

*Chapter 3*

## **THE IMPLICIT COGNITIVE PERSPECTIVE IN ACCULTURATION**

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### **ABSTRACT**

In this chapter, the conceptual basis for the use of the implicit cognition paradigm in the acculturation domain is discussed. In particular, it is argued that the process of acculturation occurs in conscious (explicit) modes, but also in non-conscious (implicit) modes. In addition, implicit cognitions derived from such non-conscious processes may play an important role in determining the acculturation and well-being outcomes. First, we note that most research in the acculturation domain has been conducted using survey-type measures, which may only reflect explicit processes in acculturation. We also note a developing trend in applying the implicit cognitive perspective in the study of acculturation, by specifically defining implicit psychological acculturation (Kim, Sarason, & Sarason, 2006), by showing how it may complement existing conceptual frameworks of acculturation (e.g. Berry, 2003), and demonstrating how it may provide data about the fundamental processes of acculturation which are not available to introspection. Furthermore, we speculate about changes in the pattern of explicit and implicit cognitions in reaction to contact with another culture by providing a working model of explicit and implicit culture acquisition. Second, we examine the burgeoning literature on acculturation using implicit measures on three key topics, namely, identity, parental relations, and intergroup relations. Through a brief review of extant research, we show support for our arguments, highlighting the necessity for the implicit cognitive perspective in acculturation research. In addition, we provide evidence that implicit measures have implications for both psychological and social acculturation, namely implicit psychological acculturation. Finally, the potential for future research in acculturation issues using the implicit cognition paradigm, and implications for organizations are discussed. Major themes : Intergroup relations, cultural assumptions, identity, differences, family relations

## INTRODUCTION

Over the past decade, research on non-conscious cognitions have contributed to a more complex view of many social processes. In particular, the advent of the Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998), and other measures which attempt to quantitatively assess implicit cognitions (e.g. word completion tasks; Hetts, Sakuma, & Pelham, 1999) has facilitated research examining both the pattern of explicit (that is, conscious), and implicit (non-conscious) cognitions, supplementing the understanding of social phenomena. In the current chapter, we aim to examine how the implicit cognition perspective can supplement the study of the acculturation process.

According to one of the most often cited definitions, acculturation results when "groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both groups" (Redfield, Linton, & Herskovits, 1936). This implies that research in acculturation should focus on changes in levels of cultures over the duration of inter-group contact. Logically however, group level changes in culture should also be accompanied by individual level changes in culture. Thus, not only can there be changes at the group level, but changes at the individual level, with regard to how people think, behave and relate to each other. To this end, Berry (1980, 2003) extended the original anthropological definition of acculturation to posit the notion of *psychological acculturation*, indicating changes occur within the individual, with regard to their attitudes, values and behaviors as a result of contact between the culture one originally belongs to, and the new host culture. That the distinction between the cultural level and the individual level be maintained is a critical one, since while individuals are influenced by the culture at large and embody cultural values of their respective social groups, there are individual differences in the level of culture embodied by a particular individual, and hence, there may be individual differences in the amount of acculturation an individual might experience. Therefore, changes in levels of culture at a group level may not reflect individual experiences of acculturation (Taras, Roney, & Steel, 2009).

Methodological options to assess individual level experiences of acculturation began with measures developed from the lessons learned from the highly cited IBM employee studies investigated by Hofstede (1980, 2001) who used survey methods. Since then, there have been a proliferation of measures of culture, and for the most part, assessment has focused on survey methods (Taras, 2008; Taras et al., 2009), which assess psychological processes and their consequences such as perception, cognition, evaluation, and behavior. This is largely consistent with Hofstede's original assertions that culture can be measured in terms of words (verbal responses) or deeds (behavior). However, the proliferation and frequent use of survey methods to assess culture and acculturation in the literature since Hofstede's work seems to indicate that researchers largely rely on verbal responses over behaviors; we are in no doubt that the logistical challenges in monitoring behavior for changes in culture have contributed to the popularity of survey methods. Furthermore, there is a justification that core cultural values and concepts are responsible for cultural differences in behavior, and it may be more productive to monitor such values and concepts over behavior, which may change with differing social and historical contexts.

If we are to examine the survey method more closely, the fundamental assumption which is made when using such methods is that the acculturating person is able to reflect on their

experiences through introspective processes (Devos, 2006). While we acknowledge that experiences of cultures different from one's own can be a salient experience and is available to the conscious mind to be verbalized (and the commonly experienced 'culture shock' phenomena reinforces this belief), it may not necessarily represent the entire phenomena of acculturation. Researchers have long been aware of the introspective limit of respondents in responding to assessment items (Eagly & Chaiken, 2007; Greenwald & Banaji, 1995; Hasher & Zacks, 1984), and the suggestion has been made that asking questions via survey methods may not capture the overall experience of acculturation since the acculturating person may not be aware of all their experiences explicitly (Kim, Sarason, & Sarason, 2006; Taras et al., 2009). In short, we suggest that there are aspects of the acculturation process which occurs outside of the explicit, conscious mind, beyond what is merely unspoken, or explicitly verbalized, or difficult to recall; indeed, there may be more to the assessment of culture than measurements of words or deeds. In the next section, we review some of the empirical evidence supporting the consideration of non-conscious (i.e. implicit) processes and cognitions in the investigation of acculturation and provide a model of explicit and implicit acculturation.

## DUAL PROCESS MODELS OF COGNITION IN ACCULTURATION

Epstein (2003), along with other researchers (e.g. Hasher & Zacks, 1984) have proposed dual modes of information processing in which information is processed simultaneously in conscious as well as non-conscious modes. More specifically, conscious processes, consisting of propositional reasoning may lead to the formation and maintenance of explicit cognitions (Gawronski & Bodenhausen, 2006). Thus, explicit cognitions can be conceptualized as being the product of one's consciously executed evaluative, perceptual, and cognitive processes of the acculturating person. In contrast, non-conscious processes, specifically associative processes between sets of concepts (i.e. processing of the degree of frequency that a consistent set of concepts are present in one's environment), may lead to the formation and maintenance of implicit cognitions (Gawronski & Bodenhausen, 2006). Attitudes and cognitions formed from such non-conscious processes are widely referred to as implicit attitudes or cognitions, and have been defined as being introspectively unidentified representations of past experiences (Greenwald & Banaji, 1995; Greenwald et al., 1998) which influence social cognition and behavior. To be more specific, implicit cognitions are thought to be the result of exposure to associations between two concepts, with the frequency of exposure to those associations reflecting the associative strength of the cognition, and in addition, such associative processes have been shown to have occurred outside of the person's awareness (Betsch, Plessner, Schwieren, & Gütig, 2001; Greenwald et al., 1998; Hasher & Zacks, 1984; Karpinski & Hilton, 2001) warranting their label, *implicit* cognitions. Thus, while it is possible that one has awareness of the associative processes occurring, since the process itself is thought to operate outside the conscious awareness, the resulting cognitions themselves may not be available to introspection or remain unidentified. In the implicit cognition literature, this has been evidenced by the frequent observation that there appear to be either low or no correlations between explicit and implicit measures (e.g. Bosson, Swann, & Pennebaker, 2000).

While a variety of attempts, including sophisticated experimental procedures, have been used to assess implicit attitudes (Hasher & Zacks, 1984; Hetts et al., 1999), it was not until the development of computer based, reaction time measures to assess implicit attitudes, such as the IAT (Greenwald et al., 1998), that a convenient way to assess specific constructs were available to researchers. Since then, there has been substantial evidence for the validity of such measures (Nosek, Greenwald, & Banaji, 2007; Greenwald, Poehlman, Uhlmann, & Banaji, 2009), with the general consensus being that explicit (i.e. self report) and implicit attitudes assess different constructs or different aspects of the same construct. In support of this idea, explicit and implicit attitudes have been shown to predict different behavioral outcomes of the same construct (Asendorpf, Banse, & Mücke, 2002; Dovidio, Kawakami, & Gaertner, 2002).

The implication for acculturation is that the psychological acculturation process would have both explicit and implicit components, responsible for different acculturation and well-being outcomes. We would contend that current acculturation research has mainly focused on the explicit component of acculturation, since this field has been heavily reliant on survey or survey-like methods to draw data. In contrast, the investigation of the implicit aspects of acculturation has had a rather shorter history. We believe the first attempt to define and operationalize implicit psychological acculturation was made by Kim, Sarason and Sarason (2006) who defined implicit psychological acculturation as "a process in which aspects of cultural experience affect one's formation of cultural beliefs/values, attitudes, and identity without one's awareness". A key distinction that needs to be made is that the term *implicit psychological acculturation* refers to cognitions and attitudes formed through processes outside one's awareness, and the use of the word *implicit* does not refer to those aspects of culture or acculturation which are merely unspoken (such as a shared assumption) or difficult to explicitly verbalize (i.e. tacitly held beliefs which are still available to introspective efforts). This distinction is important since there have been different ways to operationalize the term *implicit* in the literature (e.g. shared implicit beliefs; Arends-Tóth & van de Vijver, 2004; Chiu, Morris, Hong, & Menon, 2000).

To fully explain the definition of implicit psychological acculturation, it may be necessary to describe how we conceptualize both explicit and implicit culture acquisition from early developmental stages. This is because the acquisition of culture begins at childhood, where both the social environment of the child, and the kind of parenting would influence how the child acquires culture (Wang, 2001, 2004). These two sources of culture acquisition are posited to have independent effects, such that if one of the sources were to change, it may not necessarily affect the other; for example, migration to a host culture would change the sociocultural environment of the child, but it may not necessarily change the fundamental influence of the parent in transmitting the original culture to the child. In addition, it is posited that acculturation at different stages of development would have different effects on explicit and implicit acculturation. Also, since implicit cognitions are thought to be the result of associations between concepts formed over a long period of time, due to their strength being determined by associative processes (Greenwald & Banaji, 1995; Greenwald et al., 1998), a similarly long term view of culture acquisition, and subsequent acculturation to another culture is necessary (LaFromboise, Coleman, & Gerton, 1993).

## THEORETICAL OUTLINE OF EXPLICIT AND IMPLICIT ACCULTURATION

Stated in a simple way, before departing one's original culture, it is posited that explicit and implicit culture acquisition occurs in parallel throughout the developmental process, furnishing the child with explicit and implicit cognitions which are consistent with the values and norms of the original culture as a result of parental and societal sources of influence. During the course of this culture acquisition, development of important concepts such as the concept of self and identity, and attitudes toward others, and rules for interactions with other members of the society, in line with both the parental and societal norms would be imposed on the child. In fact, if there are no acculturation events, we would expect this to be the dominant scenario.

Such patterns of culture acquisition may change with the move to a different host culture. While up to this point, both parent and child have been socialized in line with their original culture, the move to a host culture should have differential effects on parent and child due to the changing nature of the socialization pressures. Namely, the host culture's influence should no longer be consistent with the original culture. Instead, both the parent and child will be confronted with the wider host culture when dealing with people and institutions outside of the family (Devos, Blanco, Muñoz, Dunn, & Ulloa, 2008; Schein, 1996). Furthermore, while parents face normalization processes, their children would face not only normalization pressures from the wider host culture, but could also experience parental influences in line with their original culture (Kim et al., 2006). In summary, while it can be expected that both parent and child would face normalization pressures from the host culture, children of migrants would experience pressures to be socialized in line with both their original culture, and the host culture. From this point, it is expected that elements of the host culture would start to be acquired, resulting in newly formed explicit and implicit cognitions.

Due to the differences in the nature of explicit and implicit cognitions, we would posit that the changes in explicit cognitions would be more apparent than changes in implicit attitudes, as explicit attitudes are dependent on propositional processes which are consciously processed (Gawronski & Bodenhausen, 2006), leading to changes in explicit cognition in line with the rate at which the acculturating person is able to perceive and adjust to differences from their original culture (Gregg, Seibt, & Banaji, 2006).

However, since implicit attitudes are dependent on the relative frequency of associations between concepts accumulated over time, the newly acquired associations in the host culture should have relatively lower impact on the overall associative strengths of the implicit cognition; consistent with this, one study reported that while it was possible to influence a theoretically weak implicit association, a theoretically strong implicit association was not influenced by the same procedure (Karpinski & Hilton, 2001). In line with such evidence, previous studies have shown that on implicit measures, first generation migrants were more similar to those in their original culture than those in the host culture (Hetts et al., 1999; Kim et al., 2006), and in addition, implicit cognitions of second generation migrants were closer to the levels of host culture groups than the first generation migrants or original culture groups (Boucher, Peng, Shi, & Wang, 2009; Hetts et al., 1999; Kim et al., 2006). We also expect the developmental stage of the acculturating person to be an important factor, such that those with less development in the original culture would be more open to developing implicit

attitudes in line with the host culture (i.e. the associative strengths between concepts would be weaker than a more developed person), and would have a lower degree of consequences for behavior and for functioning in the host culture in general. Specifically, we would expect that concepts such as the *self* would be less associated with original culture consistent concepts with lower levels of development in the original culture, providing the possibility that associations with the *self* and host culture concepts would have greater impact than a person who has completed a significant amount of their development in the original culture. We would posit that this would be the case for all cognitions related to acculturation such that the level of development would influence the degree to which exposure to the host culture would influence highly embedded, implicit cognitions and subsequent behavior and functioning.

From this, one might extrapolate age to be a determining factor in how implicit cognitions form during acculturation. That is, the level of existing accumulations, achieved through living in a certain culture or country will determine the relative strength of associations between the self/significant others and original/host culture consistent constructs. While we posit that age is an important and a conveniently operationalizable variable, we believe the true causal variable to be the amount of exposure to culture consistent associations. That is, the differences between the parent and child response to newly created associations to host culture consistent associations are due not to age, per se, but to differences in the amount of accumulated exposures to original culture consistent associations that determines the degree of impact that the associations newly exposed in the host culture have<sup>1</sup>. Thus, in the case of acculturation, we believe that the pattern of acquisition of new associations and their subsequent impact follows the environmental association model as proposed by Karpinski and Hilton (2001). The environmental association model asserts that implicit cognitions are a function of the frequency with which one is exposed to associations in his or her environment. In the case of acculturation, we propose that the notion of the environment not only includes being passively exposed to culture consistent associations in either the original or the host culture, but also includes being exposed to actively maintained environments such as an acculturating parent's attempts to socialize a child in line with their original culture.

One argument for exposure being the operant process in implicit psychological acculturation is that first and second generation migrants show patterns of cognitions which indicate a gradual change to similarity with host culture groups. That is, as previously discussed, while patterns of responses on measures show a clear difference between the original culture and host culture groups, first and second generation migrants showed responses in between those two groups, with more generations in the host culture resulting in greater similarity with host culture groups. What we believe is happening to the migrants is that while the sociocultural environment remains constant, the level of parental influence on their children could deteriorate with successive transmissions of the original culture from parent to child, and, thus, the children would be open to greater influence to exposures from the host culture. As children of those first generation migrants transmit their culture through the act of parenting, their mixed culture acquisition (i.e. deterioration of the original culture) should result in greater similarity to the host culture over successive generations (Costigan, Bardina, Cauce, Kim, & Latendresse, 2006). This pattern of change in implicit cognitions is

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<sup>1</sup> We acknowledge the possibility of the influence of host culture consistent associations being moderated by the willingness of the person to be influenced by the host culture. This point is expanded on in the sections dealing with intergroup relations.

in contrast to the change in explicit cognitions, where data was shown that first and second generation migrants were much more similar to host culture groups than original culture groups (Hetts et al., 1999), suggesting greater malleability of explicit cognitions compared to implicit cognitions, highlighting the embedded nature of implicit cognitions and their resistance to change in the acculturation domain.

With a construct as complex as acculturation, we realize that many different kinds of acculturative experiences exist, such as those experienced by expatriate workers, exchange students, and tourists, but reviewing all cases of acculturation is beyond the scope of this chapter. However, it is posited that the fundamental effects of frequency of exposure in implicit psychological acculturation would be occurring in all cases of acculturation, albeit under different sets of circumstances. For the purposes of this chapter, we chose to describe what we believed was the most representative experience of the acculturation process, in terms of acculturative experiences and in terms of describing our model.

This model of changes in explicit and implicit cognition as a result of the acculturation process gives a description of the changes occurring at the individual level according to the properties of the cognitions themselves. But what has been demonstrated is that acculturation is an interactive process that occurs between the self, family and the wider society. That is, acculturation takes place within a context of interaction choices between the acculturating persons and of the wider society. To this end, Berry's model of acculturation strategy provides a comprehensive framework of the possibilities in the interaction strategies between acculturating persons and the host society. Namely, Berry (1980, 2003) posits that acculturating persons can vary in the degree to which they do or do not engage with the host society, and in turn, the host society can vary in the degree to which they do or do not allow engagement with the acculturating persons. Given that our model of implicit cognition change through acculturation hinges on the frequency of exposure to culture consistent associations, in our view, Berry's model of acculturation offers an account of how variations in acculturation could arise as a result of strategic choices. Specifically, we would argue that different acculturation strategies would moderate the amount of contact the acculturating person has with the host culture, resulting in different levels of exposure to the host culture, in turn, influencing patterns of explicit and implicit attitude formation. With regard to explicit cognition change, acculturating persons choosing a strategy leading to closer relations with the host culture (e.g. integration or assimilation strategies) would theoretically be more favorable towards host culture consistent cognitions, while those choosing a strategy leading to more distance with the host culture (e.g. separation or marginalization strategies) to be less favorable to host culture consistent cognitions. With regard to implicit cognition change, while we broadly expect similar attitude change as with explicit cognitions in terms of direction and valence of change, we suspect it would happen for entirely different reasons. Since implicit cognition formation is not a function of propositional reasoning, but instead is reliant on the exposure to associated concepts, we expect that acculturation strategies would be influential in the sense that they provide a source of regulation of exposure to host culture consistent associations. Specifically, integration/assimilation strategies, which take an amenable stance toward the host culture, should lead to greater exposure to the host culture, facilitating implicit attitude formation. In contrast, separation/marginalization strategies, which do not take an amenable stance toward the host culture, should hinder exposure to host culture consistent associations. Similarly, we would expect the acculturation strategy of the host culture to regulate the exposure to host culture consistent associations. Therefore, the

strategic choices of both the acculturating person and of the host society could contribute to the formation of implicit cognitions leading to implicit psychological acculturation. We discuss and review available data on the implication of such interaction choices in a later section devoted to intergroup relations.

## EXPLICIT AND IMPLICIT MEASURES OF ACCULTURATION

Given the theoretical definitions and outline of explicit and implicit acculturation, the next pertinent topic should be the methodological properties of explicit and implicit measures. Here, we provide a brief overview of what aspect of acculturation each method theoretically captures, and discuss some methodological issues currently faced by using explicit measures, and provide a theoretical response as to how implicit measures would respond to the same issues. Regardless of the methodology chosen, one clear message that applies to both explicit and implicit measures is that assessment of variables related to culture should directly assess underlying psychological variables associated with that culture believed to be the cause of cultural differences (Betancourt & Lopez, 1993; Okazaki & Sue, 1995).

Measures traditionally used in the investigation of acculturation are typically explicit in nature, and task participants to respond through introspection about their acculturation experience (Devos, 2006). Changes in cultural patterns are often assessed through the change in endorsement of cultural values or behavioral patterns consistent with the original culture compared to the host culture, and in measures where free responses are allowed, the content of their subjective experiences may be captured (Taras et al., 2009). In sum, the explicit measure of acculturation captures changes in the individual's cultural patterns through changes in the perceived level of endorsement of the host culture or through the change in content of one's responses to host culture consistent prompts. One related point is that explicit cognitions are influenced by temporary context effects (e.g. Jang & Kim, 2009; Kim, 2004) such that significant differences in explicit cognitions can be detected as participants change in their endorsement of cultural values of the host culture or in their level of host culture consistent behaviors over time. Since the investigation of acculturation hinges on changes in cultural patterns, the fact that changes in explicit cognitions can be detected is an important feature of this method, especially since trait-like properties are not expected. Another strength of explicit measures is that it is possible for the researcher to specify specific contexts and reasons for responses, through careful wording of items. For example, a researcher may ask not only to what degree they agree with the values of the host culture, but also to specify in detail what aspects and under what circumstances their endorsement applies. In sum, the properties of the explicit measure make it appear to be suited to acculturation research, but as we will review, there are significant issues faced by using this method, some of which may be ameliorated by the complementary use of both explicit and implicit measures.

Implicit measures of acculturation may capture a very different aspect of acculturation than explicit measures. While a comprehensive review of all implicit methods are outside the scope of this chapter, we will focus on the computer-based, reaction time measures of cognitions, in particular the IAT (Greenwald et al., 1998) as it is the most widely used quantitative measure of implicit cognitions. In the IAT, there are usually two target categories, (e.g. *self* and *other* or, *me* and *parent*) and two evaluative (e.g. *good* or *bad*) or

comparative concepts (e.g. *original culture* or *host culture*) visible on a computer screen, with one of the target concepts paired with one of the evaluative or comparative concepts presented on different parts of the screen (e.g. '*self* + *original culture*' visible on the left side of the screen and '*other* + *host culture*' visible on the right side of the screen). The participant is then tasked with categorizing stimuli items (which consist of exemplars of the target and evaluative or comparative categories), into the correct pairs of concepts presented via response keys. The speed with which stimulus items are classified into the pairs of categories presented at the top of the screen are interpreted as the implicit strength of association between the concepts, with lower latencies (i.e. faster response times) indicating stronger associations. A much more detailed account is available in the paper by Greenwald and colleagues.

This method has demonstrated its ability to measure implicit social cognitions by demonstrating sound psychometric properties and has also demonstrated predictive validity across many domains of research (Greenwald et al., 2009). In particular, the IAT was shown to predict different aspects of the same target behavior than explicit measures, with studies showing that uncontrolled, or unplanned behaviors are predicted by implicit measures, while controlled, or deliberate behaviors are predicted by explicit measures (Asendorpf et al., 2002; Dovidio, et al., 2002). Coupled with the common pattern that explicit and implicit measures of the same construct do not appear to correlate (Bosson et al., 2000), and that explicit and implicit measures of the same construct appear to measure different aspects of the same construct or assess different constructs (Nosek, et al., 2007), this demonstrates that implicit measures may capture unique aspects of social behavior which are not easily captured by explicit measures. Furthermore, implicit measures have shown to reflect experiences accumulated over a long period of time. For example, Jang and Kim (2009) demonstrated that those who are known to have experienced chronically difficult life experiences showed a lower level of implicit life satisfaction compared to a group who did not have similar difficult chronic experiences. Furthermore, it was shown that the group known to have had chronically difficult life experiences showed a lower level of implicit life satisfaction even after being removed from such conditions for over a year, showing that deeply embedded experiences may be assessed using the IAT method. Indeed, if culture is the deeply embedded set of cognitions which have a global influence on attitudes, cognitions and behaviors (Markus & Kitayama, 1991), it is logical to assess culture with methods which assess the deeply embedded aspects of the self.

One major limitation of the IAT method is that since only reaction times are being measured, there cannot be any interpretation of those results beyond those reaction times without appropriate theoretical contexts or empirically measured variables. For example, if a person shows a strong degree of implicit association between the *self* and the color *red* over the color *blue*, the researcher has no avenue of explaining this result without a detailed theoretical investigation or with supporting empirical evidence. That is, while the strength of association between a target concept and evaluative or comparative can be measured, it is the researcher's burden to define the context under which the strength of the associations should be interpreted. This issue also extends to measure development, where the researcher must define appropriate categories and stimuli in order to ensure comparable stimuli exist in both target categories. Furthermore, since the IAT typically uses images or words to represent both categories and stimuli, it may be difficult or not possible to represent complex ideas. In sum,

implicit measures represent the nonconscious associative strength between concepts, but the researcher must be careful in how those strength of associations are interpreted.

### **CHARACTERISTICS OF EXPLICIT AND IMPLICIT MEASURES WITH REGARD TO ASSESSMENT ISSUES AN ACCULTURATION**

In this section, we discuss the issues faced by researchers when using conventional, explicit, means of assessment, and how inclusion of the implicit cognitive perspective could offer a different, complementary assessment of culture.

One important consideration in the assessment of acculturation is that the levels of culture acquisition in both the original culture and in the host culture are needed as described above. One practical operationalization is to have two comparable measures assessing endorsement of values and behaviors on similar dimensions in both cultures, which assumes that cultures vary on a set of common cultural dimensions (Zane & Mak, 2003); and indeed, most measures of culture take such an approach (Taras et al., 2009). There is no unanimous agreement on whether such universal cultural traits exist, and it is a contested issue (i.e. the emic vs etic debate). The use of implicit measures may not help to resolve this issue, as researchers are free to assess associations between concepts which are both universal and specific to both original and host cultures, via the deliberate selection of category and stimulus items. In sum, as with any method, the onus is on the researcher to appropriately operationalize important theoretical concepts, as use of implicit methods alone do not provide any validity or theoretical assurances.

A related issue to the above is the notion of construct equivalence (Okazaki & Sue, 1995). In their investigation of acculturation, researchers may not only be interested in the change in levels of cultural dimensions, but also be interested in the properties of psychological constructs. But, as above, when one assumes that two cultures vary on the same cultural dimensions, an easy assumption to make is that a construct in one culture would have the same structure and properties as in another culture, but this may not be the case (Boucher et al., 2009; Suh, 2002). Markus and Kitayama (1991) provided a convincing thesis on how the notions of the self differ across culture through differences in cultural values, such that the boundaries of the self construct and the nature of relationships with others were different as a consequence of differing cultural values. As a result, explicit expressions of the construct in two different cultures may show consistent patterns of response bias, as survey items are interpreted from the perception of one's own culture (Okazaki & Sue, 1995; Okazaki & Tanaka-Matsumi, 2006). Thus, different cultures may explicitly interpret the same construct in different ways. Complementary use of the implicit measures alongside explicit measures may reflect a more detailed understanding of cultural issues, since they may assess different aspects of culture due to the differences in their properties. Since explicit cognitions are dependent on propositional processes, they are likely to reflect cultural differences in consciously held beliefs or practices, but since implicit cognitions are dependent on associative processes, they may not be as susceptible to such influences (Jang & Kim, 2009; Kim, 2004). In other words, implicit assessments could reflect cultural differences relatively free from culture-specific response tendencies which may affect survey methods (Okazaki &

Sue, 1995). Therefore, reliance on explicit measures alone could lead to substantial portions of the person's non-conscious experiences being excluded from investigation.

Use of the implicit method, however, does not guarantee a culture reduced assessment of the same construct, since differences in properties may or may not exist at an implicit level. In one case, despite differences in explicit cognitions due to differences in how the construct is explicitly interpreted, if the environments in both cultures support similar frequencies of associations between concepts, there may be no cross-cultural differences in levels of that construct. In demonstration of this, Oishi (2002) reports that while there were differences in explicit recall of well-being, demonstrating cultural response tendencies, the reported frequency of experienced well-being did not differ across East Asian and European Americans. Also, Jang and Kim (2009) report that despite East Asians reporting lower explicit life satisfaction than European Americans or European Australians, they reported similar levels of implicit life satisfaction, conceptually replicating the results of Oishi.

In another case, cross-cultural research on the self-esteem construct showed that while outward expressions of the evaluation of the self on explicit measures tap culture specific response biases, positive implicit associations between the self and positive valences (i.e. positive implicit self-regard) did not differ across both a group which tend to display self enhancement (European Americans), and a group which tend to display self criticism (East Asians) (Yamaguchi et al., 2007). That is, levels of implicit self esteem were similar in both cultures. However, other differences at the implicit level may exist. For example, Boucher et al. (2009) demonstrated that while East Asian (Chinese) participants possess similar levels of implicit self-regard as European Americans, East Asian participants had shown greater levels of associations between the self and negative valences compared to the European Americans, with parallel results on explicit measures. What these results indicate is that differences can exist at the implicit level which may not be related to differences at the explicit level, depending on which constructs and which sets of cultures are being compared.

A further challenge to conceptualizing explicit and implicit cross-cultural differences is that the context in which the assessment is made may also be important. In a set of creative experiments, Kitayama and Uchida (2003) showed that collectivists and individualists can be made to show the pattern of explicit and implicit self regard that would usually be expected from the other's cultural group, if the participants were confronted with a social context consistent with either collectivist or individualist cultures. This highlights the possibility that culture serves to act as a cue to activate different sets or explicit/implicit responses. In sum, it appears that researchers must be careful in conceptualizing and measuring explicit and implicit differences across cultures, since they may reflect differences in explicit/implicit domains as well as reflect differences in the cross-cultural differences in the construct.

One final topic in assessment we will discuss is the level of measurement issue. In the construction of explicit measures of culture, survey items can be worded such that they either assess cognitions either at the individual or societal level, by asking participants to reflect on personal experiences or to appraise phenomena occurring in the wider society, which may lead to confusion of the level of analysis (Taras et al., 2009). In response, it can be logically argued that cultures differ with respect to how much they rely on social norms to inform their own cognitions (Okazaki & Tanaka-Matsumi, 2006; Suh, Diener, Oishi, & Triandis, 1998), and that inclusion of such norms are necessary to adequately assess this construct. While we can foresee that careful operationalizations of definitions and scale construction may

ameliorate this problem on explicit measures, from a conceptual point of view, the picture for implicit methods is less clear.

The reason for the lack of clarity is that despite the implicit measure assessing associations between concepts at the individual level, at the same time, it may be the case that the frequency of exposure between associated concepts are the result of the interaction between associations among concepts available to the person both in their environment (Karpinski & Hilton, 2001; Jang & Kim, 2009) and the person's interaction choices, such as acculturation strategies (e.g. Devos et al., 2008). In other words, we posit that implicit cognitions are both the result of exposure to concepts prevalent in one's environment (in which the individual is passive in processing associations), but also as a result of active strategic choices one makes to expose themselves to consistent messages in the environment (in which the individual takes an active role in exposing themselves to particular environments) (Lowery, Hardin, & Sinclair, 2001). In addition, it has also been reported that differences in interaction patterns between men and women of a single migrant ethnic group may be responsible for differential responses in implicit attitude activation, and this result was explained in terms of the relative mobility of men and women in the host culture, resulting in different experiences of the same environment (Bohner, Siebler, González, Hays, & Schmidt, 2008). These findings suggest that within even the same country, (i.e. in the same social environment), differences in interaction patterns between different ethnic groups can influence the role of implicit attitudes. This gives some confidence to the notion that implicit cognitions and attitudes are a result of the environmental exposure to concepts prevalent in society, moderated by interaction choices the individual has with the environment. What this review indicates is that implicit associations are neither a sole product of exposure to associations, nor are they purely the result of conscious choices one makes; it is highly likely that implicit cognitions are represented by both processes, albeit more strongly influenced by the process which has had a greater influence on the frequency between the associated concepts.

Overall, the use of the implicit measures, like all other methods, still require the researcher to employ theoretically justifiable operationalizations, as well as to demonstrate adequate reliability and validity. However, because of differences between explicit and implicit methods, use of implicit measures in tandem with explicit measures may reveal a deeper understanding of the acculturation process, through the assessment of theoretically different aspects of psychological constructs.

## **REVIEW OF EXTANT RESEARCH ON ACCULTURATION USING IMPLICIT METHODS**

In general, there is relatively less research of the acculturation process using the implicit cognition perspective than explicit, survey based research. In the next sections, we review some key findings revealed using the implicit cognition perspective in three important areas of acculturation research, namely identity, parental relations and intergroup relations, reflecting individual, family, and group level interactions between the acculturating groups and host culture. Furthermore, we provide directions for future research and a short outline of the importance of the implicit cognition perspectives in acculturation for organizations.

## IDENTITY

As discussed, the model of implicit psychological accuration outlined above proposes the possibility of an acculturating individual to possess both the identity of their original culture and of the host culture, in line with previous research on the topic which also shows evidence for bicultural identities (Hong, Morris, Chiu, & Benet-Martínez, 2000). But beyond merely complementing the explicit perspective, we would argue that the inclusion of the implicit cognitive perspective could have important consequences for the properties and the nature of the identity concept in the acculturation domain.

Conceptually, a notion of implicit identity would essentially be the strength of the association between the self concept and culture consistent stimuli. In the case of acculturating individuals, the acquisition of a bicultural identity would occur as a result of the self being exposed to both original (e.g., Korean) and host culture consistent stimuli (e.g., American), resulting in the self concept being associated with cultural values, icons, and symbols from both original and host cultures. Such bicultural identities may be a cause of ambiguity such that it may present barriers to adequately assess and report on cognitions via explicit measures, making the use of implicit measures desirable (Kim et al., 2006). Consistent with this position, Devos (2006) demonstrated that both Mexican Americans and Asian Americans showed a pattern of implicit identity which indicated greater association with their ethnic cultures than a neutral comparison point on an IAT-based measure, but also showed greater association with the dominant American culture than a neutral comparison point on a separate IAT-based measure. Additionally, when the relative strength between the self and ethnic culture was assessed, that is, an IAT was administered which compared the associative strength between the self and Mexican (Asian) culture with the association between the self and the dominant American culture, the overall IAT effect was not significantly different from zero, indicating both implicit identities to be of equal associative strength. This was in contrast to European American participants, who showed a pro-American identity but showed lower implicit ethnic identities compared to Mexican and Asian participants. We would contend that such associations would originate from both associations prevalent in the environment of the host culture, and from the parents of migrants as a consequence of their socialization of their children. Indeed, if merely the societal influence were to impact implicit identity, we would not expect ethnic groups to retain their identity, or if merely parental influence were to impact implicit identity, we would not expect the existence of an implicit American identity.

One other particularly interesting finding in Devos' (2006) investigation was that European American participants showed greater Mexican and Asian implicit identity compared to a neutral comparison point, with the interpretation of that result being that regardless of actual ethnic group status, living in an environment where they are exposed to Mexican or Asian culture (in this case, southern California) would contribute to their self being associated with cultural icons and symbols, quite possibly without conscious intent. This is consistent with the notion that the psychosocial environment, through propagation of associations between concepts can influence core processes relevant to psychological acculturation. This is also consistent with anthropological findings which indicate that

cultural knowledge can be transmitted across generations without conscious intent (Gamradt, 1989).

A greater differentiation of the source of identity acquisition may be gained through the investigation of successive generations of migrants. As discussed previously, the transmission of the original culture may deteriorate over time, as successive parents are socialized in the host culture to a greater extent. Consistent with this idea, Kim et al. (2006) demonstrated that first and second generation Korean migrants showed implicit identities which were more less Korean and more American with successive generations. This was despite the fact that on parallel explicit measures, migrants showed patterns of responses which indicated no greater identification to the original or the host culture. This pattern suggests that while on an explicit level, identities of acculturating persons may resemble that of the host culture, but nevertheless, due to previous exposures in the original culture, in the case of the first generation migrants, or by exposures to the original culture from the first generation parents, in the case of the second generation migrants, children may acquire implicit cognitions consistent with the original culture. This pattern of the relatively fast changes on explicit measures and relatively slow changes on implicit measures is in line with other research examining explicit and implicit acculturation (Hetts et al., 1999) and the observation that successive generations of migrants retained patterns of the original culture despite having a superficially adapted lifestyle (Johnson, 1977). This pattern also suggests that despite explicit indication of the contrary, acculturating persons may yet implicitly retain elements of their original culture (Devos, 2006). In sum, a tentative conclusion in investigation of the identity of acculturating persons would indicate that acculturating persons can acquire dual implicit identities, that implicit identities are both products of the cultural and parental influences and that the pattern of explicit and implicit acculturation could differ.

A related and an important consequence of the self concept is the notion of implicit self-esteem. Self-esteem is a construct central to the well-being of the individual, however, due to differences in the concept of the self across cultures, the traditional definition of self-esteem as a positive evaluation of the self may not apply to all cultures, but instead, culture specific notions of positive self-regard may exist (Hetts et al., 1999). The pattern of data suggest that while it is possible for acculturating persons to adapt to the host culture's pattern of norms within a relatively short period of time, on an implicit level, associations between the self and the host culture consistent set of positive self-regard concepts may be weaker than the self and original culture consistent set of positive self-regard concepts (Hetts et al., 1999). In fact, Hetts et al. found a positive relationship between the number of years spent in the host culture and implicit host culture consistent self-regard, indicating a gradual change in the pattern of well-being cognitions to be in line with the host culture. In light of this finding, the monitoring of self-esteem in acculturating groups may be important, since in the least, explicit self-esteem appears to be an outcome of ideal functioning and/or success in individualist countries (Baumeister, Campbell, Krueger, & Vohs, 2003). With respect to implicit self-esteem, it has been reported that the greater the degree to which a member of the ethnic minority held implicit associations between the self and their family (a construct theorized to be important to the ethnic group), the greater was their self-esteem, indicating that individual level psychological outcomes, such as self-esteem, may be a function of the strength of association between the self and concepts that are important to the acculturating person (Devos et al., 2008). Therefore, knowledge of both explicit and implicit self-esteem may be important in understanding acculturating groups' successful adjustment and

psychological well-being in the host culture. In the next section, we discuss another consequence of implicit identity of acculturating persons, namely, relations between parent and child during acculturation.

## PARENTAL RELATIONS

As we have suggested, one of the salient sources of culture and identity acquisition may stem from the parents of migrant children. In fact, Wang (2001, 2004) demonstrated that the way in which the parents interact with and socialize their children are in line with the cultural values of their society. The use of implicit methodologies may be warranted in this line of research because while acculturating persons may be able to reflect the changes in their cultural environment on explicit measures, they may not be able to articulate implicit associations formed at an early age (DeHart, Pelham, & Tennen, 2006). Early experiences may be formative in the sense that they provide mental models of how one should interact with significant others, and thus furnish a child with a means to navigate the social environment around them (O'Reilly, Tokuno, & Ebata, 1986). Normally, adaptive parenting strategies at childhood may lead to healthy mental development, with different parenting styles predicting different patterns of explicit and implicit self-esteem at young adulthood (DeHart et al., 2006). However, when the parent does not share the cultural values of the wider society, their parenting may become a hindrance to adjustment with the wider culture, such as in the case of migrant children. We outline why this may be the case.

Consistent with the logic we have presented thus far, it is reasonable to posit that the socialization of migrant children is a mixed environment, where in the family unit, the original culture is maintained and outside of the family unit, the host culture is prevalent. We have posited that such an environment would foster not only implicit bicultural identities (Devos, 2006; Kim et al., 2006), but also patterns of implicit cognitions which show gradual similarity with greater time in the host culture (Costigan et al., 2006). We believe that this scenario presents potential issues for acculturating children, which may have implications for not merely personal well-being, but also affect family and societal level relations. Specifically, being less acculturated and more in line with the original culture may foster positive parental relations, yet simultaneously have negative outcomes on their interactions with the host culture. In contrast, being more acculturated may have positive outcomes for interactions with the host culture yet hinder parental relations. In a study which investigated such a hypothesis, Kim et al. (2006) report that despite previous literatures on the positive outcomes of a positive parent-child relationship, when parents and children do not share the cultural values of the host society, it is associated with psychological distress. In particular, the effect of the positive parent-child relationship on distress was mediated by implicit, but not by explicit child ethnic attitudes, indicating that implicit measures, which may be less influenced by contextual influences during acculturation (Hetts et al., 1999), to be a more appropriate predictor of psychological distress.

Despite the fact that explicit measures did not predict distress, these results are not to suggest that conscious responses did not play a role; it was also found that those who showed discrepancies between their explicit and implicit ethnic attitudes to have greater psychological distress, suggesting that explicit and implicit cognitions do not operate in isolation, but a

discord between the two cognitions may be a source of conflict that could have negative outcomes in the acculturation process. In contrast, for a European American comparison group, who had no reason to show conflict with the cultural values of their parents and the wider society, or conflict with regard to their own explicit and implicit cognitions, explicit and implicit ethnic attitudes did not predict psychological distress.

One of the key points from these findings is that for individuals in an environment likely to foster bicultural identities, the notion of ethnic identity, and even ethnic attitude may be ambiguous, and that the development of a coherent identity and attitude can be difficult, given that children of migrants are expected to maintain both their original cultural heritage as well as being adjusted to the host culture. The resulting ambivalence about their culture, identity, and attitudes, reported across the studies reviewed above (Devos, 2006; Hong et al., 2000; Kim et al., 2006), suggest that the conflict between these identities and attitudes may be what is reflected in the explicit/implicit inconsistency.

In sum, while this line of research is in need of further investigations, we posit that formative experiences for children of migrants to have different trajectories than children of the host culture. When there is no conflict between the cultural values of the parent and wider society, we may expect that there is no configuration of one's explicit or implicit ethnic attitudes which predict psychological distress. In fact, as would be commonly accepted, adaptive parenting strategies in that culture may facilitate development later on in life. However, for children of migrants, conflicts between cultural values of their parents and the host culture could potentially create conflict between parent and child or between society and child, despite the use of adaptive parenting strategies consistent with the original culture. We propose that much more research is required to disentangle the effects of not just the parental, but societal level influences on the child's development, and their ultimate impacts on the well-being and adjustment of the child.

Another outcome of child-parent relations is the transmission of attitudes toward other ethnic groups. Relatively recent research points to data which suggest that without intent, parents may be transmitting their intergroup attitudes to their children, resulting in either implicit ingroup preferences or implicit attitudes in line with prevalent social norms about relative hierarchies of different ethnic groups (Dunham, Baron, & Banaji, 2008; Griffiths & Nesdale, 2006). However, this relationship may depend on the strength of the parental relationship itself; it has been reported that children who report a higher level of identification with their parent tend to have implicit associations of the outgroup positively related to their parents' prejudices (Sinclair, Dunn, & Lowery, 2005), indicating that parental relations may moderate the formation of implicit attitudes which consequently influence intergroup relations. This suggests the possibility that, not only at the intergroup level, but also at the individual level, interaction choices may influence the degree to which implicit attitudes are formed. In the next section we discuss the role of implicit cognitions in intergroup relations in more detail.

## **INTERGROUP RELATIONS**

Beyond the individual and family levels, implicit cognitions may also influence the acculturation process by influencing the way in which both acculturating groups and host

culture groups perceive and interact with one another. We review findings which relate to the acquisition of implicit cognitions regarding migrants, the properties of such implicit cognitions, their consequences, explore the conditions under which they may be activated.

When considering intergroup relations, it is important to consider how the groups involved think of each other, as it is the basis from which subsequent interactions may occur (Cuddy, Fiske, & Glick, 2007; Lee & Fiske, 2006). Thus, it is important to know both how knowledge structures are formed and to know what the content of those knowledge structures entail. In particular, we will examine the role of stereotypes since they represent a salient means by which groups inform their attitudes about each other. While stereotypes can intuitively be thought of as consciously transmitted and acquired knowledge about a group of people, some particular characteristics of stereotypes indicate that they also exist as implicit cognitions.

Specifically, stereotypes are relatively sparse in information content but are pervasive in the social environment, and as such, lends itself to being automatically processed (Florack, Scarabis, & Bless, 2001). In an important study, Devine (1989) revealed that prevalent beliefs about subgroups, despite being explicitly rejected by those who disagreed with the stereotype, were nevertheless evident implicitly. In addition, after initial implicit attitude formation toward unknown social groups had taken place, providing counteracting evidence altered explicit, but not implicit attitudes (Gregg et al., 2006), suggesting ingroup/outgroup processing is particularly influential to implicit cognition formation, and that they can be formed with relative ease, and appear to be persistent. Consistent with this, when participants were shown an article of news about a known ethnic group, it influenced explicit, but not implicit attitudes (Florack, Piontkowski, Rohmann, Balzer, & Perzig, 2003), which is in line with findings that implicit attitudes may be less susceptible to contextual influence. As such, stereotypes can exist not only in the conscious mind, but also exist as implicit cognitions, outside of the person's awareness. Another reason for the utilization of implicit perspectives is that people may be motivated to provide socially desirable responses when asked about ethnic migrants (Dovidio et al., 2002; Kim, 2003), which calls into question the validity of explicit measures on such sensitive issues.

A salient source of information about ethnic groups is the local news, which may be troubling since the media may overrepresent rates of ethnic involvement in crimes, or underrepresent their rate of victimization (Dixon & Linz, 2000). Such widely disseminated associations between a group and systematic knowledge lead to the formation of stereotypes shared among many in the community (Lee & Fiske, 2006). But more than merely biased exposure to associations about a migrant group, the content of stereotypes may depend on other factors. Lee and Fiske (2006) suggest that stereotypes about migrants are largely based on existing stereotypes of people from their original nations, and furthermore, the content of stereotypes are likely to vary with national, racial, ethnic and also socioeconomic status, along with perceived common occupations, with the suggestion that acceptance of migrant groups could depend on how much of a threat they are perceived to be to the host culture groups. On a related note, Rohmann, Florack, and Piontkowski (2006) report that differences in cultural values may contribute to a perception of threat in host culture groups toward the acculturating group, as well as to contribute to a perception of threat in the acculturating group toward the host culture group. In addition, negative intergroup contact contributed to the perception of intergroup anxiety between the two groups. Therefore, to understand

intergroup relations, it is important to understand the attitudes of both the acculturating group and of the host culture groups (Rohmann et al., 2006).

The stereotype itself may have significant consequences on the relationship between migrant and host groups. Pérez (2010) reports that implicit attitude toward migrant groups was able to uniquely predict attitudes toward immigration policy, with magnitudes of those implicit attitudes comparable to indicators of explicit migrant intolerance. In addition, Cuddy et al. (2007) report that groups with positive stereotypes may lead to positive intergroup interaction outcomes, but conversely, being attributed with negative stereotypes may lead to negative intergroup interaction outcomes. Another consequence of stereotypes is that implicit attitudes formed as a result of the stereotyping process may subtly affect interaction quality with members of other ethnic groups. It has been known for some time that explicit attitudes predict controlled behavior, while implicit attitudes predict spontaneous behavior (e.g. Asendorpf et al., 2002). The same has been found for interactions with ethnic outgroup members (Dovidio et al., 2002; McConnell & Leibold, 2001; Unkelbach, Forgas, & Denson, 2008), suggesting that quite apart from what members of ethnic groups' conscious belief, their actions may unintentionally result in discriminatory (either positive or negative) behavior.

When are implicit cognitions about migrants likely to be activated? This question essentially asks under what motivational states are easily retrievable stereotypes made salient in decision making processes regarding migrant groups. In our review of the literature, we find that mood states and need for cognition may provide the conditions to influence the effect of implicit attitudes. Consistent with previous findings which demonstrated that positive affect could result in less motivation to attend to detailed information (Carver, 2003), it can be supposed that positive mood results in less critical distinctions between an individual and their stereotyped group, resulting in greater incidence of discrimination along stereotyped lines. Accordingly, Unkelbach et al. (2008) report that being in positive mood states resulted in greater discriminatory behavior toward a negatively stereotyped group, compared to being in a neutral or negative mood state. Interestingly, while being in a negative mood state (anger) resulted in greater negative behavior overall, it did not result in selective targeting of the negatively stereotyped group. Thus, positive mood states may encourage decision making with reference to easily retrieved cues about ethnic groups. Negative mood states may also influence processing with regard to stereotypes. When perceiving a member of an ethnic outgroup, a challenge to the stereotype is presented if one perceives that person to be either representative or unrepresentative of their ethnic group, which may have consequences for how the actions of an outgroup member is interpreted. Florack, Bless, and Piontkowski (2003) report that if negative mood were directed at a representative member of the ethnic group, it may result in negative outcomes for explicit and implicit attitudes toward that group, however, if negative mood were to be directed at a unrepresentative member of the ethnic group, it may result in greater explicit acceptance and implicit attitudes toward that group. The implication is that the consequence of mood directed at migrant group members depends on the perceived representativeness of a particular person.

Another motivational state which may influence implicit cognition activation is the level of need for cognition. With respect to the idea that explicit responses to attitudes about ethnic groups may be masked by socially desirable responding, it seems reasonable to believe that the level of the need to oversee one's own beliefs would be related to the level of explicit/implicit attitude agreement. In line with this, implicit attitudes toward ethnic outgroups were able to predict explicit attitudes when there there was a lower need for

cognition (Florack et al., 2001). This may indicate that in general, low motivation to process information about the ethnic outgroups may result in the activation of implicit attitudes since Florack et al. also report that implicit attitudes are related to explicit social judgements when the amount of processing about the target ethnic group is low compared to when it is high.

As an aside, it would appear that not only can implicit cognitions have consequences for intergroup relations, but also for interpersonal interactions with outgroup members. Richeson, Trawalter, and Shelton (2005) have reported a particularly interesting finding which showed that those with less favorable implicit attitudes toward an outgroup member faced greater depletion of cognitive resources as a result of attempts to mask implicit attitudes during interactions with outgroup members, highlighting a fascinating interplay between explicit and implicit responses to interactions with outgroup members. Such findings would be useful in an increasingly globalized world, where contact with outgroups will inevitably increase in frequency.

In sum, implicit perspectives in the investigation of intergroup relations provide information about latent belief systems which may have serious consequences for both individual level interactions and group level construals about other groups. Furthermore, attention to the implicit aspect may be particularly important since the outcomes of implicit processes, such as latent negative attitudes and unintentional discriminatory behaviors may not be apparent to the self, or be activated in transient motivational states over which conscious control may not be easy.

## **FUTURE RESEARCH**

We see potential for much more research uncovering the role of explicit and implicit cognitions in the domain of acculturation. Namely, we find particularly interesting possibilities in investigating the discrepancy between explicit and implicit cognitions, and the explicit/implicit paradigm is yet to be applied to the full set of acculturation processes (with explicit and implicit attitudes to work and education being a notable exception in the literature). Furthermore, we are yet to discover the consequences of existing dispositions (such as personality), external factors (such as social support) in their influence over the pattern of explicit and implicit cognition formation, maintenance, and activation. We also see room to re-examine past findings, in particular exploring the pattern of explicit and implicit cognitions in relation to acculturation outcomes (e.g. Sue & Zane, 1985), to understand the role of implicit cognitions in successful acculturation.

To take a slightly different perspective, we observe that the vast majority of studies conducted using the implicit psychological perspective to be conducted in Western, individualist cultures, which raises the question as to whether the patterns of results would be the same when acculturating in collectivist cultures, since there may be important differences in the way in which acculturation occurs in different cultures (Jang & Kim, 2010).

Finally, while we have posited that accumulations of experiences moderated by interaction choices are responsible for implicit cognitions, there is relatively little direct evidence to support our central thesis. While we have stipulated that associations prevalent in the environment or the society, or parental relations may be responsible for implicit cognition formation and maintenance, we realize that this is a relatively vague way of describing the

environment under which such cognitions form. Also, previous attempts to find moderators or mediators of implicit cognitions relevant to acculturation have not been successful (e.g. Turner, Hewstone, & Voci, 2007). However, a lack of such factors does not imply the absence of such factors altogether. It may be the case that we are simply unaware of the factors, or have inadequate means to assess the moderators/mediators of implicit cognitions. What seems reasonable is that processes which moderate/mediate explicit cognitions may not moderate/mediate implicit cognitions since they are dependent on different mechanisms in their formation and maintenance. Related to this, more research may be needed to find the factors and mechanisms which lead to the formation and maintenance of implicit cognitions. In the next section, we provide one possible practical means to understand how associations are made prevalent, available for exposure, and subsequently, lead to implicit cognition formation.

## ORGANIZATIONAL IMPLICATIONS

When providing implications for the process of acculturation, we believe that one of the most productive ways is to provide organizational implications. This is because we believe that outside individual and family interactions, interactions with organizations and their constituents through activities such as work and education are likely to be salient sources of culture acquisition and adjustment, acting as a distinctive source of acculturation experiences (Devos et al., 2008; Jang & Kim, 2010; Schein, 1996). Furthermore, providing implications to organizations is much more likely to result in systematic changes in the behavior of the organization, its constituents, and consequent interactions with acculturating persons inside and outside the organization, which has the potential for greater impact than providing implications for casual social encounters. Also, official organizations, such as the government, wield the power to confer the status of particular groups, which can have profound effects on their perception and ultimately formation of cognitions like stereotypes, as in the case of illegal migrants who are viewed in a much more negative light than documented migrants from the same origin (Lee & Fiske, 2006). This is above and beyond the fact that organizations possess subtle (e.g. attraction-selection-attrition framework; Schneider, 1987) and obvious (such as reward and punishment strategies) means to reinforce or discourage social behavior. In short, organizations possess a powerful influence which can be wielded to shape both individual and group level perceptions, interactions, and other behaviors.

Organizations are dealing with an increasing number of cross border interactions, and the value of such interactions has been increasing, and as a result, acculturation issues have been becoming more important (Taras et al., 2009). In concert, there have been efforts in the organizational behavior domain to understand acculturation from an organizational perspective (see Gelfand, Leslie, & Fehr, 2008 and Tadmor & Tetlock, 2006 for extensive reviews). However, such efforts have mainly focused on the explicit components of culture and acculturation. Here, we aim to provide a few recommendations based on the literature reviewed.

We posit that organizations can play a role in the creation and maintenance of both explicit and implicit attitudes. It may seem somewhat ironic that we are recommending the

approach originally taken by Hofstede (1980) in the future research of acculturation. But the very nature of the implicit cognition requires that researchers should be aware of salient sources of repeated, consistent messages involved in important social activities. Organizations, by their power to create policies, and to create consistent environments where social interactions can take place, have the capacity to influence propositional information and associative exposures which can inform explicit and implicit cognitions with time. Organizations can also operationalize tactics, such as direct and indirect contact with other ethnic members, which have been shown to influence implicit cognitions toward ethnic outgroups (Aberson & Haag, 2007; Binder et al., 2009; Turner & Crisp, 2010; Turner, Hewstone, & Voci, 2007) in order to bring about desirable changes such as reduced prejudice and discrimination, with the hope of such improvements extending beyond the place of employment, and into the wider society.

Organizations may also be in a better position to understand that social attitudes and consequent behavior can be the result of non-conscious propositional processes than ordinary individuals, who may be affected by introspective limits (e.g. Devos et al., 2008). While we are not suggesting that the development of implicit measures have reached a stage where diagnostic applications can be recommended, organizations may be in a place to inform its constituents that the conscious mind may not be where all of psychological functioning takes place. In short, organizations can play a role in asking constituents to be aware of the fact that people from backgrounds who have chronically experienced different sets of values may think and behave in ways different to their own despite their conscious intent to adjust to the host culture. This could be the case for multi-national companies and organizations.

Another way in which organizations can respond to implicit psychological acculturation is by being aware when explicit or implicit cognitions are likely to contribute to processes such as decision making or social behavior. As discussed, different mood and motivational states are likely to influence the extent of their role, making it possible to regulate when they are likely to influence outcome behavior through implementation of policy. One relatively straightforward mechanism which we have not discussed is time constraints, where greater time constraints appear to facilitate the use of implicit cognitions, and lower time constraints appear to facilitate the use of explicit cognitions (e.g. Hasher & Zacks, 1984).

Organizations may also have to re-evaluate the way in which it assesses its employees. Traditional measures of the relationship between the organization and its members were assessed principally using survey methods, and as such, may not assess implicit cognitions also relevant to the organization. This may be particularly pertinent in global organizations, since constructs in one culture (such as organizational commitment, and organizational identity) may not have the same form or have the same meaning in different cultures (i.e. lack of construct equivalence) (Linowes, Mroczkowski, Uchida, & Komatsu, 2000). In terms of implicit evaluations (i.e. the degree to which the organization is associated with positive or negative valences) may nevertheless be equivalent, reflecting disparate explicit experiences due to culture, but similar positive versus negative experiences. Knowledge of such possibilities alone may provide motivation to reduce intergroup misunderstandings, conflict or other negative outcomes.

One final way in which organizations can have implications for implicit psychological acculturation is by regulating the nature of intergroup relations. Organizations can influence the economic status, and level of sanction provided to its constituents, as well as being able to influence the nature of interactions (e.g. casual/formal, task/relationship orientations,

hierarchical/non-hierarchical, individual/group oriented, etc...) between migrant and host culture groups. Thus, one could argue, by having influence in the conditions under different ethnic groups interact, organizations could influence perceptions, stereotypes and implicit attitudes about other ethnic groups at the individual level. Furthermore, with reference to Berry's model (2003) of acculturation strategies, the conditions under which migrant or expatriate workers, or even entire foreign subsidiaries or partner organizations interact could also influence how groups perceive and interact with each other, with subsequent implications for patterns of individual level cognitions.

## CONCLUSION

The circumstances under which we are exposed to prevalent messages in society, and conscious choices in interacting with that society could have more powerful effects on the acculturation processes. This is because cognitions and behaviors in the acculturation process may be occurring outside of conscious awareness, and may be activated by motivational and emotional states in complex and introspectively unidentified ways. This chapter has suggested a working model outlining the processes involved in implicit psychological acculturation, along with a short review of some of the key findings in the field. It is our hope that future investigations of the acculturation process incorporate the implicit psychological perspective in the hopes that it will provide a fuller picture of the acculturation process and be useful in understanding how to aid in the acculturation of individuals, families and their integration into host societies.

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