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Cross-Cultural Consumer Psychology

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OVERVIEW

Every year, multinational companies spend billions of dollars in marketing their products around the world. Some of this money is wasted or, worse, actually damages the marketer's reputation through cultural or linguistic *faux pas* (e.g., Ricks, 1983). As new global markets emerge, and existing markets become increasingly segmented along ethnic or subcultural lines, the need to market effectively to consumers who have different cultural values has never been more acute. Thus, it is no surprise that in the last ten to 15 to 20 years, culture has rapidly emerged as a central focus of research in consumer psychology.

What is Culture?

Culture is a crucial concept for the understanding of consumer behavior because it is the lens through which people view marketing messages and products. Culture consists of shared elements that provide the standards for perceiving, believing, evaluating, communicating, and acting among those who share a language, a historical period, and a geographic location. As a psychological construct, culture can be studied in multiple ways—across nations, across ethnic groups within nations, across individuals within nations (focusing on cultural orientation), and even within individuals through the priming of cultural values. As will be discussed presently, regardless of how culture is studied, cultural distinctions have been demonstrated to have important implications for advertising content, persuasiveness of appeals, consumer motivation, consumer judgment processes, and consumer response styles.

Chapter Organization and Scope

In this chapter, numerous studies on these topics are reviewed and discussed. Because reviewing the rapidly growing area of cross-cultural psychology could fill several handbook chapters, we are by necessity selective in our coverage. We focus more heavily on findings specific to the consumer domain rather than a more general review of cultural differences. The content is organized around both the theoretical and the methodological implications of cultural differences in consumer judgments. The individualism/collectivism cultural construct and independent/interdependent self-construal construct are given special attention because extensive research has demonstrated the implications of these variables for outcomes relevant to consumer behavior. Because the study of culture requires the cross-cultural equivalence of measurement, the second half of this chapter addresses in detail specific measurement issues and culturally based response biases likely to be of interest to consumer psychologists. We close with a review of issues and methods for addressing measurement equivalence and cultural variability in response styles.

CULTURAL VARIATION: STRUCTURAL ISSUES

What Are the Key Cultural Constructs or Dimensions?

The constructs of *individualism* and *collectivism* represent the most broadly used dimensions of cultural variability for cross-cultural comparison (Gudykunst & Ting-Toomey, 1988). In individualistic (IND) cultures, people tend to prefer independent relationships to others and to subordinate the goals of their ingroups to their own personal goals. In collectivistic (COL) cultures, in contrast, individuals tend to prefer interdependent relationships to others and to subordinate their personal goals to those of their ingroups (Hofstede, 1980, 2001; Triandis, 1989). The key distinction involves the extent to which one defines the self in relation to others. The focus is on whether the self is defined as autonomous and unique or seen as inextricably and fundamentally embedded within a larger social network. This distinction has also been referred to as egocentric versus sociocentric selves (Shweder & Bourne, 1982), or independence vs. interdependence (Markus & Kitayama, 1991).

The independent self-construal defines the individual in terms of unique attributes and characteristics that distinguish him or her from others, whereas the interdependent self-construal defines the individual in terms of social roles and relationships with others. National cultures that celebrate the values of independence, as in the United States, Canada, Germany, and Denmark, are typically categorized as individualistic societies in which an independent self-construal is common. In contrast, cultures that nurture the values of fulfilling one's obligations and responsibilities over one's own personal wishes or desires, including most East Asian and Latin American countries, such as China, Korea, Japan, and Mexico, are categorized as collectivistic societies in which an interdependent self-construal is common (Hofstede, 1980, 2001; Markus & Kitayama, 1991; Triandis, 1989).

A very large body of research in psychology has demonstrated the many implications of individualism/collectivism and independent/interdependent self-construals for social perception and social behavior (see Markus & Kitayama, 1991; Triandis, 1989, 1995). In consumer-relevant domains, several comparisons between individualistic and collectivistic societies have pointed to important differences in the content of advertising appeals (e.g., Alden, Hoyer, & Lee, 1993; S. M. Choi, Lee, & Kim, 2005; Han & Shavitt, 1994; Hong, Muderrisoglu, & Zinkhan, 1987; Kim & Markus, 1999; Lin, 2001), the processing and persuasiveness of advertising appeals (Aaker & Maheswaran, 1997; Aaker & Williams, 1998; Han & Shavitt, 1994; Zhang & Gelb, 1996), and the determinants of consumers' purchase intentions (C. Lee & Green, 1991).

Recent developments suggest that these two distinct culturally determined self-schemas may co-exist in memory, such that contextual factors can temporarily activate either the independent or the interdependent self-construal. It is relatively easy to activate distinct independent versus interdependent self-views (e.g., by asking people to circle singular vs. plural first-person pronouns in a 1-paragraph essay, Brewer & Gardner, 1996). Indeed, people in general, and especially bicultural people, can readily switch back and forth between these independent and interdependent cultural frames in response to their contexts (Fu, Chiu, Morris, & Young, 2006; Lau-Gesk, 2003). When activated, these situationally accessible self-views appear to alter social perception and consumer judgments in ways that are highly consistent with cross-cultural findings (e.g., Brewer & Gardner, 1996; Gardner, Gabriel, & Lee, 1999; Hong, Ip, Chiu, Morris, & Menon, 2001; Lee, Aaker, & Gardner, 2000; Mandel, 2003; Torelli, 2006; Trafimow, Triandis, & Goto, 1991). For instance, Lau-Gesk (2003) found that independent (interdependent) self-construals were temporarily activated when bicultural consumers were exposed to individually-focused (interpersonally focused) appeals.

In sum, the distinctions between IND and COL societies, and independent and interdependent self-construals, are crucial to the cross-cultural understanding of consumer behavior. Indeed, whereas the 1980s were labeled the decade of individualism/collectivism in cross-cultural psychology (Kagitcibasi, 1994), similar distinctions represent the dominant structural approach in cross-cultural consumer research in 1990s and 2000s. The studies to be reviewed in this chapter offer a wealth of evidence that these cultural classifications have fundamental implications for consumption-related outcomes.

Emergent Topics: Expanding the Set of Cultural Dimensions

The conceptualizations of IND and COL, and independence/interdependence, have historically been broad and multidimensional, summarizing a host of differences in focus of attention, self-definitions, motivations, emotional connections to ingroups, as well as belief systems and behavioral patterns (M. H. Bond, 2002; Ho & Chiu, 1994; Hofstede, 1980; Oyserman, Coon, & Kimmelmeier, 2002; Triandis, 1995; Triandis, Bontempo, Villareal, Asai, & Lucca, 1988; Triandis, Leung, Villareal, & Clack, 1985). Nevertheless, recent studies have proposed useful refinements to the broader INDCOL or independent/interdependent cultural categories. For instance, Rhee, Uleman, and Lee (1996) distinguished between kin and nonkin versions of IND and COL and showed that Asians and European Americans manifested distinct patterns of relations between kin and nonkin IND. Gelfand, Bhawuk, Nishii, and Bechtold (2004) distinguished between institutional and ingroup collectivism, and showed that there can be substantial differences in the degree to which a society encourages institutional collective action versus interpersonal interdependence (e.g., Scandinavian societies emphasize the former but not the latter).

Gaines et al. (1997) distinguished between IND, COL, and *familism* (orientation toward the welfare of one's family), and showed that this delineation better captured the cultural orientations observed in racial minority respondents in the United States. IND, COL, and familism proved to be separate dimensions that differed in their ability to account for race/ethnicity differences in cultural values. Cross, Bacon, and Morris (2000) demonstrated that a more relational version of interdependence applies in Western compared to Eastern societies, and provided a scale for its measurement (see also Kimmelmeier & Oyserman, 2001). Gabriel and Gardner (1999) examined this distinction in relational (dyadic) versus more group-oriented interdependence and reported gender differences indicating that women are more relational but less group-oriented than men in their patterns of interdependent judgments and behaviors. Theirs are among several studies point-

ing to gender differences in specific cultural orientations (see Cross & Madson, 1997; Kashima et al., 1995).

In sum, the nature and meaning of IND and COL (or of independent and interdependent self-construals) appear to vary across cultural, institutional, gender, and ethnic lines. Although the breadth of the INDCOL constructs lends integrative strengths, further refinement of these categories holds the potential to enhance prediction of consumer behavior.

The Horizontal/Vertical Distinction Which additional cultural categories offer value in the prediction of cross-cultural consumer behavior? Within the INDCOL framework, Triandis and his colleagues (Singelis, Triandis, Bhawuk, & Gelfand, 1995; Triandis, 1995; Triandis & Gelfand, 1998) have recently introduced a further distinction between societies that are *horizontal* (valuing equality) and those that are *vertical* (emphasizing hierarchy). The horizontal/vertical distinction emerges from the observation that American or British individualism differs from, say, Norwegian or Danish individualism in much the same way that Japanese or Korean collectivism differs from the collectivism of the Israeli kibbutz. Specifically, in vertical individualist societies (VI; e.g., U.S., Great Britain, France), people tend to be concerned with improving their individual status and distinguishing themselves from others via competition. In contrast, in horizontal individualist societies (HI; e.g., Sweden, Norway, Australia), where people prefer to view themselves as equal to others in status, the focus is on expressing one's uniqueness, capability, and self-reliance. In vertical collectivist societies (VC; e.g., Japan, Korea, India), people focus on fulfilling obligations to others, and on enhancing the status of their ingroups in competition with outgroups, even when that entails sacrificing their own personal goals. In horizontal collectivist societies (HC; exemplified historically by the Israeli kibbutz), the focus is on sociability, benevolence, and interdependence with others in an egalitarian context (Erez & Earley, 1987).

When such distinctions are taken into account, however, it becomes apparent that the societies chosen to represent IND and COL cultural syndromes in consumer research have almost exclusively been vertically oriented. Specifically, the modal comparisons are between the United States (VI) and any of a number of Pacific Rim countries (VC). It may be argued, therefore, that much of what is known about consumer behavior in individualistic and collectivistic societies reflects vertical forms of these syndromes and may not generalize, for example, to comparisons between Sweden (HI) and Israel (HC) or other sets of horizontal cultures. As an example, conformity in product choice, as examined by Kim and Markus (1999), may be a tendency specific to VC cultures, in which deference to authority and to ingroup wishes is stressed. Much lower levels of conformity may be observed in HC cultures, which emphasize sociability but not deference (Triandis & Gelfand, 1998). Thus, it may be inappropriate to ascribe differences in consumers' conformity between Korea (VC) and the United States (VI) solely to the role of IND/COL or independence/interdependence, because such conformity might not be prevalent in horizontal societies. In particular, levels of product conformity in HC contexts might not exceed those in HI contexts.

Indeed, several recent studies examining the implications of this horizontal/vertical cultural distinction have provided evidence for its value as a predictor of new consumer psychology phenomena and as a basis for refining the understanding of known phenomena (Shavitt, Lalwani, Zhang, & Torelli, 2006). For instance, Gürhan-Canli and Maheswaran (2000) demonstrated that the tendency to favor products from one's own country over foreign products (a country-of-origin effect) emerged more strongly in Japan (a VC culture) than in the United States (a VI culture). This fits well with a conceptualization of collectivists as being oriented toward their ingroups. However, mediational analyses using individual consumers' self-rated cultural values indicated that only the vertical dimension of IND and COL accounted for the country-of-origin effects in Japan. In other words, the collectivistic tendency to favor one's own country's products appeared to be driven by

cultural values that stress hierarchy, competition, and deference to ingroup wishes, not by values that stress interdependence more generally.

In line with this, research suggests that advertising messages with themes that emphasize status, prestige, hierarchy, and distinction may be more prevalent and persuasive in vertical cultural contexts (Shavitt, Lalwani et al., 2006). Such advertisements also appear to be generally more persuasive for those with a vertical cultural orientation, and may be inappropriate for those with a horizontal one. Shavitt, Zhang, and Johnson (2006) asked U.S. respondents to write advertisements that they personally would find persuasive. The extent to which the ad appeals that they wrote emphasized status themes was positively correlated with respondents' vertical cultural orientation (and negatively correlated with their horizontal cultural orientation). Moreover, content analyses of magazine advertisements in several countries suggested that status-oriented themes of hierarchy, luxury, prominence, and distinction were generally more prevalent in societies presumed to have vertical cultural profiles (e.g., Korea, Russia) than a horizontal cultural profile (Denmark).

Lalwani, Shavitt, and Johnson (2006) showed that the horizontal/vertical distinction provides a basis for refining our understanding of individualism/collectivism effects. Their studies showed that individualism/collectivism differences in socially desirable responding appear to be mediated at the individual level by horizontal (but not vertical) IND and COL values. These findings shed light on the motivational drivers linking culture with socially desirable response styles. Specifically, the response styles that were observed appeared to reflect distinct self-presentational goals—goals of being seen as sociable and benevolent (HC) versus self-reliant and capable (HI).

Additional Dimensions Numerous other cultural dimensions deserve further attention in consumer research. A focus upon these relatively under-researched dimensions as antecedents may allow for broadening the range of cultural differences beyond those currently investigated. For instance, Schwartz's extensive research (e.g., Schwartz, 1992; Schwartz & Bilsky, 1987, 1990) has validated 10 motivationally distinct types of values. The quasi-circumplex structure of values that has emerged cross-nationally (Schwartz & Boehnke, 2004) appears largely consistent with the HI, VI, HC, VC typology. Data from two independent sets of 23 samples drawn from 27 countries ($N = 10,857$) supported the assumption of contradiction between values such as power and achievement (corresponding to a vertical orientation) and benevolence and universalism (corresponding to a horizontal orientation), which were hypothesized to be structurally oppositional (Schwartz & Boehnke, 2004). Although few if any consumer psychology studies have employed Schwartz's value typology, it does offer a particularly detailed and comprehensive basis for classification.

In his large-scale studies of work values, Hofstede (1980, 2001) derived three other dimensions of cultural variation in addition to individualism: *power distance* (acceptance of power inequality in organizations, a dimension conceptually relevant to the vertical/horizontal distinction), *uncertainty avoidance* (the degree of tolerance for ambiguity or uncertainty about the future), and *masculinity/femininity* (preference for achievement and assertiveness versus modesty and nurturing relationships). A few marketing-oriented studies have employed these nation-level classifications (e.g., Blodgett, Lu, Rose, & Vitell, 2001; e.g., Dwyer, Mesak, & Hsu, 2005; Earley, 1999; Johnson, Kulesa, Cho, & Shavitt, 2005; Spencer-Oatey, 1997), but more potential remains for identifying consequences for consumer judgments and behaviors. For instance, uncertainty avoidance has been conceptualized as a syndrome related to anxiety, rule orientation, need for security, and deference to experts (Hofstede, 1980). As such, one might speculate that the level of uncertainty avoidance in a culture will predict the tendency for advertisements to use fear appeals or appeals to safety and security, and the tendency for advertisements to employ expert spokespersons. Differences along this cultural dimension may also predict the level of public support for stricter regulation of marketers and advertisers. Moreover, patterns in the diffusion of product innovations, particularly

innovations whose purchase entails a degree of risk, may vary with the level of uncertainty avoidance in a society.

The main point here is that these relatively unexplored dimensions of cultural comparison have multiple implications for advertising and marketing processes. Attention to a broader set of cultural dimensions will not only expand the range of independent variables in our research, but will also prompt consideration of cultural consequences hitherto unexamined in cross-cultural studies.

CULTURE AND THE SELF: SELF-REGULATORY FOCUS

Regardless of whether they are chronically or temporarily made accessible, alternative self-construals are thought to reflect different psychological goals. More specifically, the independent goal of distinguishing oneself from others through success and achievement and the interdependent goal of maintaining harmony with respect to others through the fulfillment of obligations and responsibilities serve as self-regulatory guides that direct consumers' attention, attitudes, and behaviors (Higgins, 1997).

The independent goal of being positively distinct, with its emphasis on achievement and autonomy, is more consistent with a promotion focus; whereas the interdependent goal of harmoniously fitting in with others, with its emphasis on fulfilling social roles and maintaining connections with others, is more consistent with a prevention focus. People with a promotion focus regulate their attitudes and behaviors toward the pursuit of growth and the achievement of hopes and aspirations to satisfy their needs for nurturance. They pursue their goals with eagerness and are sensitive to the absence and presence of positive outcomes. In contrast, those with a prevention focus regulate their attitudes and behaviors toward the pursuit of safety and the fulfillment of duties and obligations to satisfy their needs for security. They pursue their goal with vigilance and are sensitive to the absence and presence of negative outcomes.

The notion that people from Western cultures (whose independent self-construal is more accessible) tend to be promotion focused and people from Eastern cultures (whose interdependent self-construal is more accessible) tend to be prevention focused is consistent with the pattern of results found in self-enhancement studies. For example, as will be discussed shortly, it has been shown that Americans are more likely to engage in self-enhancement that focuses on the positive features of the self, whereas Japanese are more likely to engage in self-criticism that focuses on the negative aspects of the self in order to avoid future mishaps (Heine, Lehman, Peng, & Greenholtz, 2002; Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997).

That distinct self-construals are associated with distinct types of self-regulatory focus has important implications for consumer research. First, consumers consider information that is compatible with the dominant self view to be more important (Lee et al., 2000). Specifically, promotion (prevention) focused information that addresses the concerns of growth and achievement (safety and security) is more relevant and hence deemed more important to those individuals with a dominant independent (interdependent) self-construal (Aaker & Lee, 2001; Lee et al., 2000). Using different operationalizations of self-construal that include cultural orientation (North American vs. East Asian), individual disposition (Singelis, 1994), and situational prime, Lee and her colleagues (Lee et al., 2000) demonstrate that individuals with a more accessible independent self view perceive a scenario that emphasizes gains or nongains to be more important than one that emphasizes losses or nonlosses. They also experience more intense promotion-focused emotions such as cheerfulness and dejection. In contrast, those with a more dominant interdependent self view perceive a scenario that emphasizes losses or nonlosses to be more important than one that emphasizes gains or nongains. They also experience more intense prevention-focused emotions such as peacefulness and

agitation. Thus, consumers with distinct self-construals are more persuaded by information that addresses their regulatory concerns when argument quality is strong (Aaker & Lee, 2001; Agrawal & Maheswaran, 2005; J. Wang & Lee, 2006), but less persuaded when the argument quality is weak. Chen, Ng, and Rao (2005) also find that consumers with a dominant independent self-construal are more willing to pay for expedited delivery when presented with a promotion framed message (i.e., to enjoy a product early), whereas those with a dominant interdependent self-construal are more willing to pay for expedited delivery when presented with a prevention framed message (i.e., avoid delay in receiving a product). These matching effects between self-construal and regulatory focus are observed regardless of whether self-construal is situationally made more accessible or culturally nurtured (Aaker & Lee, 2001; Agrawal & Maheswaran, 2005; Chen et al., 2005). Interestingly, brand commitment (defined as consumers' public attachment or pledging to the brand) seems to moderate the effectiveness of the chronic versus situational regulatory relevance effects (Agrawal & Maheswaran, 2005). In particular, Agrawal and Maheswaran (2005) find that appeals consistent with the chronic self-construal are more persuasive under high brand commitment, whereas appeals consistent with the primed (independent or interdependent) self-construal are more effective under low brand commitment. According to the authors, consumers who are committed to the brand have a readily accessible knowledge structure related to the brand. To these consumers, not only is brand information highly accessible, it is also linked to other chronically accessible cognition in memory. Hence exposure to brand information such as an advertising appeal is likely to activate their chronic self-construal. Thus, appeals consistent with their chronic self-construal are more persuasive. However, for the low commitment consumers, brand information is not linked to any chronic knowledge base. Thus, appeals that are consistent with their more accessible self-construal at any one time (i.e., their primed self-construal) are more persuasive.

More recent research suggests that regulatory relevance effects may be moderated by involvement such that people are more likely to rely on their regulatory focus as a filter to selectively process information when they are not expending cognitive resources to process information (Briley & Aaker, 2006; Wang & Lee, 2006). For example, Briley and Aaker (2006) demonstrate that participants who are culturally inclined to have a promotion or prevention focus hold more favorable attitudes toward those products that address their regulatory concerns—but only when they are asked to provide their initial reactions or when their evaluation is made under cognitive load or under time pressure. The culturally induced regulatory relevance effects disappear when participants are asked to make deliberated evaluations or when they are able to expend cognitive resources on the task.

Distinct self-construals with their corresponding regulatory goals also appear to be the basis of different temporal perspectives across members of different cultures such that those with a dominant independent self-construal are more likely to construe events at a more distant future than those with a dominant interdependent self-construal. For the independents, their regulatory goal that emphasizes growth and achievement takes time to attain. Further, their sensitivity to gains and nongains prompts them to focus on positives (vs. negatives), which are more salient in the distant future (Eyal, Liberman, Trope, & Walther, 2004). In contrast, for the interdependents, their regulatory orientation that emphasizes safety and security necessitates their keeping a close watch on their surrounding environment and on the immediate future. Further, their sensitivity to losses and nonlosses prompts them to focus on negatives (vs. positives), which are more salient in the near future. Interdependents' close attention to the self in relationship with others also requires their construing the self and others in contexts that are concrete and specific (vs. abstract and general, Choi, Dalal, Kim-Prieto, & Park, 2003), which are more characteristic of near versus far temporal distance. Indeed, Lee and Lee (2005) observe that those with a dominant interdependent self-

construal (e.g., Koreans) are likely to construe a future event to be temporally more proximal than those with a dominant independent self-construal (e.g., Americans); interdependents also respond more positively to events scheduled in the near future than do independents. The implication is that appeals that make salient the temporal distance that corresponds with consumers' self view would be more persuasive than appeals that make salient a mismatched temporal distance.

It is important to note that temporal perspective in terms of event construal (i.e., temporal construal) is different from temporal perspective in terms of how far reaching are the consequences of an event (i.e., the "ripple effect," Maddux & Yuki, 2006). The ability of those with a dominant interdependent self-construal to recognize the interrelationships between people, objects, and situations should prompt them to perceive events to have far-reaching consequences, even though they are more likely to have a proximal temporal perspective. In contrast, the perception by those with an accessible independent self-construal of people, objects and situations as being discrete rather than intertwined should prompt people to think that the consequences of events are relatively short-lived, even though they are more likely to have a distant temporal perspective (Lee & Lee, 2005).

This section highlights the importance of understanding the regulatory orientation of the two distinct self views. However, efforts to generalize this relationship should proceed with caution. As discussed earlier, cultures differ not only in their levels of individualism and collectivism, but also in the extent to which they are vertical (emphasizing hierarchy) or horizontal (emphasizing equality or openness, Triandis, 1995; Triandis & Gelfand, 1998). It is possible that construal-induced shifts in regulatory focus are limited to cultures that are vertical in structure. To the extent that competing to distinguish oneself positively is more prevalent in vertical than horizontal individualist cultures, an independent promotion focus is more likely among members of a vertical individualist culture (e.g., United States) than a horizontal individualist culture (e.g., Norway, Sweden). And to the extent that obligations and responsibilities are better defined in a vertical collectivist culture with its roles and norms than in a horizontal collectivist culture, an interdependent prevention focus should be more prevalent among members of a vertical collectivist culture (e.g., Japan, Korea) than a horizontal collectivist culture (e.g., an Israeli kibbutz). More research is thus needed to investigate whether the relationship between self-construal and regulatory focus may be generalized across both horizontal and vertical types of individualism and collectivism.

CULTURE AND THE SELF: MAKING RISKY CHOICES AND SELF-REGULATION

Another area of interest related to self-regulation is how culture influences people's attitudes toward risk and the way they make risky choices. Based on the literature reviewed in the previous section, one would expect that members of collectivist cultures who tend to be prevention-focused would be more risk averse than members of individualist cultures who tend to be promotion-focused (Lee et al., 2000). In particular, individuals who are promotion focused are inclined to adopt an eagerness strategy, which translates into greater openness to risk, whereas those who are prevention focused are inclined to adopt a vigilant strategy, which usually translates into more conservative behaviors (Crowe & Higgins, 1997). Further, options that have greater potential upsides are likely to also come with greater potential downsides, whereas options with smaller potential downsides are often those with smaller potential upsides. Thus, when choosing between a risky alternative with greater upsides and downsides and a conservative alternative with smaller downsides and upsides, individuals who pay more attention to positive outcomes would favor the risky option, whereas those who focus more on negative outcomes would favor the conservative option. These different attitudes toward risk are consistent with findings that promotion-focused participants

emphasize speed at the expense of accuracy in different drawing and proofreading tasks and that the reverse is true for those with a prevention focus (Forster, Higgins, & Bianco, 2003).

However, empirical investigations examining the difference between people with distinct cultural self-construals have produced mixed results. For instance, Briley and Wyer (2002) found that those primed with an interdependent versus independent self-construal were more likely to choose a compromise alternative (i.e., an option with moderate values on two different attributes) over more extreme options (i.e., options with a high value on one attribute and a low value along a second attribute) when choosing between such products as cameras, stereo sets, or computers. When presented with the task of picking two pieces of candy, interdependence-primed participants were also more likely to pick two different candies than two pieces of the same candy. To the extent that choosing the compromise alternative or picking one of each candy reduces the risk of social embarrassment and post-choice regret, these results provide support that those with a dominant interdependent self-construal are indeed more risk averse. Similarly, Mandel (2003) observed that participants primed with an interdependent versus independent self-construal were more likely to choose a safe versus a risky option when choosing a shirt to wear to a family gathering or when playing truth or dare. However, these same participants were more likely to choose the risky option when making a decision regarding a lottery ticket or a parking ticket. Along similar lines, Hsee and Weber (1999) presented Chinese and Americans with safe versus risky options in three decision domains—financial (to invest money in a savings account or in stocks), academic (to write a term paper on a conservative topic so that the grade would be predictable or to write the paper on a provocative topic so the grade could vary), and medical (to take a pain reliever with a moderate but sure effectiveness or one with a high variance of effectiveness). They found that Chinese were more risk-seeking in the financial domain than their American counterparts, but not in the academic and medical domains. Taken together, these results suggest that while individuals with a dominant interdependent self-construal are more risk averse than those with a dominant independent self-construal in general, they are less risk averse when their decision involves financial risks.

To account for these findings in the financial domain, Weber and Hsee (Weber & Hsee, 1998, 2000) proposed that members of collectivist cultures can afford to take greater financial risks because their social network buffers them from financial downfalls. That is, individuals' social networks serve as a cushion which could protect them should they take risks and fall; and the wider is their social network, the larger is the cushion. Because people in collectivist cultures have larger social networks to fall back on relative to those in individualist cultures, they are more likely to choose seemingly riskier options because their perceived risks for those options are smaller than they are for people in individualist cultures. In one study, Weber and Hsee (1998) surveyed American, German, Polish, and Chinese respondents about their perception of the riskiness of a set of financial investment options and their willingness to pay for these options and found that their Chinese respondents thought the risks were the lowest and paid the highest prices for the investments, and the opposite was true for Americans. Once risk perception was accounted for, the cross-cultural difference in risk aversion disappeared. Mandel (2003) also found that the difference between independent and interdependent participants' risky financial choices is mediated by the size of the participants' social network.

Hamilton and Biehal (2005) suggest that this social network cushioning effect may be moderated by people's self-regulatory goals. They find that those primed with an independent self-construal tend to prefer mutual funds that are more risky (i.e., more volatile) than those primed with an interdependent self-construal; and this difference is mediated by the strength of their regulatory goal in that risky preferences are fostered by promotion goals and discouraged by prevention goals. They further show that interdependent participants' preferences for the less risky options may be

moderated by their bias toward maintaining the status quo. That is, when interdependent primed participants were told that they had previously chosen a more volatile mutual fund, they were more likely to choose the high-risk versus the safer options. In contrast, the preference of those primed with an independent self-construal was not affected by status quo information.

It is interesting to note that both Mandel (2003) and Hamilton and Biehal (2005) manipulated self-construal but found opposite effects of self-construal on risky financial decisions. Hamilton and Biehal (2005) suggest that perhaps Mandel's (2003) interdependence prime, which implied that "you depend on others," prompted a stronger promotion orientation than Hamilton and Biehal's interdependence induction, which emphasized the notion that "others depend on you." Hence, Mandel's interdependent participants were more risk-seeking. This "you depend on others" mindset may have also characterized Weber and Hsee's (1998) risk-seeking Chinese participants who were university students, especially in light of their likelihood of being the only child in the family.¹ More systematic investigations of how culture and self-construal affect consumers' risky decision making await future research.

Besides having an influence on the individual's self-regulatory focus and attitude toward risks, culture also plays an important role in the individual's self-regulation of emotions and behaviors. Because the maintenance of harmony within the group may hinge on members' ability to manage their emotions and behaviors, collectivist cultures tend to emphasize the control and moderation of one's feelings and actions more so than do individualistic cultures (Potter, 1988; Russell & Yik, 1996; Tsai & Levenson, 1997). Indeed, it has been reported that members of collectivist cultures often control their negative emotions and only display positive emotions to acquaintances (Gudykunst, 1993). Children in these societies are also socialized to control their impulses at an early age (Ho, 1994).

It follows that culture would play an important role in consumers' purchase behavior by imposing norms on the appropriateness of impulse buying activities (Kacen & Lee, 2002). When consumers believe that impulse buying is socially unacceptable, they are more likely to refrain from acting on their impulsive tendencies (Rook & Fisher, 1995). Whereas members of individualist cultures are more motivated by their own preferences and personal goals, members of collectivist cultures are often motivated by norms and duties imposed by society. Thus, people with a dominant interdependent self-construal who tend to focus on relationship harmony and group preferences should be better at monitoring and adjusting their behavior based on "what is right" rather than on "what I want." Consistent with this notion, Kacen and Lee (2002) surveyed respondents from Australia, the U. S. Midwest, Singapore, Malaysia, and Hong Kong, and found that the relationship between trait buying impulsiveness and actual impulsive buying behavior is stronger for individualists (respondents from Australia, and the United States) than for collectivists (respondents from Hong Kong, Malaysia, and Singapore). Further, this relationship is observed to be positively correlated with respondents' independent self-construal among the individualists, but not among the collectivists. These results are consistent with findings that attitude-behavior correlations are weaker in collectivist than individualist cultures (Bagozzi, Wong, Abe, & Bergami, 2000; Kashima, Siegal, Tanaka, & Kashima, 1992; Lee, 2000). Along similar lines, Chen, Ng, and Rao (2005) also find that consumers with a dominant independent self-construal are less patient in that they are willing to pay more to expedite the delivery of an online book purchase than those with a dominant interdependent self-construal.

However, there are also reasons to believe that those with a dominant independent self-construal may have better self-control than those whose interdependent self-construal is more dominant. Recent research by Dholakia and his colleagues (Dholakia, Gopinath, Bagozzi, & Natarajan, 2006) suggests that although prevention-focused consumers report lower desires for tempting objects, it

is the promotion-focused consumers who are more successful in resisting temptation. More specifically, their participants were asked to imagine that they were on a tight budget shopping for socks, and were tempted with an expensive sweater. The approach to the self-control strategies of the promotion-primed participants, which tended to focus on achieving their goal (e.g., “socks are more important right now”), were more effective than the avoidance strategies employed by the prevention-primed participants, which tended to focus on the temptation (e.g., “I don’t need this sweater”). Future research is warranted to investigate the role that culture and self-construal play in self-regulation and impulse purchase behavior. In particular, investigations into the interplay between chronic and situationally induced self-views and regulatory foci may offer important insights to help consumers make better choices.

CULTURE AND CONSUMER PERSUASION

Most research on cultural influences on judgment and persuasion has examined the implications of individualism/collectivism or independent/interdependent self-construals. Initial research on these questions examined the degree to which the prevalence or the persuasiveness of appeals matches the cultural value orientation of the society. Several of these studies sought evidence for “cultural matching” in the nature of appeals that tend to be found in a society’s advertising media. Others examined whether culturally matched message appeals have a greater persuasive impact than mismatched messages. We review these studies presently.

Content Analyses: Cultural Differences in the Prevalence of Appeals

What can be learned about culture by analyzing a society’s advertisements? Through content analyses of advertisements, researchers can infer changes in consumption and cultural values from changes in advertising appeals (Pollay, 1986). Cross-cultural comparisons can also yield evidence for distinctions between cultures.

For instance, U. S. advertisers are often exhorted to focus on the advertised brand’s attributes and advantages (e.g., Ogilvy, 1985), based on the assumption that consumer learning about the brand precedes other marketing effects, such as liking and buying the brand (Lavidge & Steiner, 1961), at least under high involvement conditions (Vaughn, 1980). Thus, advertisements that attempt to “teach” the consumer about the advertised brand are typical in the United States, although other types of advertisements are also used.

In contrast, as Miracle (1987) has suggested, the typical goal of advertisements in Japan appears very different. There, advertisements tend to focus on “making friends” with the audience and showing that the company understands their feelings (Javalgi, Cutler, & Malhotra, 1995). The assumption is that consumers will buy once they feel familiar with and have a sense of trust in the company. Because Japan, Korea, and other Pacific Rim countries are collectivist, “high context” cultures that tend toward implicit and indirect communication practices (Hall, 1976), Miracle suggested that the mood and tone of commercials in these countries will be particularly important in establishing good feelings about the advertiser (see also Taylor, Miracle, & Wilson, 1997). Indeed, studies have shown that advertisements in Japan and Korea rely more on symbolism, mood, and aesthetics and less on direct approaches such as brand comparisons than do advertisements in the United States (Cho, Kwon, Gentry, Jun, & Kropp, 1999; di Benedetto, Tamate, & Chandran, 1992; Hong et al., 1987; Javalgi et al., 1995).

This is not to argue that advertisements in collectivist societies use more of a “soft sell” approach in contrast to a “hard sell,” information-driven approach in the West. Information content in the

advertisements of collectivist cultures can be very high (Tse, Belk, & Zhou, 1989), sometimes higher than that of U.S. advertisements (Hong et al., 1987; Rice & Lu, 1988; for a review see Taylor et al., 1997). It is generally more an issue of the type of appeal that the information is supporting.

For instance, a content analysis of magazine advertisements revealed that in Korea, as compared to the United States, advertisements are more focused on family well-being, interdependence, group goals, and harmony, whereas they are less focused on self-improvement, ambition, personal goals, independence, and individuality (Han & Shavitt, 1994). However, as one might expect, the nature of the advertised product moderated these effects. Cultural differences emerged strongly only for products that tend to be purchased and used along with other persons (e.g., groceries, cars). Products that do not tend to be shared (e.g., health and beauty aids, clothing) are promoted more in terms of personal, individualistic benefits in both countries.

Paralleling the overall cross-national differences, a content analysis by Kim and Markus (1999) indicated that Korean advertisements, compared to U.S. advertisements, were characterized by more conformity themes (e.g., respect for collective values and beliefs) and fewer uniqueness themes (e.g., rebelling against collective values and beliefs). (See also Cho et al., 1999; Choi et al., 2005; Javalgi et al., 1995; Tak, Kaid, & Lee, 1997, for other ad comparisons relevant to individualism/collectivism).

Recently, studies have extended these cultural conclusions into analyses of website content (Cho & Cheon, 2005; Singh & Matsuo, 2004). For instance, Cho and Cheon (2005) found that corporate Web sites in the United States and the United Kingdom tend to emphasize consumer-message and consumer-marketer interactivity. In contrast, those in Japan and Korea tended to emphasize consumer-consumer interactivity, a pattern consistent with cultural values stressing collectivistic activities that foster interdependence and sociability.

Finally, in studying humorous appeals, Alden, Hoyer, and Lee (1993) found that advertisements from both Korea and Thailand contain more group-oriented situations than do those from Germany and the United States. However, it is worth noting that in these studies, evidence also emerged for the value of the vertical/horizontal distinction previously discussed. Specifically, relationships between the central characters in advertisements that used humor were more often unequal in cultures that were characterized as having higher power distance (i.e., relatively vertical cultures, such as Korea) than in those labeled as lower in power distance (such as Germany), in which these relationships were more often equal. Such unequal relationships portrayed in the advertisements may reflect the hierarchical interpersonal relationships that are more likely to exist in vertical societies.

Cultural Differences in Judgment and Persuasion

The persuasiveness of appeals appears to mirror the cultural differences in their prevalence. An experiment by Han and Shavitt (1994) showed that appeals to individualistic values (e.g., "Solo cleans with a softness that you will love") are more persuasive in the United States and appeals to collectivistic values (e.g., "Solo cleans with a softness that your family will love") are more persuasive in Korea. Again, however, this effect was much more evident for products that are shared (laundry detergent, clothes iron) than for those that are not (chewing gum, running shoes).

Zhang and Gelb (1996) found a similar pattern in the persuasiveness of individualistic versus collectivistic appeals in an experiment conducted in the United States and China. Moreover, this effect appeared to be moderated by whether the advertised product is socially visible (camera) versus privately used (toothbrush). Finally, Wang and Mowen (1997) showed in a U.S. sample that individual differences in separateness/connectedness self-schema (i.e., the degree to which one views the self as independent of or interconnected with important others) predicts attitudes

toward individualistic versus collectivistic ad appeals for a credit card. Thus, cultural orientation as well as national culture have implications for the effectiveness of appeals. However, such cultural differences are only anticipated for those products or uses that are relevant to both personal and group goals.

Wang, Bristol, Mowen, and Chakraborty (2000) further demonstrated that individual differences in separateness/connectedness self-schema mediate both the effects of culture and of gender on the persuasiveness of individualistic versus collectivistic appeals. However, their dimensional analysis demonstrates that this mediating role is played by distinct dimensions of separateness/connectedness self-schema for cultural as opposed to gender-based effects.

Less is known regarding the impact of culture on the cognitive processing of persuasive messages. Some studies attest that existing models of cognitive processing and cognitive responding serve as useful frameworks across cultures (Aaker & Maheswaran, 1997; Aaker & Williams, 1998; Alden, Stayman, & Hoyer, 1994; Leong, Ang, & Tham, 1996).

Cultural differences in persuasion are also revealed in the diagnosticity of certain types of information. For instance, Aaker and Maheswaran (1997) showed that consensus information regarding other consumers' opinions is not treated as a heuristic cue by Hong Kong Chinese (as it is in the United States, Maheswaran & Chaiken, 1991) but is instead perceived and processed as diagnostic information. Thus, collectivists resolve incongruity in favor of consensus information, not brand attributes. This would be expected in a culture that stresses conformity and responsiveness to others' views. On the other hand, cues whose (low) diagnosticity is not expected to vary cross-culturally (e.g., number of attributes presented) elicit similar heuristic processing in the United States and Hong Kong.

Further research indicates that, whereas members of both U.S. and Chinese cultures resolve incongruities in the product information they receive, they tend to do so in different ways (Aaker & Sengupta, 2000). Specifically, U.S. consumers tend to resolve incongruity with an "attenuation strategy" in which one piece of information is favored over another, inconsistent piece of information. In contrast, Hong Kong Chinese consumers tend to follow an additive strategy in which both pieces of information are combined to influence judgments. This is consistent with a view of East Asian individuals as thinking *holistically*, and taking more information into account when making judgments (Choi et al., 2003; Nisbett, Peng, Choi, & Norenzayan, 2001).

Finally, although numerous studies on culture and consumer persuasion have pointed to cultural-congruity effects, suggesting that culturally matched ad appeals are more prevalent and/or persuasive than culturally mismatched appeals, a growing number of studies have suggested that the situation in rapidly transitioning economies may be more complex. For example, Westernized appeals, such as appeals to youth/modernity, individuality/independence, and technology are rather salient in Chinese advertisements (Zhang & Shavitt, 2003) as well as frequently employed by current Taiwanese advertising agencies (Shao, Raymond, & Taylor, 1999). These cultural-incongruity findings may be driven by government policies guiding internal development and modernization, by public exposure to Western media, and by demographic and geographic contact zones.

In addition, consumers in developing countries tend to respond favorably to markedly Western products. For instance, in one study of Indian consumers (Batra, Ramaswamy, Alden, Steenkamp, & Ramachander, 2000), brands perceived as having a nonlocal (Western) country of origin were favored over brands perceived to be local. This effect was stronger for consumers with a greater admiration for the lifestyle in economically developed countries. These cultural-incongruity findings are meaningful because they suggest the important role that advertising can play in reshaping cultural values in countries experiencing rapid economic growth (Zhang & Shavitt, 2003). Rather than reflecting existing cultural values, advertising content in those countries promotes new

aspirational values, such as individuality and modernity, hence these new values become acceptable and desirable among consumers.

MEASUREMENT AND METHODOLOGY: OVERVIEW

We turn now to a consideration of the measurement issues and challenges facing consumer psychologists who seek to compare distinct cultural groups. It is now generally understood that substance and measurement artifacts can become confounded if care is not taken when conducting cross-cultural research (Harkness, van de Vijver, & Mohler, 2003; Singh, 1995), and that such issues complicate cross-cultural marketing research (Malhotra, Agarwal, & Peterson, 1996). These measurement artifacts may take several forms. Cultural conditioning, for example, can mediate how individuals comprehend or interpret survey questions. Recognized for years as a problem in achievement testing (Flaugher, 1978; Hambleton, Merenda, & Spielberger, 2005; Williams, 1977), the uncritical adoption of measures developed within one cultural context for use with persons of differing cultural backgrounds may misrepresent the thoughts, feelings, and behaviors of those individuals, leading to erroneous conclusions (Johnson et al., 1997; Marin & Marin, 1989; Rogler, 1989). Similarly, culture-based variations in perceptions of social desirability and concerns about social presentation may also be mistaken for substantive group differences, or mask real differences (Johnson & van de Vijver, 2003; Keillor, Owens, & Pettijohn, 2001; Middleton & Jones, 2000). Communication norms are also influenced by culture (Gudykunst & Kim, 1992; Kochman, 1981) and may contribute to differences in response patterns to survey questionnaires and interviews that reflect cultural, as well as substantive, concerns. Research to be reviewed later in this chapter has documented race, national and ethnicity-based variability in several survey response behaviors, including acquiescent response behavior (Grimm & Church, 1999; Smith, 2004; van Herk, Poortinga, & Verhallen, 2004) and preferences for or against extreme response options (Bachman & O'Malley, 1984; Clarke, 2000; Marin & Marin, 1989). These cultural artifacts threaten the comparability of survey data collected across nations and across cultural subgroups within countries.

The potential effects of cultural influences on survey data collection have not always been recognized. For example, the highly regarded cross-national study of civic behavior conducted in the early 1960s by Almond and Verba (1963) compared and analyzed survey data collected in five nations (Germany, Great Britain, Italy, Mexico, the United States) without considering potential culture-based differences in questions processing, communication norms or response behaviors. During that same decade, several other studies began documenting the presence of culture-driven measurement artifacts in survey measures. Dohrenwend (1966) identified differences in perceptions of the desirability of various psychological symptoms across samples of four ethnic groups residing in New York City. These differences were related to the prevalence of each symptom type within each cultural group such that less stigma was associated with the more common symptoms found within each group. This work inspired a series of subsequent studies concerned with the potential bias introduced by race/ethnic variability in response styles (Carr, 1971; Cunningham, Cunningham, & Green, 1977; Zax & Takahashi, 1967). Around the same time, a landmark study reported by Hofstede (1980) examined survey data collected from IBM employees in 40 countries between 1967 and 1973. Among the numerous important findings reported by Hofstede was the fact that measures of response acquiescence varied across these nations. To address this potential confound, Hofstede reported a method of score standardization that was designed to eliminate the differential effects of acquiescence.

During these same years, research contributed by a variety of disciplines also began pointing to differences in how questions and concepts were being interpreted across race and ethnic groups

(Mirowsky & Ross, 1980; Zola, 1966). Collaborations between survey methodologists and cognitive psychologists in the early 1980s led to the development of formal models of the survey response process (Jabine, Straf, Tanur, & Tourangeau, 1984). This work integrated question interpretation, recall, judgment formation and mapping, and response editing processes into a unified conceptual model of respondent processing of survey questions. Subsequent work has identified evidence that race & ethnicity may influence the processes in this model at multiple points (Johnson et al., 1997; Warnecke et al., 1997).

In the late 1950s, concern was also being expressed that quantitative measures were being systematically contaminated by social desirability, or the need for social approval (Crowne & Marlowe, 1960; Edwards, 1957). Interestingly, one of the first field reports of this phenomenon described a communication pattern among East Asian survey respondents that was labeled a “courtesy bias” (Jones, 1963). This cultural norm, it was reported, emphasized the importance of establishing and maintaining polite and cordial interactions with visitors, even at the cost of providing inaccurate information. Indeed, it is now understood that this norm can complicate the interpretation of market research data because consumers in some societies hesitate to express the critical product perceptions they hold (Douglas & Craig, 1983; Witkowski, Ma, & Zheng, 2003). Numerous studies have also investigated the potential effects of this and similar social desirability biases on race & ethnic group comparisons (Crandall, Crandall, & Katkovsky, 1965; Edwards & Riordan, 1994; Ross & Mirowsky, 1984).

More recent research, to be reviewed in the next section, has moved beyond the documentation of race/ethnic/national differences in culturally based measurement bias towards understanding the processes by which culture influences survey error, as well as strategies for developing and testing measures that are more equivalent across cultural groups. It is to this latter problem that we next turn our attention.

CONSTRUCTING EQUIVALENT MEASURES

Measurement theory traditionally emphasizes the fundamental importance of reliability and validity considerations when constructing survey and other quantitative measures (Nunnally, 1978). In conducting cross-cultural research, the equivalence of measures is also an important consideration, one that has been all-too-often overlooked. As van de Vijver and Leung (2000) wrote in a special “Millennium” issue of the *Journal of Cross-Cultural Psychology*, the “uncritical acceptance of observed differences in the social domain as reflecting valid cross-cultural differences (p. 35)” is a serious barrier to continued progress in cross-cultural research. Recent research has in fact documented numerous examples of cultural variability in the performance of measures initially developed in mono-cultural settings that may raise questions of cross-group applicability. Wong, Rindfleisch, and Burroughs (2003) have demonstrated that the use of scales that employ both positive and reverse-worded items may be seriously problematic in some cultures, but not others, thus limiting the cross-cultural usefulness of this common measurement strategy. There is also evidence that culture may differentially influence the use of response scale end-points (van Herk et al., 2004), the reporting of behavior frequencies (Ji, Schwarz, & Nisbett, 2000; Schwarz, 2003) and the reporting of sensitive information (Johnson & van de Vijver, 2003).

Although there is growing recognition of the need to address the equivalence of measures, there is little consensus regarding the dimensionality and assessment of that equivalence. For example, more than 100 types of equivalence have been referenced in the research literature (Brown, 2000) and numerous equivalence typologies have been proposed (J. Singh, 1995; Steenkamp & Baumgartner, 1998; Stewart & Napoles-Springer, 2000; van de Vijver, 1998). Two very general classes

of equivalence tend to dominate these discussions: those that are primarily concerned with the psychometric comparability of measures across cultural groups—what Johnson (1998) has referred to as forms of procedural equivalence—and those that emphasize shared meaning of the construct being measured—interpretive equivalence. Interpretive equivalence is a necessary precondition for procedural equivalence and it is important to recognize that some constructs may not have the cross-cultural equivalents necessary to develop comparable measures. We also note that anthropologists and cross-cultural psychologists distinguish between etic and emic concepts (Triandis, 1972). Etics are those concepts that are believed to be shared across multiple cultures, and emics are those that have important meaning within one or more cultures, but no equivalent within others. As an example, love for one's children would seem to be a universal value, and hence, an etic concept. Various cultures, however, may have differing norms for expressing it, a situation that might require an emic, or culture-specific, measurement strategy.

Prior to developing measures for cross-cultural applications, it is thus necessary to evaluate the degree to which the constructs to be measured are etic or emic across the cultures of interest. Although numerous strategies have been proposed, there is as of yet no consensus regarding best practices for evaluating and constructing equivalent measures across cultural groups. Several procedures are now being successfully employed to address the equivalency of survey measures. These include cognitive interviewing (Johnson et al., 1997), group translation procedures (Harkness, 2003; Harkness, Pennell, & Schoua-Glusberg, 2004), assessments of differential item functioning using Rasch and item response theory methods (Ewing, Salzberger, & Sinkovics, 2005; Teresi, Holmes, Ramirez, Gurland, & Lantigua, 2001) and covariance structure modeling (Devins, Beiser, Dion, Pelletier, & Edwards, 1997; Scholderer, Grunert, & Brunso, 2005; Steenkamp & Baumgartner, 1998). Below, we describe recent innovative approaches to addressing this problem.

One promising methodology involves the use of anchoring vignettes to confront the challenge of group differences in question interpretations by directly assessing and calibrating survey response categories across cultures. This method, recently introduced by King, Murray, Salomon, and Tandon (2004), measures individual responses to a series of vignettes, which are then used to standardize survey responses across groups that employ varying frames of reference. King et al. present both parametric and nonparametric methods for making cross-cultural adjustments. A recent application of this technique is described by Salomon, Tandon, and Murray (2005), who use it to assess the equivalence of health self-ratings across six under-developed nations.

Behavior coding, a technique originally developed to evaluate interviewer and respondent behaviors (Cannell, Fowler, & Marquis, 1968), has also been recently applied to assessments of cultural variability in question comprehension. (Johnson et al., 2006) coded and analyzed more than 13,000 answers to survey questions provided by 345 African American, Mexican American, Puerto Rican, and non-Hispanic white respondents. They identified respondent behaviors that were indicative of comprehension difficulties (e.g., asking for question clarification, indicating uncertainty about a question, rephrasing a question before answering) and examined variability in these response patterns across respondent and question characteristics using hierarchical linear (HLM) models. These analyses suggested that respondent culture was independently associated with general variability in comprehension difficulty, and also with differences that were linked to specific questionnaire design features.

In sum, although advancements have been made in exploring potential techniques for assessing and establishing the equivalence of survey measures across cultural groups, there remains no agreement regarding best practices in this area. Decisions regarding which approaches to employ are often dictated by time constraints, budget restrictions, and the technical skills of the researcher. There is also no consensus regarding how to organize and define conceptualizations of equivalence.

Resolution of this latter problem will be a necessary prerequisite to further progress towards the former.

CULTURE AND RESPONSE STYLES

Response styles are of central interest in the study of cross-cultural consumer psychology because of their potential to complicate measurement and interpretation of cultural differences. Vogt (1999, p. 248) describes response styles as “a tendency ... to give the same type of answer to all questions rather than answering questions based solely on their content.” In other words, response styles represent systematic sources of variation in respondent answers that are determined by factors other than the content of the survey questions. Several common types of response styles include the tendency to provide socially desirable answers, the tendency to provide acquiescent answers, and the tendency to select the most extreme response options when answering questions. Each of these response styles have been linked with the cultural background of survey respondents and may pose an obstacle to cross-cultural measurement.

Social Desirability

Respondent reporting of information that projects a favorable image of themselves, sometimes at the expense of accuracy, is commonly known as social desirability bias (Nederhof, 1985). This reporting style reflects the human propensity to emphasize, and occasionally overstate, positive qualities and behaviors, while de-emphasizing/understating negative ones. Survey validation studies generally support this presumption, as socially desirable behaviors such as voting (Sigelman, 1982), church attendance (Hadaway, Marler, & Chaves, 1993), and physical exercise (Adams et al., 2005) are often overreported, while undesirable behaviors such as drug use (Fendrich, Johnson, Sudman, Wislar, & Spiehler, 1999) and a history of sexually transmitted diseases (Clark, Brasseux, Richmond, Getson, & D'angelo, 1997) are sometimes underreported.

Several self-report measures have been developed to assess socially desirable response tendencies (Crowne & Marlowe, 1964; Edwards, 1957; Eysenck & Eysenck, 1964; Paulhus, 1998a). Persons scoring highly on such measures as the Marlowe-Crowne scale that taps impression management have been found less likely to report dark side consumer behaviors and values, such as alcohol consumption, intoxication, and marijuana use (Bradburn & Sudman, 1979) as well as materialism (Mick, 1996).

As noted earlier, mean scores on these socially desirable responding measures have also been found to vary across nations and across ethnic and racial groups within nations (Johnson & van de Vijver, 2003; Keillor et al., 2001; Lalwani et al., 2006), and more recent research is beginning to identify the underlying cultural orientations and values that may account for these differences. Middleton and Jones (2000), for example, have suggested that variability across each of Hofstede's (2001) cultural dimensions may underlie higher impression management scores for East Asian compared to North American survey respondents. At the national level, van Hemert et al. (2002) reported significant negative correlations between one of these orientations—individualism scores—and mean scores on the Lie scale of the Eysenck Personality Inventory (Eysenck & Eysenck, 1964). Other research has identified greater tendencies among collectivists towards conformity (R. Bond & Smith, 1996) and unwillingness to self-disclose (P. B. Smith & Bond, 1998), characteristics also likely to be associated with socially desirable reporting. One might also expect that socially desirable response styles would be more common in “tight” cultures, a characteristic closely associated with collectivism (Triandis, 1995), in which prescribed norms of behavior would be most explicit.

However, the nature of the relation between cultural variables and this response style is also dependent on the type of socially desirable responding in question. As indicated earlier, Lalwani, Shavitt, and Johnson (2006) argued that two distinct response patterns should emerge as a function of cultural orientations or backgrounds—Impression Management (IM) and Self-Deceptive Enhancement (SDE) (Gur & Sackeim, 1979; Paulhus, 1991; Sackeim & Gur, 1979). Each of these response styles corresponds to different culturally relevant goals. Subscales measuring these dimensions compose the Paulhus Deception Scales (Paulhus, 1984, 1991, 1998b). As implied earlier, IM reflects the traditional definition of socially desirable responding. It refers to an attempt to present one's self-reported actions in the most positive manner to convey a favorable image (Paulhus, 1998a; Schlenker & Britt, 1999; Schlenker, Britt, & Pennington, 1996). This construct is often associated with dissimulation or deception (Mick, 1996), and is tapped by such items as, "I have never dropped litter on the street" and "I sometimes drive faster than the speed limit" (reverse scored; Paulhus, 1998a). SDE refers to the tendency to describe oneself in inflated and overconfident terms. It is a predisposition to see one's skills in a positive light, and has been described as a form of "rigid overconfidence" (Paulhus, 1998a). SDE is assessed by such items as, "My first impressions of people usually turn out to be right" and "I am very confident of my judgments."

Lalwani et al. (2006) showed that U.S. respondents (IND), compared to those from Singapore (COL), scored higher in self-deceptive enhancement and lower in impression management. Similarly, European American respondents (IND), compared to Korean American respondents (COL), scored higher in self-deceptive enhancement and lower in impression management.

Moreover, data in the United States served as a function of cultural orientation, incorporating the horizontal/vertical cultural distinction described earlier, and shed light on the specific cultural goals served by these response styles. Specifically, people with an HC cultural orientation, who emphasize sociability, benevolence, and cooperation, tended to engage in IM. On the other hand, people with an HI orientation, who emphasize self-competence, self-direction, and independence, tended to engage in SDE. The observed response styles thus appear to reflect distinct self-presentational goals—to be seen as sociable and benevolent (HC orientation) versus self-reliant and capable (HI orientation).

In the consumer context, such findings offer implications for understanding how cultural background and orientation influences the way consumers respond to marketing surveys, as well as the way they view and present themselves to consumers and marketers more generally. These patterns of self-presentational styles may lead those with an HI cultural orientation to express relatively inflated levels of confidence in their own consumer skills and to view themselves as unrealistically capable of making good choices in the marketplace. On the other hand, those with an HC cultural orientation may be more likely to distort their previous purchases and marketplace behaviors in a manner designed to appear normatively appropriate and sociable.

Acquiescent Response Style

A second response style, known as acquiescent behavior or "yea-saying," was first recognized prior to World War II (Lentz, 1938). Acquiescence is defined as the tendency of some respondents to agree with survey statements, regardless of content. Stricker (1963) distinguished acquiescent from socially desirable responding by suggesting that the latter represented conformity on items for which clear and unambiguous social norms existed, whereas acquiescence represented conformity on items for which social norms were unclear or did not exist. Hence, social desirability represents a response style motivated by conformity to specific social or cultural norms, in contrast to acquiescent responding, which represents a more general pattern of conformity that is less dependent on

question content. Recognition of this phenomenon led to early recommendations that multiitem scales should balance the numbers of positive and reverse-worded items as a method of addressing this bias (Lentz, 1938). However, as noted earlier, recent research has pointed to cross-national equivalence problems associated with the use of reverse-worded items (Wong et al., 2003).

Unlike the social desirability construct, there are no multi-purpose measures of acquiescence available. Rather, it tends to be measured on an ad hoc basis from study-to-study via total agreement with heterogeneous sets of survey items (Bachman & O'Malley, 1984), the extent of agreement with pairs of oppositely worded items (Johnson et al., 2005), agreement with general sets of items worded in positive and negative directions (Watson, 1992), or by combining two or more of these indices (Baumgartner & Steenkamp, 2001).

Variability in propensity to acquiesce has been identified both within racial and ethnic subgroups within nations and also across counties (Aday, Chiu, & Andersen, 1980; Javeline, 1999; Johnson et al., 1997; Ross & Mirowsky, 1984; van Herk et al., 2004). Research has also begun to identify cultural dimensions that may underlie cross-group variability. Acquiescence may be more common in cultures that value deference, politeness and hospitality (Javeline, 1999). Mounting evidence also suggests that acquiescent response styles may be more common within more collectivistic cultures (Grimm & Church, 1999; Hofstede, 2001; Johnson et al., 2005; Smith, 2004; Smith & Fisher, 2006; van de Vijver, Ploubidis, & van Hemert, 2004).

In addition, acquiescence has been linked with uncertainty avoidance. Smith (2004) found that nations scoring high in uncertainty avoidance also scored higher across several measures of acquiescence. He hypothesized that uncertainty avoidant cultures are more anxiety prone and have less tolerance for ambiguity, and that these traits may be associated with this response style. Similar national level findings have been reported by van de Vijver et al. (2004). In contrast, hierarchical analyses have found acquiescent responding to be higher within cultures that score low in uncertainty avoidance (Johnson et al., 2005), a finding that supports the view that acquiescence is more common in social environments with greater tolerance for ambiguity and uncertainty.

Extreme Response Style

It has also been recognized for many years that some respondents prefer selecting the extreme endpoints of response scales (Cronbach, 1946). Systematic preferences for either extreme or middle responses can produce considerable variance in scale scores that are attributable to this response style, independent of the construct being assessed. There are several approaches to measuring extreme responding. Most commonly, it is assessed as the proportion of survey items for which a respondent selects an extreme response option (Bachman & O'Malley, 1984). Other approaches include evaluating the variance around mean responses (Kiesler & Sproull, 1986) and use of a measure developed by Greenleaf (1992) that has good psychometric properties (i.e., the items are uncorrelated and have equal proportions of positive and negative extreme response proportions).

As with the other response styles evaluated, extreme responding is known to vary across race/ethnic groups within the United States (Bachman & O'Malley, 1984; Hui & Triandis, 1989), and considerable evidence exists of cross-national differences (Chun, Campbell, & Yoo, 1974; Clarke, 2000; C. Lee & Green, 1991; van Herk et al., 2004). Additional evidence of a linkage between culture and extreme responding comes from findings that this construct is inversely associated with level of acculturation among Latinos in the United States (Marin, Gamba, & Marin, 1992), and that English-Spanish bilinguals show a greater preference for extreme responses when interviewed in Spanish as compared to English (Gibbons, Zellner, & Rudek, 1999).

Significantly, several of Hofstede's (2001) cultural dimensions have also been associated with this response style, including individualism (Chen, Lee, & Stevenson, 1995; Smith & Fisher, 2006), power distance and masculinity (Johnson et al., 2005) and uncertainty avoidance (van de Vijver et al., 2004). Taken together, these findings suggest that extreme responding is characteristic of cultures that value distinctive, competitive, assertive, decisive and sincere behavior, and that have a low tolerance for ambiguity (Hamilton, 1968; Marin et al., 1992). Conversely, preference for mid-dling response options may be more common within cultures that value modesty, interpersonal harmony and subtlety.

Addressing Cultural Variability in Response Styles

Multiple approaches have been proposed to deal with the potentially contaminating effects of cultural variability in survey response styles. These include strategies that emphasize construction of items and scales that are less susceptible to these measurement artifacts and analytic approaches to assessing and adjusting for response style differences across groups. Some specific questionnaire design recommendations include the avoidance of agree-disagree question response formats (Converse & Presser, 1986) and the use of measurement scales that contain balanced sets of positively and negatively worded questions to eliminate or minimize the effects of acquiescence (Cloud & Vaughan, 1970; Javeline, 1999; Knowles & Nathan, 1997; Mirowsky & Ross, 1991; Ray, 1979). Others have attempted to avoid acquiescence and extreme responding effects by developing ipsative (i.e., ranking) measures that are believed to be less susceptible to these forms of bias (Schuman & Presser, 1981; Toner, 1987). Smith (2003) discusses several additional approaches to designing survey questions that may minimize these response effects across groups.

Analytic strategies that have been recommended include the use of ipsative rescaling of items to address acquiescence and/or extreme responding (Cunningham et al., 1977) and statistical adjustments using standardized measures of social desirability (Paulhus, 1991; Pleck, Sonenstein, & Ku, 1996). Hofstede, Ten Berge, and Hendriks (1998) review several alternative procedures for scoring questionnaires to correct for acquiescence and extreme responding. Multiple group confirmatory factor analysis, structural equation modeling and latent class factor strategies have also been proposed to identify and adjust for cultural differences in these response styles (Billiet & McClendon, 2000; Cheung & Rensvold, 2000; Moors, 2003; Watson, 1992). In addition, numerous additional methods have been proposed for addressing social desirability bias in mono-cultural research (King & Bruner, 2000; Nederhof, 1985) and some of these may be adaptable for use in cross-cultural contexts. As Cheung and Rensvold (2000) observe, however, there is no single procedure that is generally applicable to addressing this issue. Rather, confronting the effects of cultural differences in response styles will require both careful attention to the design of survey questionnaires and careful analyses of the data obtained, using some combination of the procedures currently available for addressing these phenomena.

CONCLUSIONS

As marketing efforts have become increasingly globalized, understanding cross-cultural consumer psychology has become a mainstream goal of consumer research. In recent years, a rapidly expanding volume of research has addressed a broadening set of cross-cultural issues and dimensions. Significant progress has come on several fronts, including an enhanced understanding of the relations between culture and self-construal, motivation, self-regulation, and consumer persuasion. However, with the expansion of research activity comes a greater awareness of the unique challenges posed by cross-cultural measurement. Our review has addressed some of the ways in which culture

influences respondents' comprehension or interpretation of measures, as well as the ways culture influences the respondents' styles in answering questions. Ongoing progress in cross-cultural consumer research will require careful attention to both the methodological and the conceptual issues that remain to be addressed.

NOTE

1. China introduced the one-child policy in 1979. As a result, Chinese people who were born after 1979 tend to have a more accessible independent self-construal (Lee & Gardner, 2005).

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