Cognitive Dissonance:
A Comprehensive Review Amongst
Interdependent and Independent Cultures

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ABSTRACT: Festinger postulated that within each person's mind is a mechanism that creates an uncomfortable feeling of dissonance, or lack of harmony, when we become aware of some inconsistency among various attitudes, beliefs, and items of knowledge that constitute our mental store. Festinger called this phenomenon the cognitive dissonance theory. Another facet of social psychology that has been studied at great length is the cross-cultural differences between North American culture and East Asian culture. Specifically, East Asian culture and North American culture has been associated with interdependent culture and independent culture, respectively. In the past decade, social psychologists have begun to investigate dissonance theory with respect to cross-cultural differences. As classrooms become ethnically, racially, and culturally increasingly diverse, educators must be aware of cognitive dissonance in contrasting cultures to foster optimal achievement.

RESUMÉ: Festinger déclarait qu'un mécanisme se trouve dans l'esprit de chaque personne et qu'il crée une sensation désagréable de déséquilibre ou de manque d'harmonie au moment même où la personne prend conscience de certaines incompatibilités entre des mentalités diverses, des croyances et des faits de connaissance qui constituent notre mémoire. Festinger a appelé ce phénomène "la théorie de la dissonance cognitive." Un autre aspect de la psychosociologie qui a été largement étudié, est les différences interculturelles existantes entre les cultures Nord-américaine et Est asiatique. Il est à noter tout particulièrement que les cultures Est asiatique et Nord-américaine ont respectivement fait partie d'une culture interdépendante et d'une culture indépendante. Durant les dix dernières années, les psychosociologues ont commencé à mener une enquête sur la théorie de la dissonance en matière de différences interculturelles. Etant donné l'accroissement constant de la diversité ethnique, raciale et culturelle dans les classes, les éducateurs doivent prendre conscience de la dissonance

cognitive en distinguant les cultures pour ainsi optimiser la réalisation.

Leon Festinger's cognitive dissonance theory has spawned numerous research studies, making it one of the most important and a fecund in social psychology (Cooper & Fazio, 1984). Another facet of social psychology that has been studied at great length is the cross cultural differences between North American culture and East Asian culture. Specifically, East Asian culture and North American culture has been associated with interdependent culture and independent culture, respectively (Markus & Kitayama, 1991). Within interdependent cultures, individuals orient towards interrelatedness with others around them. Individuals within these cultures tend to cooperate with each other to avoid conflict. Individuals in interdependent cultures often judge the self in light of how others judge them. In contrast, an independent culture promotes individualistic socialization and individuals focus on self-needs, wants, and ideas. An individual within an independent culture judges the self through the confirmation of one's internal attributes (Markus & Kitayama, 1991). In the past decade, social psychologists have begun to investigate dissonance theory with respect to cross-cultural differences. As classrooms become ethnically, racially, and culturally increasingly diverse, educators must be aware of cognitive dissonance in contrasting cultures to foster optimal achievement.

Cognitive Dissonance Theory

In 1957, Festinger postulated that within each person's mind is a mechanism that creates an uncomfortable feeling of dissonance, or lack of harmony, when we become aware of some inconsistency among various attitudes, beliefs, and items of knowledge that constitute our mental store. For example, students who enjoy sun tanning may become aware that sun tanning can be deleterious to one's health. The benefits and liabilities of sun tanning become a cause for dissonance, and the person may change their attitude, such that they are conducive with the continuance of tanning, even though they understand the risks of sun tanning. As shown in the previous example, the dissonance-reducing mechanism does not always function adaptively. A number of studies have shown that people tend to set their doubts aside after making a decision. Even in the absence of new information, people become more confident of their choice after acting on it than they were before (Knox

& Inkster, 1968). In some instances, individuals may even justify their decision by degrading the alternative. In many cases, people behave in ways that run counter to their attitude and then are faced with the dissonant cognitions. They cannot undo their deed, but they can relieve dissonance by modifying or reversing their attitude (Festinger, 1957).

Differences of Dissonance as a Function of Culture

The cognitive dissonance theory has been studied at length to discover how different cultures differ in their dissonant behaviours. Studies have displayed that many differences exist within interdependent and independent cultures. According to Markus and Kitayama (1991), individuals from Western societies have the need to avoid or reduce cognitive dissonance. Dissonance occurs when a person behaves one way publicly, but the individual feels another contrasting thing privately. When the self-defining attitude is judged by how one views him or herself, the individual will have the tendency to reduce dissonance. An example of this dissonance-reducing tendency exists in independent cultures. However, Markus and Kitayama argue that counter-attitudinal beliefs of dissonance do not exist within interdependent cultures. In interdependent cultures, one's internal attributes are not significant defining attributes of the self. Rather, one's emotions and feelings are regulated in accordance with the situation. Moreover, interdependent individuals look for others in the environment to confer their personal feelings. Therefore, if the surrounding people do not provide dissonant cues towards the individual, the same individual will not have any internal dissonance (Markus & Kitayama, 1991). Furthermore, it has been observed that North Americans value consistency between thoughts and actions, whereas the Japanese place value on expressing the correct behaviour that enhances one's image, regardless of whether or not the action is congruent with one's innermost feelings (Doi, 1986). These initial studies about distinct cultures and their respective motivations to reduce dissonance have provided many constructive research paradigms in future studies.

Brehm (1956) developed a method of studying cognitive dissonance, which is still frequently used. In Brehm's *free choice paradigm*, participants are given two alternatives to choose from that are very similar to each other. Participants must rate the objects before and after they have chosen one of the alternative objects. Brehm's robust paradigm found that individuals have a tendency to *spread the*

alternatives. People will rate their object as better after they have chosen that object, while the neglected object will be degraded. By using Brehm's free choice paradigm, research that once broadly studied the differences of dissonance within independent and interdependent cultures began to investigate cultural differences in dissonance as a function of self-esteem (Steele, Spencer, & Lynch, 1993; Heine & Lehman, 1997). Through several studies, Steele et al. (1993) suggested that individuals with higher self-esteem were more likely to perform dissonance reduction strategies. The researchers also correlated that North Americans had higher levels of self-esteem. However, it may be construed that people in interdependent cultures have lower self-esteem than those in independent cultures. This is certainly not the case as argued by Heine and Lehman (1997a). Studies by Heine and Lehman in Canada and Japan suggested that the previous study by Steele et al. (1993) was flawed. Heine and Lehman argued that although cognitive dissonance reduction was more likely to occur within the North American independent culture, this was one of the integral traits of independent cultures, and that internal self-esteem could not be effectively correlated with dissonance. The researchers found that Japanese students had high internal self-esteem, but to reduce conflict with their peers, they would choose an object that would satisfy the group's needs; thus, the Japanese student would not perform dissonance-reducing strategies. To reduce unnecessary conflict was a defining characteristic of interdependent cultures as described earlier.

Related to self-esteem and dissonance is the value placed upon tough decisions and the need to justify these decisions. In the same study by Heine and Lehman (1997b), they observed that when Japanese students were faced with important decisions, they did not value the need for justification as much as North Americans did. In a similar study by Doi (1971), it was suggested that independent cultures' values on interacting in harmony negated the need to barrage an individual with questions of justification. However, researchers observed that North Americans frequently needed the individual who made the important decision, to justify his or her choice (Doi, 1971; Heine & Lehman, 1997). This self-justification allows individuals to justify their decision based on their internal attributes. The difference for the need to justify one's decision exemplifies the differences between independent and interdependent cultures with regard to dissonance. Therefore, when Japanese individuals enter North America and are questioned constantly about their sense of comfort or belonging, the Japanese find these questions to

be dubious and unnecessary. In contrast, North Americans felt out of place when they entered Japan and few questions were asked about their comfort (Doi, 1971).

Culture and Self-Expression on Choice

More recent research has been undertaken to explore the cultural differences in self-expression and its effects on choice. Throughout history, it has been shown that North Americans value self-expression with their many rallies and protests against and for oppression and equality (Kim & Sherman, 2007). In contrasting, East Asians are much more reserved with regard to voicing their opinions, again directing the attention to a cardinal trait of interdependent cultures. According to Kim and Sherman (2007), Koreans viewed self-expression as a form of maintaining group relationships rather than using it as a form of protest. However, North Americans viewed self-expression as a tool to voice their internal beliefs and ideas.

In a controlled experiment of dissonance using the free choice paradigm, Kim and Sherman (2007) asked students to choose a pen from four possible pens. Of the four pens, only one had to ability to write. Each participant had to provide the preference of pen they would choose prior to physically choosing the pen, and evaluate why they chose the pen after their decision. North American students were much more expressive at displaying their preference. After choosing their preferred pen, it was apparent that North Americans tended to display dissonance-reducing actions, such as talking positively about their choice (i.e., the colour or design) and derogating the more usable pen. The tendency for North American students to become emotionally invested with the pen prior to choosing it seemed to fuel them to justify their decision. In the same study, Koreans were less expressive with their preference of the pen, and did not feel the need to justify their choice of the non-working pen. Rather, the majority of Korean students simply said that they chose the wrong pen and displayed little emotional attachment or motivation to justify their choice. It can be inferred from Kim & Sherman (2007) that greater emotional attachment can exacerbate the amount of dissonance experienced by an individual. However, future research regarding interdependent cultures and emotionally attached dissonance would need to be conducted.

Dissonance Toward Others

Criticisms of previous research of Brehm's free choice paradigm (1956) included its focus on the self. In each trial of the free choice paradigm, the participants were making a decision between alternatives for the self. As discussed earlier, the interdependent self does not focus upon the self, but on the interrelationships with others in the environment. Thus, no effect of dissonance can be assumed within the free choice paradigm for interdependent individuals. A methodological flaw may be present when trying to study interdependent cultures and the dissonance effect (Hoshino-Browne et al., 2005). An alternative paradigm was concocted by Hoshino-Brown and colleagues, where individuals not only chose objects for themselves, but also chose objects for a friend. By having to make a decision for a friend, the interdependent oriented person may experience dissonance with relation to their friend. Not surprisingly, after a poor decision, the interdependent individual was afraid of the friend's reaction to the poor choice. In a study by Hoshino-Browne et al. (2005) using their unconventional free choice paradigm, the authors investigated whether or not greater dissonance would be produced with East Asian individuals when making a poor choice for a friend. As observed, when making a decision for the self, Euro-Canadians and East Asian Canadians acted accordingly with past literature, where the Euro-Canadians found a greater need to justify their decisions, while East Asian Canadians did not. Interestingly, when the students had to choose an alternative object for a friend, the dissonance effect was significantly greater for East Asian Canadians than for Euro-Canadians. Moreover, group analyses between the "self" and "friend" trials revealed that Euro-Canadians experienced more dissonance when making a decision for the self relative to making decisions for the friend, while East Asian Canadians felt more dissonance when making a decision for the friend relative to deciding for the self. The researchers then proceeded to examine the post-decisional justification of the East Asian Canadians who experienced dissonance. The authors observed that at the threat of relational conflict, East Asian individuals would tend to justify their decision to the friend (Hoshino-Browne et al., 2005).

A Bicultural Investigation

The above study by Hoshino-Browne et al. (2005) prompted the investigators to conduct a study with bi-cultural Canadians to observe which theory of the self (independent or interdependent) bi-cultural Canadians would adhere to. An increasing number of East Asians are exposed to a second culture, and it has become a staple of modern times. According to Hoshino-Browne et al., bicultural Canadians are East Asian students who were born and raised in Canada. It was observed that bicultural Canadians were able to effectively switch between independent and interdependent selves, depending on the cultural context. For example, when surrounded by Euro-Canadians, bicultural Canadians tended to significantly justify their decisions. However, when placed in an East Asian context, bi-cultural Canadians effectively switched to an interdependent mind frame and tended not to justify their choices after making a decision (Hoshino-Browne et al., 2005). This effective and efficient switching has been termed "frame switching" or the "alternation" model in the acculturation process (Hong, Morris, Chiu, & Benet-Martinez, 2000; LaFramboise, Conner Snibble, Markus, & Suzuki, 2004). Even more impressive was the ease with which the bicultural Canadians were able to switch.

Dissonance within a business context has recently been studied to investigate the effects of dissonance in the workplace (Tadmor & Tetlock, 2006). With the current focus on globalization, business success has come to depend on the understanding of a variety of cultural outlooks. To accomplish this, companies are beginning to hire more bicultural individuals. The business culture has observed a different effect of dissonance than that of laboratory bicultural studies (Tadmor & Tetlock, 2006). According to the authors, individuals always display more commitment to one culture than another when they are biculturally oriented. For example, when a bicultural individual was given the responsibility to make an important decision in North America, more dissonance was observed when one important value from East Asia had to be sacrificed for another. The more important the decision was, the more dissonance the individual felt. Moreover, Tadmor and Tetlock observed that within the interdependent culture, if a bicultural individual made a decision that was incongruent with East Asian values, the members of the group would reject the individual creating dissonance for the bicultural individual.

For independent or interdependent individuals who are not bicultural, but were forced into their irrespective environments, an

initial low dissonance ensues (Tetlock, Peterson, & Lerner, 1996). The investigators found that minimal dissonance occurred, because an expectancy effect was present. For example, Japanese business people who travel to North America for a meeting have very low dissonance when confronted with disagreements, even though in Japan, high dissonance would be experienced. It was suggested that the Japanese individuals expected cultural differences to be present. Therefore, when disagreements occurred, the Japanese viewed them as a cultural difference, rather than viewing the conflict as an attack against him or her (Tetlock et al., 1996). Furthermore, a second explanation was offered for the low dissonance, suggesting that during the initial encounter with a novel culture, individuals are scouting others in the environment (Tetlock et al., 1996). Afterwards, individuals would assimilate their behaviours to their previous observations.

Bicultural individuals have been shown to alleviate dissonance with different strategies. When dissonance was low, bicultural individuals would prefer information that supported their current opinion and ignored information that favoured the alternative opinion (Mills, 1999). Interestingly, when low and high dissonance was experienced within a culturally mixed audience, bolstering one's own cultural values (i.e., independent or interdependent) would not alleviate the conflict. As observed by Tetlock (2002), individuals had the tendency to initially self-criticize and then try to legitimize the two sides' of the argument. From existing evidence, bicultural investigation of alleviating dissonance is difficult. Not only does an individual adhere to self-beliefs, but the individual also has to consider his or her audience and the amount of acculturation he or she has experienced.

Social Context Priming Effect on Dissonance

While Hoshino-Browne et al. (2005) were progressing with their research on interpersonal effects on dissonance experience (i.e., making a decision for a friend), concurrent research on social context priming was underway (Kitayama, Snibble, Markus, & Suzuki, 2004). Within the social context priming paradigm, rather than having friends or actors in the experiment for public scrutiny, Kitayama and colleagues hypothesized that even when placed in a situation where no public scrutiny was available, interdependent individuals might experience dissonance when social cues associated with such scrutiny are made salient. Within public conditions, Kitayama et al. (2004) replicated what Hoshino-Browne et al. (2005) observed. However, when a poster was

hung on the wall with several faces on the poster, the same social context priming effect was shown. These facial images were very subtle social cues, such as gazes. Even so, Japanese students were observed to experience higher dissonance relative to their North American counterparts, suggesting that Japanese students were using the inanimate facial gestures as a source of social engagement. Furthermore, post-evaluation of each Japanese participant's decisions warranted greater spreading of the alternatives when compared to North Americans (Kitayama et al., 2004).

The above study using salient social cues was consistent with previous literature that North Americans' dissonance reflects the worry about their own competence and other related internal attributes. Yet, Japanese participants' dissonance arose from a worry about possible rejection from others. This is consistent with studies looking at independent and interdependent cultures and their respective characteristics.

Cognitive Dissonance in Hong Kong

Although an abundance of cross-cultural dissonance research has been undertaken in Japan, less has been performed within the Chinese culture. Recently, Wong, Yik, and Kwong (2006) investigated how emotions play a role in dissonant behaviour with Chinese students in Hong Kong. One of the most dominant explanations of commitment toward a decision is the self-justification explanation stemming from the cognitive dissonance theory. For Chinese individuals in the interdependent environment, dissonance occurred when they were told that their decision was incorrect. Individuals tended to attempt to alleviate the negative affect produced by the dissonance. Otherwise, the belief-behaviour discrepancy would prevent individuals from performing against their prior belief (Wong et al., 2006). Therefore, unlike much of the research from Japan, the currently discussed research has shown that Chinese individuals will compare their dissonant behaviour to some internal attributes, like people in independent cultures (Thibodeau & Aronson, 1992). Furthermore, when quitting a particular assigned task, negative affect frequently preceded cognitive dissonance. This dissonance arose from the negative attitude displayed by others when the Chinese individual performed the task poorly (Wong et al., 2006).

As exhibited in the current study by Wong et al. (2006), Chinese individuals in Hong Kong behaved congruently with literature pertaining to interdependent and independent cultures. Consistent with

independent beliefs, individuals escalated their actions to their internal attributes after being told their decisions were wrong. However, Hong Kong Chinese individuals also showed typical interdependent traits when quitting a task after being told of their poor performance. These discrepancies were difficult to explain, but it may be that the region's history caused the conflicting dissonant behaviours. Since Hong Kong was a colony of the United Kingdom for a very long time, independent cultural ideals may have influenced how the Hong Kong Chinese react to dissonant information. However, in recent years, many mainland Chinese have been migrating to Hong Kong after the region's handover to China; thus, introducing interdependent cultural traits to the Hong Kong Chinese. Therefore, more research may need to be undertaken to dissociate which culture individuals in Hong Kong adhere to.

Cognitive Dissonance's Relation to Education

The current literature review about the cross-cultural effects on cognitive dissonance is quite intriguing and relates well with education. As schools continue to become more culturally and ethnically diverse, student interaction and classroom dynamics will continue to change. Teacher education must continue to focus on producing assessments and classroom management strategies that are culturally relevant to student populations. Furthermore, the study of independent and interdependent cultures has provided vast contributions into the differences of dissonance between the two distinctly different cultural constructs. As illustrated, individuals from both cultures experience dissonance. It is important for educators to understand dissonance from a student's perspective, and to mitigate the dissonance in a classroom of diverse cultures. However, the emotions attached to the dissonance determine one's degree of dissonance experienced. For example, North Americans who experience dissonance after making a decision will be motivated to justify their decision by seeking out their internal attributes. In contrast, East Asians will experience dissonance when their peers display disgust with a certain decision. Among the majority of the literature, researchers have argued that most East Asian students will not be motivated to alleviate the dissonance, but to accept the criticism.

Within educational psychology, the search for a comprehensive understanding of cognitive dissonance is important. With the rapid globalization of today's schools, teacher education programs are working hard to educate teachers on the importance of having students communicate and work effectively with students from different cultures.

To do so, people are trying to understand how others in different cultures react to criticisms, poor decisions, and conflicts – all of which create dissonance. As displayed in the current literature review, many dissonance differences exist between interdependent and independent cultures. Yet, the search for the motivation to alleviate dissonance in different cultures is ongoing. A new wave of research should soon be developed that will investigate the different school mediators involved with the motivation to assuage dissonance. Furthermore, research to observe the mediators involved with the occurrence of dissonance itself needs to be further investigated. Finally, an increasing trend of bicultural research is beginning to surface where more studies are focused on bicultural students and their methods of coping with dissonance. As these studies continue, more research using novel paradigms should be expected from this discipline.

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