Culture and Development
Implications for Classroom Practices*

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Abstract

Theoretically, psychological differences among human groups can be accounted for in three distinct ways: (a) exposure to different local ecological conditions may cause underlying psychological mechanisms to be expressed differently (evoked culture); (b) people may acquire psychological tendencies through socialisation and enculturation (cultural transmission); and (c) population differences in gene frequencies may be associated with particular behaviour tendencies (non-cultural genetic variation). An understanding of the role of culture in development of psychological processes has significant implications for teacher training and classroom practices. These include: (a) the fallacy of stereotyping and treating groups as monolithic; (b) viewing culture as immutable and essentialised, contrary to evidence of change amidst stability; (c) the constraints of evaluative comparisons and the importance of tolerance for differences; and(d) greater appreciation of the richness of cultural differences which can serve to enhance rather than diminish the classroom climate. During the past four decades, cross-cultural and cultural psychologies have built a rich landscape of knowledge related to the role of culture in human development. While cross-cultural psychology views culture as an independent variable that influences behaviour and development, cultural psychologists have viewed culture and individual activity as co-constructive. Cross-cultural psychology in particular has sought to: (a) test existing theories in various cultural contexts; (b) explore new cultural systems to discover psychological phenomena not available in cultures studied so far; and (c) generate a more universal theory of human development based on the first two sets of activities. The present paper will: (a) examine the nature of the construction of knowledge regarding culture and development;

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and (b) profile the existing knowledge base regarding cultural variations and similarities in various domains of human functioning. A significant portion of the information is drawn from a recent review by Heine and Norenzayan (2006) with their kind permission to use their review with due acknowledgement. The main thrust of the arguments will be on the explanations offered to understand cultural group differences and their implications for classroom practices in multi-cultural settings.

Culture as Man-made Environment

There are varied definitions of culture in the existing literature. (Berry, Poortinga, Segall, and Dasen, 2002). One comprehensive and classic definition is presented here to highlight the fact that culture is an integral part of human development.

"Culture consists of patterns, explicit and implicit, of and for behaviour acquired and transmitted by symbols, constituting the distinctive achievements of human groups, including their embodiments in artifacts: the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values; cultural systems may be, on the one hand, considered as products of action, and on the other, as conditioning elements of further action" (Kroeber and Kluckholm, 1952, p.181, cited in Berry *et al*, 2002).

Culture is seen as 'in here' (in our heads and the result of individual activity (co-constructive and participatory) or as 'out there' (outside our skin) and as the antecedent of behaviour. The former is the basic assumption of cultural psychology while the latter characterises cross-cultural psychology. The rich literature from both these schools of thought have contributed to and enhanced our understanding of the interface between culture and human development.

Goals of Cross-cultural and Cultural Psychology

The goals of cross-cultural psychology are (Segall, Dasen, Berry, and Poortinga, 1999):

1. To transport current hypotheses and conclusions about human behaviour to other cultural contexts in order to test their validity.
2. To explore new cultural systems, to discover psychological phenomena not available in the first culture.
3. To integrate psychological knowledge gained from the first two activities and to generate a more open human psychology that would be valid for most if not all people.

Cross-cultural psychology adopts a positivistic paradigm and emphasises derived ethnic and cultural universalism even while accommodating cultural relativism in some respects.

Cultural psychology, on the other hand, aims to explicate how culture and individuals constitute or construct each other. The emphasis in cultural psychology is not on the search for universalism as much as in the cultural activity of meaning making, hence on intersubjectivity, interpretation and cultural relativism.

In the following sections, we will summarise how the landscapes of knowledge regarding culture and human development have been constructed, and the major substantive ideas that have emerged there from.

The primary source of the substantive information is based on Heine and Nozenzayan's (2006) article entitled "Toward Integration: Cultural Psychological Sciences." (With kind permission to do so dated, 1 November 2008). Other specific references and anecdotal examples have been added by the present author.

Two Stages of Scientific Inquiry

Most scientific inquiry proceeds through two stages. In the first stage, new theories that facilitate the observation and discovery of interesting phenomena are proposed, and various methodological confounds ruled out. In the second stage, the inner workings of phenomena are more precisely explained, and underlying mechanisms are identified. In cross-cultural/cultural psychologies, Stage I research typically propose theories that predict cultural differences, in particular, psychological processes, whereas Stage II research seeks to more precisely explain the observed cultural differences by identifying the critical variables that account for them. The two processes however, are not mutually exclusive and often overlap each other.

One of the major criticisms in the discipline has been regarding the restricted data base that has been used to understand basic psychological processes. Research has predominantly used Euro-American college students as subjects. Yet, claims have been made about universality in basic psychological processes without necessarily testing the validity of such a claim. Hence, *enhancing external validity* becomes an important goal of Stage I inquiry. Of course, there remains the trade-off between maximising internal validity with adequate controls thereby restricting *generalisability* and enhancing the scope for external validity, thereby limiting internal validity. Even when external validity is enhanced by good cross-cultural research, one needs to bear in mind that universality may be established at various levels of generalisation and may not necessarily be universal in the literal sense of the word.

Stage I – Towards Identifying Cultural *Variations in Psychological Processes*

Stage I research also helps *identify cultural variations in psychological processes*. There are a number of rich theoretical models that allow for predictions about the extent to which various models will replicate in other cultural contexts. Pronounced and theoretically meaningful cultural differences have been found in fundamental psychological processes such as preference for high subjective well-being, the manifestation of psychological disorders, the need for high self esteem, and a preference for formal reasoning. In general, the cultural differences tend to be more pronounced in studies that compare behaviours that reflect implicit psychological tendencies and less pronounced in studies that compare

explicit self-reported cultural values. One of the important components of Stage I research has been to identify specific situations in which some cultural differences in psychological processes are made manifest. For example, middle-eastern cultures which still practise 'honour killing' are not aggressive across situations but only when their family 'honour' is threatened by an illicit relation or offensive remark by the foe. Similarly, East Asians do not always prefer intuitive reasoning strategies more than Westerners do and show a preference for formal reasoning in completing abstract tasks, even though they may choose to apply intuitive reasoning in other situations.

A related key focus of Stage I research has been to conduct a systematic series of studies to rule out competing artifactual accounts of cultural differences. Efforts to *determine the validity of cultural differences* constitute a large part of the studies that are conducted in Stage I research. (See Van De Vijver and Leung, 2000 for discussions on methodological problems related to this issue). The range of identified cultural differences in psychological phenomena has expanded in recent years aided by prominent theoretical developments such as on the prototypes of independence-interdependence (Markus and Kitayama, 1991).

As a corollary to identifying cultural differences, Stage I cross-cultural research also *informs theories about psychological universals or cultural similarities.* A significant contribution in this regard comes from anthropologists (For example, Schlegel and Barry's, 1991 work on adolescence analysing HRAF data on 186 cultures) and the classic work by the Whiting group on child training and personality (Whiting and associates, 1963). Compelling evolutionary accounts of the origin of psychological processes need to consider the adaptive value of the processes at the level of abstraction where universality is more evident, or they need to specify the conditions under which they are operating (See Keller, 1997 for discussions on the evolutionary perspectives). Work by my students in Baroda with rural and urban women revealed that the standard tools of self-esteem that focussed on an individualistic perspective yielded poor scores whereas open-ended interviews highlighted that women in these communities derived their self-esteem by the collective achievement of their husbands and children. Similarly, positive self-enhancement is derived from social (family or group) approval and appreciation rather than in terms of how one describes one's self. In fact, self praise is considered arrogance in collectivistic cultures which expect the individual to underplay one's virtues.

One of the major shortcomings of the most influential researches in cross-cultural psychology has been that it has focussed on comparisons between North Americans and East Asians (the work by Markus and Kitayama, 1991 which generated a lot of interesting research is one such example). It is very likely that other cultural comparisons may throw up demographic and cultural variables of interest. Contributions by Whiting and associates (Whiting, 1963 onwards), Cole and associates (Cole,

Gay, Glick and Sharp, 1971, and later work) and Segall, Campbell and Herskovits (1966) are excellent examples of potential contributions from work with other cultures. Another often cited criticism is that cultural psychological research has been largely limited to exploration of the extent to which theories developed in the West generalise to non-western cultures. Contributions from cultural psychology (Shweder, 1990) and indigenous psychology (Sinha, 1997) address this shortcoming.

There is a pressing need to shift from exploring whether phenomena identified in the West generalise elsewhere to exploring whether other indigenously identified phenomena generalise to the West.

Ramanujan (1990) and Sinha and Tripathi (1994) discuss the example of 'tolerance for contradiction' observed among Indians who can co-exist with science and religion or science and astrology with no obvious cognitive dissonance in their individual lives. It would be interesting to see whether such a tolerance generalises to the Euro-Americans. Similarly, there has been anecdotal evidence highlighting the prevalence of mathematical concepts in the everyday life of south Indians through close contact and familiarity with classical music wherein the numerical count in the rhythm is critical as also the practice of decorating the front yard daily with drawings of intricate designs that call for an appreciation of arithmetic and geometric concepts. The perceived superiority of South Indians of both genders in mathematics both among resident Indians and Indian diaspora could lead to interesting cross-cultural research.

Stage II – Towards Explaining Cultural Differences

Stage II research seeks to explain how cultural differences in psychological processes are produced and sustained. Cross-cultural research enables the unpackaging of confounding variables. Cole and his associates' study of age, schooling and cognition in Liberia (1971) is an excellent example of segregating the role of schooling and age, something which cannot be done in cultures with universal and compulsory schooling. Absence of gender differences in mathematical abilities among South Indians and hypothesis related to everyday experience in mathematics could lead to unpackaging situational and contextual variables.

Several interesting methodological strategies have been used to ascertain the reasons for cultural differences and explain them.

1. Mediational Strategies

A frequently used strategy is to identify cultural differences on two measures and then examine whether the cultural differences in the relationship between the two measures is in the predicted direction. As the reader is well aware, there are inherent limitations with such correlational strategies, particularly with data based on self reports. Cultural variables are often not transparent and self evident to the participant who may have been encultured in the said beliefs and practices without even being

conscious of them and articulate about it. Further, correlations do not clarify causal relations nor the direction of the relationships observed leading only to tentative inferences that need further testing.

2. Experimental Strategies

An interesting strategy is to prime constructs hypothesised to vary across cultures and then examine whether such priming can lead people from one culture to respond more like those of another culture in select experimental tasks. Work in the area of independence-interdependence is of particular interest.

A variety of other experimental or quasi-experimental approaches have also been used to identify mechanisms underlying cultural differences. One approach is to identify key experiences that vary across cultures and measure whether greater exposure to these experiences leads to change in psychological variables. For example, training in Oriental or Ayurvedic medicine could foster a holistic way of thinking, with longer periods of exposure likely to impact more.

New research has gone beyond independence-interdependence to examine additional cultural affordances that may explain cultural differences in cognition. Heine and Norenzayan (2006) cite the study by Miyamoto, Nisbett and Masuda (2006) which showed that (a) randomly sampled Japanese scenes were visually more complex than randomly sampled American scenes (as judged by both objective and subjective measures); and (b) both American and Japanese participants exposed to Japanese scenes were more likely to show holistic processing in a subsequent task than were participants exposed to American scenes.

Another useful approach is the triangulation strategy. The procedure involves first examining a psychological phenomenon in two cultures A and B that differ in a theoretically predicted direction. The second step involves cultures B and C (a third culture) wherein B differs from C in another psychological characteristic, but C and A share a commonality. Heine and Norenzayan (2006) discuss an interesting example of similar ecological reasoning among Mayan villagers and Americans with expertise in biology (such as seen in park keepers) but both differed from other Americans who were not exposed to ecological reasoning that relies on knowledge about the inter relations among plants and animals.

Although still in its infancy, Stage II research has deepened cross-cultural psychologists' understanding of psychological mechanisms by broadening the horizons in the search for reasons for cultural differences.

Explanations for Group Differences

Theoretically, psychological differences among human groups can be accounted for in three distinct ways (after methodological artifacts have been ruled out): (a) exposure to different local ecological conditions may cause an underlying psychological mechanism to be expressed differently (evoked culture); (b) people may acquire psychological tendencies through social learning processes that are biased in favour of learning from in-group members (transmitted or epidemiological

culture); or (c) population differences in gene frequency may be associated with particular behavioural tendencies (non-cultural genetic variation). Each of these is explained briefly in the following section.

A. Evoked Culture

The often cited example in cross-cultural psychology of evoked culture pertains to food sharing (Berry, 1966). Where foraging and hunting success is highly variable across time, egalitarian norms for food sharing and sanctions against hoarding are strong; this is not the case where supply of food is relatively stable such as in sedentary agrarian cultures. The other example relates to mate selection where even today, in societies where infant and maternal mortality are high and where there is need for several children to assist the parents in running a farm or assisting in earning a livelihood, robust women who are physically strong and hold promise for hard work and good reproductive prospects are preferred over thin and delicate looking females (see Buss et al, 1990). Environmental factors that evoke holistic cognitive tendencies among Japanese were referred to in the previous section.

B. Transmitted and Epidemiological Culture

Cultural transmission is the primary engine that produces the bulk of stable variation across groups. Transmission is through socialisation in the family and in other socio-cultural settings, enculturation through total cultural immersion, and through formal and non-formal education. It is useful to distinguish between evoked and transmitted culture as explanation of cultural differences; yet, in actuality, these two processes reflect a continuum rather than a dichotomy. One possibility is that ecological differences evoke initial responses that vary adaptively across different environments, but then these responses are picked up and perpetuated even when the initial conditions are no longer present. A prominent example in the Indian setting is the practice among North Indian Hindus of a strict taboo regarding marriage alliances among families residing in seven villages surrounding the bride or groom. Such a practice (which is in contrast to the encouragement of cross cousin marriages in Southern India) initially aimed at prohibiting marriages among close relatives who inhabited villages close by since that could result in inheritance of genetic disorders running in the family. This practice continues even today when the demographic distribution of families has changed drastically, and the strict taboo continues, and often, one reads of honour killing by parents or close relatives when cousins fall in love, elope and marry.

Cultural psychologists could take advantage of the naturally occurring 'experiments' to isolate the effects of transmitted culture by comparing groups living in similar environments but with different beliefs and practices (See review of work in this area by Camilleri and Malewska-Peyre, 1997, and Berry and Sam, 1997). One is often surprised to note the extent to which cultural differences are preserved, for

example, among Indians who migrated to Africa some three to four generations ago and the Indian Diaspora in the USA which consciously preserves its cultural heritage in the family and home settings, even while integrating with fellow Americans in the work setting.

C. Genetic Variation as Explanation for Psychological Differences

A controversial explanation for psychological differences between cultures is that they could derive from genetic differences. This possibility should be examined with care, given the unfortunate history of racism and conquest that has often accompanied biological explanations of group differences. The words 'savages', 'primitive', 'barbarian' and so on to describe cultures different from those in the West were in usage until recently. Behaviour geneticists have repeatedly warned about the need for caution in inferences regarding genetic differences between cultures as often 'the within culture' differences exceed 'the between culture' differences. Nevertheless, a growing body of research continues to identify genes that vary systematically across populations. These include genes associated with distinct blood groups, skin colour, lactose intolerance, resistance to malaria and several other characteristics. Group differences could well result from selection pressures (survival of the fittest), the consequence of thermal regulation, pathogen resistance, diet constraints and the like. The Parsee (Zoroastrian) community in India offers excellent opportunities for genetic research, having preserved its genetic identity through monitored inbreeding. Genes related to longevity, despite the prevalence of several genetically inherited diseases, have been investigated as reported in a recent seminar organised by the PARZOR group at Bombay in December 2008. Most psychological traits and tendencies are unlikely to meet the stringent criteria for indicating genetic inheritance. What would be useful to understand is how cultural practices have sustained the influence of the genome. Empirical results typically show that immigrants and their descendents exhibit psychological processes intermediate to those of their heritable culture and their cohorts in the host culture, which evidence is consistent with a cultural, rather than genetic explanation of group differences.

Proximal and Distal Explanations of Cultural Differences

Distal explanations are historical analyses that involve social, economic and geographic factors that may have given rise to culturally stable patterns of thought and behaviour. Proximal explanations, on the other hand, involve individual level psychological processes including beliefs, knowledge and experiences with the world that have been shaped by these historical developments, and could be directly implicated in cultural differences in psychological characteristics. The former deals with culture level analysis, and the latter, individual level of analysis. An excellent example of distal explanation is seen in the 1991 work by Schlegel and Barry who examined the

secondary data from Human Resource Area files (HRAF) from 186 pre industrial cultures, to provide an anthropological account of adolescent development across cultures. A contemporary example of proximal explanation could be the perseverance of 'honour culture' in societies where men and women are executed on charges of falling in love with a stranger, an enemy's kin or eloping with an already married person, thus, bringing the family to shame. A historical precedent that evolved to preserve the group's identity and maintain taboos prescribed by the culture have sustained in practice even though the said taboos are irrelevant and serve no purpose today.

Implications for Classroom Practices

The rich data on cultures assembled by Cross-Cultural and Cultural Psychology over the past four decades have several implications for classroom practices, especially in a multi-cultural society like India where caste and religion play an important role in social interactions. Key ideas that emerge from work in this area are listed below and offer a base for reflection and practice.

- We tend to treat groups as monolithic and generalise our stereotypes regarding groups to individual pupils. For example, we take it for granted that children of a particular caste are dull and incapable of learning abstract concepts, or that members of some groups are not clean, or others whose ancestors were dacoits, will inherit the tendency to be thieves. Each one of these beliefs that openly affects classroom practices can be challenged and proved as unfounded.
- We tend to view culture as immutable and essentialised. Cultural studies as well as studies in human development in any given culture show clearly that both stability and change are characteristics of both cultures and individual ontogeny. In a society where caste prejudices are deeply rooted, change can occur in first generation learners only when teachers believe that neither culture nor individual behaviour are static. There is adequate data to support such a claim.
- Another malaise that plagues our classroom practices in the evaluative comparisons rewards children by virtue of their class, caste and occupational background advantages at the cost of those who enjoy no such privileges. Developing an attitude of tolerance for alternative life styles, belief systems and language forms pays rich dividends in terms of providing an enabling environment for learning, particularly for first generation learners from the lower castes.
- Cross-cultural psychology also offers us observations on cultural prejudice, culture blindness and multi-culturalism as options in classroom practices in a multi-cultural society such as ours. Needless to emphasise that for both teachers and pupils, a positive attitude towards multi-culturalism pays the best dividends.
- Finally, experiences in a multi-cultural classroom can lead to

greater appreciation of cultural differences in a complex society such as in India. An appreciation of differences when fostered in children by a teacher, who can transcend differences and see the richness in the diversity, can help nurture a generation that is both tolerant and appreciative of diversity in religions, ethnicity, and language as we do of cuisines, textiles, and music and dance forms.

In conclusion, I wish to emphasise that there are ethical issues involved in how we structure the landscape of knowledge, especially in the social sciences. Theoretical ideas often get *rectified*, and are reflected most clearly in the classroom teaching-learning situations, wherein as teachers, we engage both students and ourselves in shaping a shared understanding, reflecting either our prejudices or our tolerance for alternative world views.

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