

Cross-Cultural Psychology of Aging

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OUTLINE

Cross-Cultural Psychology of Aging	323	<i>Cross-Cultural Aging as Tests of Generalizability</i>	332
A Theory: Aging in Culture	324	Summary, Caveats, and Conclusion	333
<i>Individuals Make Sense of Life Through Internalizing the Values of Their Cultures</i>	324	Acknowledgments	334
<i>Age Differences in Personality</i>	326	References	334
<i>Age Differences in Social Relationships</i>	328		
<i>Age-Related Cognition</i>	329		
Other Approaches	331		
<i>Using Aging as a Context to Test Cultural Differences</i>	331		

CROSS-CULTURAL PSYCHOLOGY OF AGING

It is public knowledge that the world's population is aging. However, what is seldom discussed is the fact that between 2010 and 2040, 66.5% of the world's older population increase will be accounted for by Asia; and within Asia, 42.0% of the increase will be accounted for by China alone (Cheng, Chi, Fung, Li, & Woo, 2015). Yet, empirical studies on aging

among the Chinese are few, and the scant findings sometimes suggest that the aging of the Chinese may be different from what is suggested in the mainstream literature. Moreover, cross-cultural differences in the psychology of aging are often different from the ethnic and racial differences on aging that have been described in the literature (Jackson, Govia, & Sellers, 2011). For example, the difference in socioeconomic status that drives much of the health inequality observed in the ethnic/racial

literature has a very minor role in the cross-cultural psychology literature. In this chapter, we first review our own theoretical and empirical work, and the work of others, on East–West differences in age-related personality, social relationships, and cognition. Next, we discuss two other approaches to studying cross-cultural aging. The first approach uses aging as a proxy of cognitive and neural changes, and then tests whether cultural differences in cognition diminish or magnify with these changes (Park, Nisbett, & Hedden, 1999). The second approach compiles cross-national data sets to test the generalizability of aging-related phenomena.

A THEORY: AGING IN CULTURE

In a theoretical paper published elsewhere (Fung, 2013), we argue that socioemotional development across adulthood may be part of the life-long socialization process: individuals in each culture learn to be better members of their culture as they grow older. Cultural differences in aging (i.e., age by culture interactions) occur when people from different cultural contexts learn different ways to become better members of their culture. By proposing this argument, we agree with the basic premise of lifespan developmental theories (Baltes & Baltes, 1990; Brandtstädter & Greve, 1994; Carstensen, 2006; Heckhausen & Schulz, 1995) that as people age, they shape their world in ways that maximize their well-being; but we add that people do so within the confines and definitions of their respective culture.

In particular, we argue that (i) individuals make sense of life (i.e., figuring out what is important to them) through internalizing the values of their cultures; (ii) these internalized cultural values become their personal goals that guide their development across adulthood; (iii) cultural differences in aging result when individuals from different cultures each pursue their own internalized cultural values with age.

Below we describe these theoretical postulates in greater detail.

Individuals Make Sense of Life Through Internalizing the Values of Their Cultures

The need to make and maintain meaning is one of the basic human needs (Heine, Proulx, & Vohs, 2006). Since birth, individuals try to figure out what is important in life through socio-cultural artifacts such as schooling, work, sex roles, and social relationships (Kegan, 1994). Gradually, individuals learn to resolve conflicts between societal demands and personal desires (Erikson, 1950, 1968, 1982) by means that include but are not limited to internalizing societal demands and turning them into personal goals. This process is known as “socialization” (Bronfenbrenner, 1979) or “cultural learning” (Vygotsky, 1934/1962) in the human development literature, and “acculturation” in the immigration literature (Berry, 1997).

For example, individuals in independent cultures (Markus & Kitayama, 1991) learn to value personal autonomy and uniqueness since birth, through interactions with their parents (Keller, 2003). Their parents maintain a certain level of personal distance from them (in terms of face-to-face contact, object stimulation, and mutual eye contact), and encourage them to express the self as a separate physical entity in actions, words, ideas, and feelings (Lewis & Brooks-Gunn, 1979).

In contrast, individuals in interdependent cultures (Markus & Kitayama, 1991) learn to see the self as embedded within social units through proximal parenting (Keller, 2003), i.e., their parents provide them with much body contact and stimulation. They also learn to prioritize the needs of the group over their own needs by being encouraged to follow the customs and norms embraced and prescribed by their parents and the society. Parents also directly teach children the values that they

perceive as culturally important (Tam, Lee, Kim, Li, & Chao, 2012).

Later, as the individuals enter schools, those in independent cultures are encouraged to learn through exploration (Chao, 1995). But those in interdependent cultures are given more dogmatic education and training (Chao, 1995), as well as direct moral education and formal training on how to relate to other (Wu, 1996). The learned culture values influence the individuals' moral judgment (Vauclair & Fischer, 2011), priority of different needs (Triandis, 1995) and definition of life satisfaction (Oishi, Diener, Lucas, & Suh, 1999).

There are reasons to believe that these socialization processes intensify with age. Heine and colleagues (2006)'s Meaning Maintenance Model postulates that the demand to satisfy a need is increased when other needs are not satisfied (see also the literature on fluid compensation: McGregor, Zanna, Holmes, & Spencer, 2001; Steele, 1988). Almost all theories on adult development and aging agree that the second half of life is associated with some losses and declines, particularly in the physical and cognitive domains (Rowe & Kahn, 1997). These losses and declines may motivate older people to seek satisfaction by other needs. Since identifying with and internalizing cultural values help to fulfill the need for belongingness (Baumeister & Leary, 1995), to protect self-esteem (Steele, 1988) and to reduce epistemic uncertainty (Hogg, 2001), people may do so to a greater extent with age, to compensate for losses and declines in other areas.

For example, Neugarten (1968, 1977) argues that older adults perceive themselves as less able to effect change in the world. They thus place greater emphasis on meeting sociocultural demands.

Although not focusing on age-related losses and declines, a few other theories make predictions that are consistent with the argument that socialization may intensify with age. Erikson's psychosocial theory of development

(1950, 1968, 1982), for example, describes each developmental stage as a conflict between personal needs and societal demands. After resolving all these conflicts, the ultimate goal in the last stage of life (i.e., old age) is integration, which can be understood as the integration of personal goals and cultural values. Along the same vein, socioemotional selectivity theory (Carstensen, 2006) argues that with age, people perceive future time left in life as increasingly limited. This sense of limited future time motivates older people to prioritize goals that aim at deriving emotional meaning from life. Making sense of life through identifying with and internalizing the values of one's culture is likely to be a good way to derive emotional meaning from life.

To test whether older adults were indeed more likely to endorse and internalize cultural values than did younger adults, we (Ho, Fung, & Tam, 2007) examined personal and cultural values among younger (aged 18–23 years) and older (aged 54–89 years) Hong Kong Chinese. Values were measured by the Schwartz Value Questionnaire (1992), which consists of 56 values grouped under ten value types: power (e.g., social power, authority), achievement (e.g., successful, capable), hedonism (e.g., pleasure, enjoying life), stimulation (e.g., daring, a varied life), self-direction (e.g., creativity, freedom), universalism (e.g., broadminded, wisdom), benevolence (e.g., helpful, honest), tradition (e.g., humble, accepting my portion of life), conformity (e.g., politeness, obedient), and security (e.g., family security, social order). To measure personal values, we asked participants to rate the importance of each value to self. To measure cultural values, we adopted the inter-subjective importance approach (Wan, Chiu, Peng, & Tam, 2007) and asked participants to rate the importance of each value in reference to their culture (i.e., the Chinese culture). We calculated the correlation coefficient between the ratings of personal and cultural values for each participant, across all 56 values. We found

age differences in the correlation coefficients, such that older participants showed a higher congruence between personal and cultural values than did younger participants. We also computed mean differences between personal and cultural values for each participant and then compared their age differences. Smaller discrepancies between personal and cultural values were found among older than among younger participants.

To further investigate what drove this higher congruence of personal and cultural values among older relative to younger participants, we examined age differences in personal values. Older participants reported higher endorsement of all personal value types that are more communal in nature (i.e., universalism, benevolence, tradition, conformity, security) than did younger participants. They also reported lower endorsement of four out of five personal value types that are more agentic in nature (i.e., achievement, hedonism, stimulation, self-direction) than did younger participants. These findings, taken together, suggest that with age, Hong Kong Chinese move away from more agentic values to more communal values, resulting in a closer association between personal and cultural values. In other words, we have preliminary support for the theoretical postulate that people increasingly internalize cultural values with age. Indirect evidence is also found in the literature on moral judgment. [Jiang, Li, and Hamamura \(in press\)](#) found that older adults made more principled moral judgment toward issues pertaining to fairness and justice than did their younger counterparts. Since moral judgment is closely associated with cultural values ([Vauclair & Fischer, 2011](#)), older adults' more principled judgment may reflect their higher endorsement of cultural values.

Internalized cultural values become personal goals that guide adult development. Cultural differences in aging result when individuals from different cultures each pursue their own internalized cultural values with age. Once people internalize

their cultural values as their “personal values,” their goals are set based on these values. To the extent that everyone develops across adulthood in ways that are consistent with internalized cultural values, cultures with different values should show different patterns of adult development. Indeed, in the self-enhancement literature, [Sedikides, Gaertner, and Toguchi \(2003\)](#) found that individuals with higher levels of independent self-construal self-enhanced on individualistic attributes (e.g., arguing for your position and against your group) whereas those with higher levels of interdependent self-construal self-enhanced on collectivistic attributes (e.g., avoiding open confrontation with your group). To the extent that self-enhancement guides the direction of self-development, or put in another way, adult development, we would expect independents to show age-related increases in individualistic attributes and interdependents to show similar increases in collectivistic attributes. We have tested this hypothesis in the following three areas: age-related personality, social relationships, and cognition.

Age Differences in Personality

For a number of years, personality development has been assumed to manifest in exactly the same way across cultures. Indeed, cross-sectional patterns of age differences in personality were found to be largely the same across cultures, ranging from Germany, Italy, Portugal, Croatia, South Korea ([McCrae et al., 1999](#)), the United Kingdom, Spain, the Czech Republic, Turkey ([McCrae et al., 2000](#)), Russia, Estonia, Japan ([Costa et al., 2000](#)) to the People's Republic of China ([Yang, McCrae, & Costa, 1998](#)). These findings have often been taken as evidence that personality development is universal. Yet, these cross-cultural findings were almost always obtained within the scope of the Five-factor model—neuroticism, extraversion, agreeableness, openness to experience, and

conscientiousness (commonly known as the “Big Five”). It remains possible that age differences in other aspects of personality may differ across cultures.

Meanwhile, the literature in cultural psychology (Cheung et al., 2001) has reliably documented that when personality was measured not just by measures imported from the West but also by indigenous measures developed in China, six factors—interpersonal relatedness in addition to the Big Five—were found among several Chinese samples. Interpersonal relatedness covers items such as social reciprocity, harmony, face, and adherence to norms and tradition. When the expanded measures were then imported back to the West, the interpersonal relatedness factor was again found among several American samples (Cheung et al., 2001).

Conceptually, what distinguishes interpersonal relatedness from the Big Five is that while there is no theoretical reason to suspect that the Big Five may differ in importance across cultures, there is reliable cross-cultural evidence to suggest that interpersonal relatedness is more important among Chinese than among North Americans. For example, Chinese are found to be more interdependent than are North Americans (see Oyserman, Coon, & Kemmelmeier, 2002 for a meta-analytical review). Relationship harmony is more important than self-esteem to the psychological well-being of Chinese, whereas the reverse is true for North Americans (Kwan, Bond, & Singelis, 1997). Moreover, the lexical approach of personality argues that as people in a community talk to one another, they use vocabulary to describe different personality attributes. The personality attributes that “people in the language community have found particularly important and useful in their daily interactions” (John, 1990, p. 67) are represented by more synonyms in the language, and are eventually picked up as a factor when the language is factor analyzed. The fact that the interpersonal relatedness factor was first identified in the Chinese language

suggests that it is more “important and useful” in that culture.

To test whether age differences in personality existed for interpersonal relatedness, we (Fung & Ng, 2006) examined age differences in the Big Five and interpersonal relatedness among younger (below 30 years old) and older (above 50 years old) Canadians and Chinese. Findings revealed that age differences in the Big Five did not differ across cultures. Yet, age differences in some aspects of interpersonal relatedness (i.e., social reciprocity and adherence to norms and traditions) were found only among Chinese but not Canadians. We interpret these findings as suggesting that personality may change with age according to cultural values. For Chinese, their culture emphasizes social reciprocity and adherence to norms and traditions, so they may learn to exhibit these characteristics to a greater extent with age. Canadians, in contrast, do not live in a culture that emphasizes these personality characteristics; they thus do not exhibit these characteristics to a greater extent as they grow older.

To test whether this interpretation is correct, we (Fung, Ho, Tam, & Tsai, 2011) examined age differences in social reciprocity among European Americans and Chinese Americans, aged 20–90 years. Conceptually replicating the findings of Fung and Ng (2006), age was positively associated with social reciprocity among Chinese Americans but not European Americans. Moreover, individual differences in values moderated these cultural differences. The association between age and social reciprocity was non-significant among European Americans as a group; but it became positive among European Americans who valued tradition (seeking group acceptance) more. Conversely, the association between age and social reciprocity was significantly positive among Chinese Americans as a group; but the association was weaker among Chinese Americans who valued hedonism (seeking individual pleasure) more. These findings

suggest that people from each culture develop their social reciprocity, or more generally, their personality, with age according to what they value. In sum, there is at least some preliminary evidence to suggest that socioemotional aging may not be defined by a particular pattern across cultures. Even when the mechanism of aging is the same, the exact pattern of socioemotional aging across cultures may differ depending on the particular values each culture socializes its members with.

Further cross-sectional findings for the role of cultural values in personality development were obtained in a study on age differences in dispositional optimism among Americans and Chinese (You, Fung, & Isaacowitz, 2009). Prior cross-cultural research has suggested that optimism is closely associated with self-enhancing tendencies that are considered to be significantly more desirable among European Americans than among East Asians (Chang, Sanna, & Yang, 2003). The well-documented positive self-evaluation in Western cultures may not be generalized to the Asian cultures. There is a tendency to report self-criticism in Asian cultures, such as Japan (Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997) and Korea. These Asian cultures believe that self-criticism is vital for individuals to support the group and maintain social harmony (Kitayama et al., 1997). These findings suggest that viewing oneself as negative or pessimistic may be somewhat adaptive in some Asian cultures. Under this context, we (You et al., 2009) examined optimism across age. We found that while Americans as a group were more optimistic than were Chinese, this cultural difference was greater with age. Older Americans were more optimistic than were younger Americans; yet, older Chinese were less optimistic than were younger Chinese. These findings, though cross-sectional, suggest that the direction of personality development may be determined by what is desirable and appropriate in each culture. Americans, living in a

culture that regards optimism as desirable, become more optimistic with age. Conversely, Chinese, who live in a culture that values optimism less, become less optimistic with age.

Age Differences in Social Relationships

Other than personality, social aging also seems to show cross-cultural differences. A particular pattern of age differences in social network characteristics (SNC) has been reliably reported in the literature, including our earlier work (Fung, Carstensen, & Lang, 2001). Across cultures, increasing age was associated with fewer peripheral social partners, yet the number of emotionally close social partners remained relatively stable across age. It should be noted that most of the studies on age-related SNC cited above were conducted in the United States and Germany. We (Yeung, Fung, & Lang, 2008) predicted that East Asians with a higher level of interdependence (Oyserman et al., 2002) might be more likely to maintain interactions with social partners of greater diversity even when they grew older. In particular, East Asians might be more likely to maintain or even increase the number of close social partners, and be less likely to reduce the number of peripheral social partners, with age.

To test these hypotheses, we (Yeung et al., 2008) examined age differences in SNC among Chinese, aged 18–91 years. More importantly, we tested whether individual differences in interdependence moderated these age differences. The stability of the number of emotionally close social partners across age, typically found in Western studies (Fung, Lai, & Ng, 2001), was replicated only among Chinese with a low level of interdependence. In contrast, those with medium or high levels of interdependence exhibited a positive association between age and the number of emotionally close social partners. Similarly, although a negative association between age and the number of peripheral social partners was observed

for the entire sample, the association was significant only among those with low or medium levels of interdependence. The association was much weaker, and in fact, no longer significant, among those with a high level of interdependence. These findings revealed that age differences in the number of close and peripheral social partners depended on values such as interdependence.

Longitudinal findings provide further evidence for the moderating role of values. We (Zhang, Yeung, Fung, & Lang, 2011) examined the relationships between age, changes in the number of peripheral partners, and changes in loneliness over 2 years, among Chinese aged 18–91 years. We also tested the moderating role of individual differences in interdependence. Results showed that the well-documented negative association between age and number of peripheral partners over time was only significant for individuals with low or medium levels of interdependence, but not for those with high interdependence. Moreover, having more peripheral social partners was associated with decreased loneliness in the 2-year interval, only among older and middle-aged adults high in interdependence.

Country-level individualism also moderated age differences in trust. We (Li & Fung, 2013) examined the associations between age and generalized trust, and trust toward family members, friends, neighbors, and strangers across 38 countries, including Australia, China, and the United States, using data from the World Value Survey. The age range differed by country, but usually ranged from the late teens to the 80s or 90s. We found that age was positively related to all the five types of trust across the countries. However, countries with lower levels of individualism, as indexed by Hofstede (2001), showed weaker associations between age and trust toward friends and strangers. We interpret these findings as suggesting that people in less individualistic countries are less selective about these peripheral partners with age.

Age-Related Cognition

Even age differences in basic cognitive processes, such as attention and memory, show differences across cultures. In recent years, an age-related phenomenon called the “positivity effect” (Carstensen & Mikels, 2005) has been identified. This effect involves preferential cognitive processing of positively valenced, relative to negatively valenced or neutral, stimuli with age. Isaacowitz and colleagues, for example, found the positivity effect in American samples using eyetracking techniques (Issacowitz, Wadlinger, Goren, & Wilson, 2006a,b).

However, information from the external environment, whether positive or negative, may carry important social cues. In particular, negatively valenced information, such as angry facial expressions, may be at least as useful as, if not more useful than, positively valenced information, such as happy facial expressions, in maintaining social harmony (Kitayama & Karasawa, 1995). As a result, Asian cultures that value interpersonal relationships and interdependence (Markus & Kitayama, 1991) may not show a bias for positive information. For example, in describing the construct “happiness,” Americans only describe the positive features, whereas Japanese describe both positive and negative (e.g., social disruption) features (Uchida, 2007). In another study, Markus, Uchida, Omregie, Townsend, and Kitayama (2006) found that while American athletes explained Olympic performance primarily in terms of positive attributes, Japanese athletes did so in terms of both positive and negative (e.g., their family have made a lot of sacrifice) attributes.

In addition, while optimism or even positive illusion were found to be beneficial to well-being in the mainstream (i.e., Western) psychological literature (see Carver & Scheier, 2002, for a review), we (Cheng, Fung, & Chan, 2009) found that older Chinese who foresaw

more negative future selves had higher well-being 12 months later. Likewise, despite the well-established finding in the mainstream literature that negative social exchanges had adverse effects (Rook, 1984), we (Fung, Yeung, Li, & Lang, 2009) found among Chinese, aged 18–91 years, that more negative exchanges were positively associated with increases in emotional closeness over a 2-year period.

Given the above, we predicted that to the extent that people in East Asian cultures found negative information as useful as positive information, they might either not show the positivity effect or show it to a lesser extent with age. To test this prediction, Fung et al. (2008) compared attention among younger and older Chinese, using eyetracking techniques in exactly the same way, with the exact same stimuli, as Issacowitz et al. (2006a,b). In contrast to the aforementioned positivity effect reliably found among Americans, older Chinese actually looked away from positive stimuli (in this case, happy faces).

Similar cross-cultural differences were also noted in memory. In a study that compared memory for positive, negative and neutral stimuli among younger and older Chinese (Fung & Tang, 2005), a negativity bias was found among older adults. In the study, the background music of a government TV announcement on health promotion was varied such that it conveyed positive, negative or neutral valence. The only difference in recognition memory was found between the negative and neutral versions, with older adults showing better recognition memory for information presented in the negative version of the announcement than the neutral version.

To further test whether the positivity effect existed in memory among older Chinese, Fung, Isaacowitz, Lu, and Li (2010) examined age differences in free recall for positive, negative and neutral images, with the exact same stimuli and methodology as those employed in a previous study that has found the strongest positivity

effect among Americans (Charles, Mather, & Carstensen, 2003, Experiment 1). Their findings revealed that older Chinese showed better memory for positive than for neutral images (i.e., the positivity enhancement effect), but they showed the same level of memory for negative images as they did for neutral images (i.e., an absence of the negativity reduction effect).

In the aforementioned studies, Chinese who were more interdependent as a group (Markus & Kitayama, 1991) did not show the age-related positivity effect to the same extent as did Americans in prior studies, who as a group were less interdependent. Fung et al. (2010) directly tested whether individual differences in interdependence moderated these age differences in memory. Older Chinese with lower levels of interdependence showed both the positivity enhancement effect and the negativity reduction effect, as their American counterparts did in earlier studies (Charles et al., 2003). However, older Chinese with higher levels of interdependence only showed the positivity enhancement effect, but not the negativity reduction effect. Younger Chinese showed a memory bias for negative images over positive and neutral images throughout the study, regardless of levels of interdependence.

Individual differences in interdependence also moderated the age-related positivity effect in attention among younger, middle-aged, and older Chinese. Fung et al. (2010) presented participants with a real-life video clip that showed positive images on one side of the screen and negative images on the other side of the screen. They found that among Chinese who were lower in interdependence, older Chinese looked at the negative images, relative to the positive images, significantly less than did their middle-aged and younger counterparts. However, no such age differences were found among Chinese who were higher in interdependence. Taken together, the above findings suggest that the age-related positivity effect is not universal. Chinese, being more interdependent as a group,

are more likely to value negative stimuli as much as positive stimuli in their social environment. They are thus less likely to show preferential processing of positive stimuli over negative stimuli with age.

OTHER APPROACHES

Using Aging as a Context to Test Cultural Differences

Other than examining how adult development differs across cultures, some researchers focus on cultural differences and investigate how cultural differences may differ by age. [Park et al. \(1999\)](#) proposed that cross-cultural differences in basic processes, such as speed and working memory, diminished with age because of the universally decreased neurobiological function associated with aging. However, cultural differences in cognitive pragmatics, such as categorization and background processing that people acquired through the learning process, magnified with age, because these processes were influenced by culture-specific learning and practice. This argument has received some empirical support.

For example, [Chee, Zheng, Goh, and Park \(2010\)](#) found that cultural differences in thinking style—Americans being more likely to use analytical thinking and East Asians being more likely to use holistic thinking—could be partially explained by the fact that younger Americans had higher cortical thickness in frontal, parietal, and medial-temporal polymodal-associated brain areas than did younger East Asians. These cultural differences in thinking style disappeared among older participants, but interestingly, persisted among high-performing older participants. Park and colleagues interpreted these age differences as further support for the fact that cultural differences in thinking style were driven by neurological differences. Age-related declines in cortical

thickness occurred for both Americans and East Asians, eliminating cultural differences in neurology and thus cultural differences in thinking style. However, high-performing older adults retained such cultural differences in neurology, so cultural differences in thinking style persisted. Similarly, [Hedden, Park, Nisbett, and Ji \(2002\)](#) found that Chinese performed better than did Americans in numeric tasks and such cultural differences became less pronounced with age. These decreased cultural differences with age were accompanied by age-related declines in visuospatial processing cross-culturally. Again, Hedden and colleagues interpreted these findings as suggesting that declined brain functions led to the attenuated cross-cultural differences in performance on numeric tasks with age, supporting the argument that cultural differences in cognition were accounted for by brain functions.

In contrast, other cultural differences in cognitive processing magnify with age. This type of cognitive processing usually requires practice across adulthood. For instance, [Gutchess et al. \(2006\)](#) found that Westerners used categorization more than East Asians did, and such differences became more pronounced with age. In this study, categorization was measured by a ratio of clustering, that is, the extent to which the participants successfully recalled relevant words together. Gutchess and colleagues interpreted the finding as reflecting that categorization was a cognitive skill that required practice. To the extent that a skill is in use, an older person theoretically has practiced the skill for a longer period of time than does a younger person. Westerners who use the skill more improve it with practice whereas East Asians who use the skill less do not enjoy such benefits. As a result, cultural differences in categorization magnify with age. A similar explanation was also used to account for the finding that younger Chinese performed better in tasks on naming common objects—providing more specific depiction and greater variance

in depiction—than did younger Americans, and such cultural differences were more pronounced between older Chinese and older Americans (Yoon, Feinberg, & Gutchess, 2006).

In addition, the differential rates of age-related cognitive declines among people in different cultures can also magnify some cultural differences. Goh et al. (2006) tested the neurobasis of object-focused versus background-focused differences between Western and East Asian cultures. They found that although the functioning of the object-processing brain regions decreased with age in both Western and East Asian cultures, such functioning of East Asians declined to a greater extent with age. This led to a larger cross-cultural difference in object processing between older Westerners and East Asians (Goh et al., 2006).

In summary, researchers from this approach dissent culture by age interactions by examining whether particular cultural differences diminish or magnify with age. They then investigate whether the factors that change with age, for example, specific brain functioning, may account for the decrease or increase in cultural differences.

Cross-Cultural Aging as Tests of Generalizability

Last but not least, the most common way of studying the cross-cultural psychology of aging is to construe culture as a context—as much as gender, socioeconomic status, and rural versus urban are contexts—to test the generalizability of aging-related phenomena. For example, Fredrickson and Carstensen (1990) found among US citizens that older adults preferred familiar social partners to novel social partners, whereas younger adults did not show this preference. This finding was offered as a potential explanation for why the shrinkage of social network size with age did not affect the well-being of older adults. Using the same paradigm, Fung, Carstensen, and Lutz (1999)

replicated these age differences in social preferences among Hong Kong Chinese, and Fung et al. (2001) further replicated these age differences among Taiwanese Chinese and Mainland Chinese. These replications suggest that the observed age-related pattern is reliable, and is unlikely to be under the influence of other variables that differ between the cultures, such as social structure or living arrangements. Some may even conclude from these findings that the age differences in social preferences are universal.

Others go one step further and link individual-level age differences to country-level socio-cultural variables. For instance, Löckenhoff et al. (2009) examined perceptions of aging across 26 cultures. They found cross-cultural similarities in many aspects of perceptions of aging, such as perceived declines in societal views of aging and perceived increases in wisdom. However, when cross-cultural differences were found, they attempted to account for the differences by examining their associations with country-level variables. For instance, the proportion of older adults, aged 65 years or older in the population was associated with more negative perceptions of societal views on aging. These attempts to link individual-level variables across age with country-level variables offer important opportunities for us to study age-related changes in the context of environmental affordances.

In order to compare across cultures, it is necessary to compile cross-national data sets. Several such data sets exist in the cross-cultural psychology, including but not limited to the World Values Survey (World Values Survey Association, 2009), the World Health Organization Quality of Life network (Molzahn, Kalfoss, Makaroff, & Skevington, 2011) and the Adolescent Personality Profiles of Cultures Project (De Fruyt, De Bolle, McCrae, Terracciano, & Costa, 2009; Löckenhoff, Terracciano, Patriciu, Eaton, & Costa, 2009). Moreover, there have been few, but important,

attempts to develop parallel data sets across countries. For example, the national survey of Midlife Development in the United States (MIDUS), which aimed at investigating the age-related changes in health status and psychological well-being from mid-life onward, was originally conducted among Americans. In order to make cross-cultural comparisons, a parallel study was carried out in Japan (MIDJA). Using data from MIDUS and MIDJA, several interesting findings have been observed. For instance, [Karasawa et al. \(2011\)](#) compared age differences in psychological well-being among middle-aged and older Japanese and Americans. They found that older Japanese perceived a greater level of personal growth than did their middle-aged counterparts, whereas a reversed pattern was found in American samples.

In addition, many countries have their own national survey on aging, including but not limited to Australia ([Cubit & Meyer, 2011](#)), Canada ([Sheets & Gallagher, 2013](#)), China ([Zhang, Guo, & Zheng, 2012](#)) and Japan ([Muramatsu & Akiyama, 2011](#)). All of these surveys measured age, health status, socioeconomic status and psychological status, providing opportunities for comparisons across these cultures. Regretfully, other measures were not parallel. Nevertheless, they are efforts in the right direction. As the importance of cross-country surveys becomes better known, hopefully more efforts will be made in future to develop parallel surveys in aging across cultures.

Although even less well known, there have been attempts to combine behavioral data with genetic data to examine the differences in expression of genes (known as epigenetics) across different environmental contexts. Such gene-environment interaction may reveal the contextual factors that can facilitate or inhibit the behavioral expression of a particular genetic predisposition. These studies have started to gain popularity in cross-cultural psychology.

For instance, [Cheon, Livingston, Hong, and Chiao \(in press\)](#) studied the moderating role of 5-HTTLPR in the relationship between perceived outgroup threat and intergroup bias. Although this specific study only included college students, it is a promising future direction for the field of cross-cultural aging. Despite philosophical debates on whether genes differ by ethnicity and/or culture, it is plausible, at least theoretically, to argue that cultures, as prototypical examples of environmental contexts, may interact with age to determine the expression of genes. In fact, in biological aging, there have already been studies on how aging may be associated with highly defined epigenetic changes in the human epidermis ([Raddatz et al., 2013](#)). It probably will not be long before we start to examine how age-related epigenetic changes may be moderated by culture-specific environmental contexts.

SUMMARY, CAVEATS, AND CONCLUSION

In this chapter, we first reviewed empirical findings suggesting that socioemotional aging, at least in the areas of personality, social relationships, and cognition, may not manifest in exactly the same way across cultures. Moreover, when cultural differences in aging occur, they are usually consistent with known cultural differences in values. These findings inspire us to argue that socioemotional development across adulthood may be part of a life-long process: individuals in each culture learn to be more culturally appropriate as they grow older. Cultural differences in aging (i.e., age by culture interactions) occur when people from different cultural contexts learn different ways to become culturally appropriate. Next, we reviewed two other approaches of studying cross-cultural aging. The first approach examines cultural differences across age and pays particular attention to whether such cultural

differences diminish or magnify with age. The second approach tests the generalizability of aging phenomena across cultures and examines their associations with genetic predisposition or country-level variables.

We acknowledge that due to the limited number of studies on the intersection between aging and culture, much empirical evidence we have cited is based on cross-sectional studies, conducted in only a couple of cultures. Longitudinal studies on a wider range of cultures are needed. From the life course perspective (see Alwin, 2012, for a review), both place (in this case, culture) and time (in this case, age as well as cohort) contribute to human development. The cross-sectional findings should be interpreted with caution as age differences can reflect cohort effects and/or developmental changes. Nevertheless, since cohort effects tend to vary with culture, reviewing whether the patterns of age differences are the same or different across cultures can help to partially isolate developmental changes from culture-related cohort effects.

Moreover, despite the preliminary nature of the evidence reviewed above, it suggests a promising direction for future research: aging does differ across cultures, particularly in terms of personality, social relationships, and social cognition. These cultural differences can be predicted. It may be fruitful to look for cultural differences in aging (i.e., culture by age interactions) in areas where known cultural differences in values (i.e., culture main effects) exist. In addition, drawing parallels between cultural differences and age differences in areas such as cognition may allow us to better understand the mechanisms underlying both. It will also be promising to compile cross-national data sets to examine the associations between age-related individual differences and macro-level differences across cultures. Last but not least, studying cultures as environmental contexts that may moderate the expression of genes with age is likely to be a hot topic for future research.

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