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Adult Development in Japan and the United States: Comparing Theories and Findings About Growth, Maturity, and Well-Being

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[–] Abstract and Keywords

This chapter examines early conceptual formulations of adult development in the U.S. and contrasts them with notably different conceptions of aging in Japan. Empirical research in both cultural contexts points to evidence of psychological change in personality traits, well-being, affect with aging in the U.S., whereas Japanese studies have linked the well-being of older persons to life roles and activities as well as examined the concept of *ikigai* (what makes life worthy). Gender differences are an emerging part of the story, especially in Japan. The authors delineate multiple avenues for future research to broaden the scope of scientific inquiries on adult development and aging in Japan as well as promote greater exchange between cultural psychologists and adult developmentalists. More work is also called for to link adult developmental changes to health and to examine historical changes in experiences of aging.

Keywords: adult development, successful aging, roleless role, filial piety, *ikigai*, personality, well-being, affect, health, history

During my first visit to New York as a young foreign student, I went with my friend to a cozy restaurant on the Upper East Side. It was a small, family-like place with good food. In the corner of the restaurant I saw an old lady seated by herself. She was nicely made up with a fine suit, well-cared for grey hair, and matching nails and lipstick. But, I felt sorry for her. I said to my friend, "Do you see that graceful lady eating dinner by herself? I feel very sorry that she does not have family with whom to share her nice meal. It seems so lonely ..." Before we finished eating, my friend responded to me, "You are unfair. I think she has a nice life; she is rich and can go to nice restaurants and dress well. She is healthy enough to come by herself. Do not tell me that she is lonely and sad." Her voice sounded almost upset. I was beginning to learn that the way a person becomes happy not only depends on personal qualities but also on how one is brought up and what are the messages from the surrounding culture. Independence or control may be the most prominent things in the American context, but not for those in Japan.

– Mayumi Karasawa

The aim of this chapter is to review formulations of adult development in two different cultural contexts, with a focus on how personal growth in the second half of life is theoretically conceptualized and empirically investigated. We begin with a brief review of theories of adult development generated over the past 50 years in US and European contexts. These formulations describe psychological and social changes thought to normally occur across the decades of adult life. Such perspectives are contrasted with how adult life in general and aging in particular have been construed in philosophical and religious traditions in Japan. This juxtaposition highlights cultural differences in the meanings attributed to old age and the societal responsibilities typically assigned to midlife. A background

theme is whether adulthood and old age are construed positively and honorifically or negatively and as problematic for the individual and for society.

We then provide a distilled summary of empirical evidence, first focused on findings from U.S. studies and then contrasted with emerging empirical work on adult development and aging in Japan. The Western research documents a diverse story, showing evidence of psychological growth and development in certain areas, while documenting psychological decline and losses in others. Because the study of adulthood and later life is relatively new in Japan, fewer studies are summarized, although we do report new results from representative samples of Japanese adults who are compared to representative samples of U.S. adults. The psychological constructs examined are derived largely from Western developmental theories. Nonetheless, the findings document cultural similarities as well as differences in age patterns. Japanese results further underscore variation by gender. Overall, the evidence, based on cross-sectional data, suggests psychological gains and losses with aging in both cultural contexts.

Our final section addresses needed future directions in the study of culture, adult development, and aging. Particularly important are longitudinal studies, which are essential to resolve the inherent confounding of cohort and age effects in cross-sectional research. Another promising venue for future inquiry is to bring a developmental perspective to many of the questions and constructs of interest in cultural psychology. For example, what are the life course trajectories associated with an independent model of personhood compared to an interdependent model of personhood? Do these models become more, or less, salient influences on behavior and self-evaluation as individuals grow older? We also call for greater research on inequalities in adult development within each cultural context—that is, whether opportunities for personal growth and realization of potential disproportionately accrue to advantaged (by education and income) segments of society. We conclude with a call to link studies of adult development to research on adult health. Of interest is whether psychosocial profiles of growth and well-being translate to healthy regulation of diverse physiological systems with aging and, thereby, to reduction in risk for disease, disability, and dysfunction. A key overarching question in such inquiry is whether there are cultural differences in those psychological aspects of adult development that are most conducive to healthy aging.

Conceptual Formulations and Cultural Contexts

Adult Development in the United States

Early Western formulations of adult development can be traced to numerous sources (see Ryff, 1985), including Erikson's (1959) psychosocial stage model, Bühler's basic life tendencies that contribute to fulfillment in life (Bühler, 1935; Bühler & Massarik, 1968), and Neugarten's (1968; 1973) description of the executive processes of personality in the middle years and the process of interiority in old age. Across these endeavors, the objective was to formulate the challenges and possibilities for growth that occur in middle and later adulthood. For example, Erikson's middle-aged stage of generativity versus stagnation involved moving beyond the self-directed concerns of establishing one's identity in adolescence or the interpersonal needs of finding intimacy in early adulthood to a middle-aged phase in which one is concerned with establishing and guiding the next generation. In old age, these concerns are replaced by the need to find meaning in one's life, resolve past conflicts, and gain a sense of acceptance about what occurred in earlier decades (i.e., Erikson's stage of integrity vs. despair). Similarly, Jung's formulation of the individuation process included a turning inward in the later years to illuminate the self (Jung, 1933; von Franz, 1964).

Empirical indicators were largely missing from these formulations, which explains why they had little presence in early scientific investigations such as the Kansas City Studies of Adult Life (Williams & Wirths, 1965), initiated by a group of scholars at the University of Chicago. Interestingly, these researchers wanted to study personal and social adjustment in old age (Burgess, 1960), but they recognized that their endeavor reflected aging in Western societies. This early awareness of possible cultural differences in how adulthood and aging unfold was, however, lost in most subsequent studies. With regard to empirical indicators of "successful aging," the leading measure in the Kansas City Studies was life satisfaction (Neugarten, Havighurst, & Tobin, 1961), although the construct was not well formulated theoretically and lacked psychometric evaluation. Nonetheless, extensive research generated in the 1960s and 1970s used assessments of life satisfaction (see Cutler, 1979; Larson, 1978).

During the same period, a notably negative portrayal of aging emerged in U.S. social gerontology, largely from the discipline of sociology. Rosow's (1974) formulation of later life socialization described old age as a "roleless role"—a time in which individuals are unclear about their functions and place in society. Kuypers and Bengtson (1973) went further—they formulated the "social breakdown syndrome," which involved pernicious processes whereby lack of meaningful roles, diminished normative guidance, and limited reference groups precipitate negative self-attitudes among the elderly and, ultimately, an internalized sense of reduced competence. Two decades later, Riley, Kahn, and Foner (1994) continued the negative portrayal via the "structural lag" problem, which depicted American institutions as failing to keep up with the added years of life that many American were experiencing. Like its sociological predecessors, this perspective underscored the dearth of meaningful opportunities for life engagement of older Americans in realms of work, family, and community.

Taken together, these Western formulations reveal marked discrepancies in how adulthood and later life was construed. On the one hand, numerous models described opportunities for growth and continued development that occurred across midlife and into old age. Such models were largely neglected in empirical inquiries due to the absence of credible assessment procedures. The early empirical work, initiated in the 1950s and 1960s, focused on the idea of successful aging measured in terms of life satisfaction. By contrast, social gerontology explicated numerous problems encountered by those growing old in Western societies where few meaningful role opportunities were provided that allowed older adults to make use of their talents and capacities. These tensions between aging as development and growth versus aging as decline and loss carried into the subsequent empirical studies reviewed in our section on empirical findings. In the next section, we first examine how adulthood and aging has been characterized in Eastern cultural contexts.

Adult Development and Aging in Japan

Although Erikson's stage of generativity is a prominent feature of middle-aged adult development in Western contexts, the concern for establishing and guiding the next generation in Japan arguably begins earlier in the life course. The ideal way in which young children are reared encourages obedience, filial piety, and dependence on the mother, as described in the chapter by de St. Aubin and Bach (this volume). Their chapter further highlights that U.S. and Japanese formulations of generativity meaningfully differ. Whereas U.S. researchers have quantified individual differences in levels of generativity, this venture was seen as foolish by the Japanese, who instead saw meaning among the qualitative differences in generativity across adults.

The meaning of maturity in Japan, especially social maturity, has also been extensively examined (Menon, 2001; and chapter in this volume) with emphasis given not only to old age, but also to the middle years of adulthood (Lock, 1998; Plath, 1975). All phases of adult life tend to be construed as continuing opportunities for personal improvement; that is, as a "time of becoming, not being" (Rohlen, 1978, p. 132). Aging across these various periods is seen as a natural process that involves submitting oneself to nature and natural changes. All phenomena in the world must submit to time, as exemplified by the change of seasons, with each appreciated for its distinctive qualities and special beauties. Similarly, every phase of life represents distinct experiences and opportunities. Personal growth or maturity within this perspective demands effort and application and a release from the self toward pure action, which involves blending seamlessly with the patterns and rhythms of nature. There is no equivalent to these ideas in the U.S. cultural context.

A further concept of relevance is *ikigai*, for which there is no fully comparable English term. The Japanese definition refers to having something to live for, to experiencing the joy of goals and a life worth living (Mathews, 1996; Nakanishi, 1999). As discussed in subsequent sections, this psychological concept about one's purpose in life in adulthood and old age has been extensively studied in Japan as an influence on promoting better health, defined in terms of how long one lives (mortality) and the degree to which one is free of later life chronic conditions (morbidity).

The greatest emphasis, by far, in Japanese construals of the second half of life pertains to the status of the elderly in society. Traditionally, the elderly have been respected in East Asian cultures, partly due to the Confucian teachings of filial piety and ancestor worship (Chow, 1991; Palmore & Maeda, 1985; Sung, 1995). According to the Confucian guidelines, one needs to respect one's parents and care for them, which is reflected in the saying, "filial piety is the source of one hundred good deeds." The ancestor worship that requires reverence and devotion to dead ancestors further reinforces the importance of respecting one's parents or grandparents because they are

closer to dead ancestors. We note that Rosenblatt's chapter in this volume addresses cultural beliefs about the relationship between the deceased and the living.

Respect for the elderly is encoded in various practices and institutions in Japan. For example, although Mother's Day and Father's Day exist in both the United States and Japan, Respect for Elders Day exists only in Japan, and it is celebrated as a national holiday. Furthermore, the Japanese National Law for the Welfare and the Elders established in 1963 stated that "the elders shall be loved and respected as those who have for many years contributed toward the development of society, and a wholesome and peaceful life shall be guaranteed to them" (Palmore & Maeda, 1985, p. 87). In contrast in the United States, the Older Americans' Act established in 1965 does not refer to love or respect for the elderly. This contrast underscores Menon's observation (in this volume) that in Japan, unlike in the United States, aging is a continuous process of social maturation, and different phases of life offer different opportunities for personal growth and improvement.

Other cultural differences pertain to how the life course is construed. While illustrating the amount of freedom and status allowed to individuals at different life stages, Ruth Benedict (1946) contrasted the Japanese "arc of life" with the American counterpart (see also Menon's chapter in this volume). In Japan, the greatest amount of freedom and initiative is allowed for young children and older people, whereas people of middle-age face more restrictions and little freedom. Thus, the amount of freedom and status over the Japanese life course seems to form a U-curve. In the United States, by contrast, the arc of life forms an inverse U-curve. Young children receive a great amount of discipline, which gradually decreases as they grow more independent. The amount of freedom and status peaks in the middle-age and gradually declines as individuals grow older and become dependent. These formulations suggest that there are cultural differences in the status of the elderly. For example, holders of higher political offices (e.g., prime ministers or presidents) tend to be much older in Japan than in the United States (Menon, this volume).

At the same time, the size of the elderly population is increasing in Japan more rapidly than in any other country in the world (Statistics Bureau, 2011). Such drastic changes in population structure may impact the lives of the elderly. In fact, the proportion of the elderly who live with their children has been sharply declining in Japan, although it is still much higher compared to Western countries (Ogawa & Retherford, 1993). Menon (this volume) points out that "contemporary Japan is experiencing an unusual and profound social change." Among others, many young women now choose not to marry and bear children. Thus, the traditional social structure that anchored the relationship between young and old has already begun to erode. Whether such changes in demography will lead to decline in respect for the elderly is an open question (see also Rosenblatt's chapter in this volume). Even in a relatively recent study, Sung (2004) found that young adults in Korea, which shares the cultural norm for elder respect and rapid demographic changes with Japan, reported higher frequencies of diverse forms of elder respect compared to young adults in the United States. However, the Koreans also attached less importance to some categories of respect compared to their U.S. counterparts.

A final observation regarding conceptions of adulthood and aging in Japan is that paths toward personal growth have traditionally been gender differentiated. For women, opportunities for pure action have involved being good wives and wise mothers, whereas for men the proper sphere of activity is the public domain, where pure action involves sincere and diligent work. The rapid economic growth that followed World War II has reshaped the lives of many in the modern era, although differing conceptions of maturity for men and women remain part of the culture (Plath, 1980). These observations, wherein gender constitutes a stronger influence on psychological changes with aging in Japan compared to the United States, carry over into ongoing empirical studies, as described next.

Empirical Studies of Adulthood and Aging

Findings from the United States

Considerable empirical research has examined evidence for or against Erikson's (1959) stage model of psychosocial development in adulthood and later life. Whitbourne and colleagues used both longitudinal and sequential designs to document psychological changes consistent with the hypothesized transitions from ego identity to ego intimacy in early adulthood (Whitbourne & Waterman, 1979; Whitbourne, Zuschlag, Elliot, & Waterman, 1992). Others used cross-sectional designs to examine Erikson's midlife stage of generativity (Keyes &

Ryff, 1998; McAdams & de St. Aubin, 1998; Peterson & Klohnen, 1995), providing supportive evidence of its ascendancy in the middle years of adulthood. With the Mills Longitudinal Study of women, Helson and colleagues documented other aspects of psychological change from early adulthood to midlife and old age, linking many to changing role statuses and life transitions. For example, Roberts, Helson, and Klohnen (2002) showed that women increased from ages 21 to 52 in norm orientation (being considerate of others and less impulsive) and complexity (having tolerance for human diversity and fallibility). They also found increases in dominance, as well as changes in femininity and masculinity (linked with life circumstance such as divorce and participation in the paid labor force). Helson and Soto (2005) documented further change in positive and negative emotionality, psychological defenses, and affect complexity, drawing guidance from the Labouvie-Vief and González (2004) formulation of emotion regulation. Data from the Mills study were combined with two other longitudinal studies (Oakland Growth Study, Berkeley Guidance Study) to further substantiate increases with age in norm adherence, decreases with age in social vitality, and midlife peaks in dominance and independence over a 40-year period (Helson, Jones, & Kwan, 2002). Taken together, these studies depicted multiple forms of psychological change consistent with a developmental perspective on adult life (Helson, Soto, & Cate, 2006; Ryff, 2008).

Other lines of empirical inquiry in U.S. studies have been built around trait psychology, where initial claims about the stability of adult personality (Costa & McCrae, 1980; 1988) were framed as challenges to the earlier formulations from Erikson and Neugarten. Using data from the Baltimore Longitudinal Study of Aging, Costa and McCrae examined mean-level changes and cross-time correlations and found little evidence of psychological change in major personality traits (neuroticism, extraversion, agreeableness, conscientiousness, openness to experience) during adulthood. Alternatively, using the Normative Aging Study, Mroczek and Spiro (2003) found little evidence for average change in neuroticism and extraversion, but observed prominent individual differences evident in rate of change over a 12-year period. Older men became slightly less extraverted over time, whereas younger men became slightly more extraverted. Younger men also showed more marked decline in neuroticism compared to older men. Life events (marriage, remarriage, death of spouse) were found to account for the different rates of decline in neuroticism with age. Roberts et al. (2006) conducted meta-analyses from 92 longitudinal samples and found significant mean-level change in four of six traits from midlife to old age (Roberts et al., 2006). For example, increases in social dominance (a facet of extraversion), conscientiousness, and emotional stability were observed, especially in young adulthood (ages 20–40). Alternatively, in old age, decreases were evident in social vitality (another facet of extraversion) and openness. The patterns were characterized as “normative change” (i.e., change occurring in the same direction for most people during a specific period in the life course). Related efforts involve pursuing the idea of personality trait development (Roberts & Wood, 2006), wherein commitments to adult roles in work, family, and community contexts are thought to give rise to traits needed to accomplish such roles, such as being conscientious and emotionally stable. Caspi and colleagues (2005) have equated maturity with the kinds of trait changes that facilitate capacities to become productive and involved contributors to society. Such thinking signals a return to early work on adult development at the University of Chicago, specifically Havighurst’s (1948) formulation of the “developmental tasks” of adulthood (e.g., selecting a mate, starting a family, committing to an occupation, taking on civic responsibilities) through which individuals become worthy, responsible members of society.

Still further lines of U.S. research on adulthood and aging have involved the topic of psychological well-being, which has been differentiated into eudaimonic and hedonic components (Ryan & Deci, 2001). Ryff’s six-factor model of well-being illustrates a eudaimonic approach that was built on many of the developmental theories described earlier (Erikson, Bühler, Neugarten, Jung), as well as on humanistic (Maslow, Rogers, Jahoda) and existential (Frankl) perspectives and the writings of Aristotle (see Ryff, 1985; 1989; Ryff & Singer, 2008). The empirical dimensions derived from the model include autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Multiple studies, including those based on nationally representative samples, have shown sharply downward profiles from young adulthood through midlife to old age for self-rated purpose in life and personal growth (Clarke, Marshall, Ryff, & Rosenthal, 2000; Ryff, 1989; 1991; Ryff & Keyes, 1995). Other dimensions, such as autonomy and environmental mastery have shown increments with age, whereas positive relations with others and self-acceptance showed little age variation. Those cross-sectional findings have been augmented with longitudinal data from two large surveys (Wisconsin Longitudinal Study, Midlife in the United States [MIDUS]), the latter involving a national sample of adults (Springer, Pudrovskaya, & Hauser, 2011). Data from both samples documented significant gains with age in environmental mastery from early adulthood to midlife and into old age. Autonomy also showed significant gains across these age periods for the

MIDUS national sample. Alternatively, personal growth declined across these age periods in both samples, and purpose in life showed significant decline from midlife to old age in both samples. Positive relations with others showed gains from early adulthood to midlife, whereas self-acceptance showed mostly stability for the national sample.

Hedonic well-being, in contrast, involves contentment, happiness, and enjoyment. Frequently used empirical indicators have included assessments of positive and negative affect, as well as life satisfaction. Multiple investigators have employed these measures to investigate age differences (e.g., Diener, Sandvik, & Larsen, 1985; Diener & Suh, 1997; Herzog & Rodgers, 1981; Liang, 1984; Malatesta & Kalnok, 1984; Shmotkin, 1990). Most of these cross-sectional studies have shown either negligible age differences in well-being or age increments in life satisfaction and positive affect, concomitant with age decrements in negative affect. The overall storyline on hedonic well-being and aging has thus been quite positive. Mroczek and Kolarz (1998), for example, used MIDUS data to show curvilinear age increments in positive affect with aging (ages 25–74) and linear decrements in negative affect (same age range). Using the same study, Prenda and Lachman (2001) documented a positive linear relationship between age and life satisfaction. Cohort differences rather than aging (maturational) processes constitute a rival interpretation for these effects. Thus, the 23-year study of Charles, Reynolds, and Gatz (2001) offered important longitudinal evidence that positive affect is stable with aging whereas negative affect declines.

The recurrent evidence that life satisfaction, happiness, and positive affect do not show downward trajectories with aging (which theories of social gerontology might have predicted) has led to efforts to account for this generally upbeat message about hedonic well-being and aging. Some have suggested it may reflect intentional actions older persons might take, such as flexibly adjusting their goal pursuits (Brandtstädter, Wentura, & Rothermund, 1999). Others have emphasized “selectivity” processes, such as that older persons better select their social interaction partners so as to optimize their emotional experiences (Carstensen, 1995), or they selectively focus resources in certain domains so as to optimize functioning (Freund & Baltes, 2002). Later life affect regulation may also involve affect optimization (constraining affect to positive values) and affect complexity (amplification of affect in search of differentiation and objectivity; see Labouvie-Vief, 2003; Labouvie-Vief & Gonzales, 2004; Labouvie-Vief & Medler, 2002).

In summary, U.S. research on psychological changes in adulthood and later life has covered wide territory over the past 40 years. Some studies have assembled empirical findings to support Erikson’s psychosocial stages as well as ideas from other developmental formulations (Neugarten, Bühler, Jung). Along the way, trait researchers challenged such claims, arguing that there was little evidence of personality change in adulthood. Recent meta-analyses have, in turn, challenged the claims of trait stability with extensive evidence of age-related shifts in key traits or their facets. Indeed, a new emphasis is “personality trait development,” which is believed to be anchored in the roles and responsibilities of adult life. Another arena of empirical inquiry has focused on psychological well-being, which has been partitioned into two approaches. Eudaimonia emphasizes such psychological constructs as purpose in life and personal growth, which have shown sharply downward trajectories with age in multiple studies; other dimensions, such as autonomy and environmental mastery, have shown gains with age. Hedonic well-being emphasizes happiness, life satisfaction, and positive affect, which have consistently shown either stability or gains with aging. Numerous theoretical perspectives have been advanced to account for this upbeat story, whereas social structural factors, such as the structural lag phenomenon, have been invoked to account for the downward trajectories in certain aspects of eudaimonic well-being.

Despite these many avenues of empirical inquiry in the United States, the question of cultural differences in these findings has rarely, if ever, been asked. That is, whether stated explicitly or implied by the nature of the conclusions drawn, this research has been largely oblivious to whether any of the guiding theories or related empirical results might be relevant only in a Western, advanced, technological society, such as the United States. This is why the contrast with Japanese findings, which are less extensive in scope, is centrally important to the objectives of this chapter.

Findings from Japan

Scientific research on adulthood and aging is relatively recent in Japan. Apart from research linking *ikigai* to health outcomes in later life, few empirical studies have probed ideas related to Japanese conceptions of personal growth (e.g., toward pure action and oneness with nature) or the cultural emphasis on filial piety and respect for elders.

Comparative work has, however, been conducted on age differences in psychological well-being in Japan versus the United States. We summarize findings from these investigations along with recent work examining cultural differences in the link between aging and wisdom.

A growing number of studies in Japan have examined the concept of *ikigai* and its links to better health. The structure of *ikigai* has been examined relative to other similar concepts, such as psychological well-being, subjective well-being, and quality of life (Kumano, 2006), with findings indicating that the components of *ikigai* (life-affirmation, goals/dreams, meaning of life, meaning of existence, sense of fulfillment, commitment) were largely distinct from other related constructs of well-being and life quality. Sone et al. (2008) investigated the association of “life worth living” (*ikigai*) and all-cause as well as cause-specific mortality in a prospective cohort study involving more than 40,000 respondents. Over a 7-year period, those who did not have a sense of life worth living had a higher risk of death as well as higher risk of cardiovascular disease. Another prospective cohort study (Koizumi et al., 2008) over the course of 13 years showed that men with a strong sense of purpose in life (*ikigai*) had reduced risk of death from cardiovascular disease. Most recently, Tanno et al. (2009) followed more than 70,000 adults aged 40–79 from 1988 to 1990 in which *ikigai* was assessed with a lifestyle questionnaire. After adjusting for numerous sociodemographic factors and health behaviors, both men and women showed reduced risk of mortality from all causes among those with higher levels of *ikigai*. Thus, considerable evidence supports the view that longevity among Japanese adults is linked with the perception that one’s life is worth living and is purposeful.

The life roles and activities of older persons in Japan have been linked to their well-being. For example, Nakahara (2011) showed that being a grandparent, particularly how it relates to one’s identity, was linked with the frequency of contact with one’s grandchildren, which in turn was linked with grandparent satisfaction and subjective well-being. Such findings underscore the central significance of interpersonal embeddedness as a crucial feature of well-being in the Japanese context (see Menon, this volume; Kitayama et al., 2010; Park et al., 2013). Studies from China also underscore the active engagement of older adults in the grandparent role, particularly in comparison to the United States (Edward, Ren, & Brown, this volume). Volunteering among older persons in Japan has also been studied. Nakahara (2013) found that unpaid volunteering has a greater effect on life satisfaction of the elderly living alone who have less family-roles or social support from family than on elderly persons living with family members. Such findings suggest that relationships with people outside the home through unpaid work might act as a protective effect against decreased life satisfaction. This investigation was based on a U.S. study (Greenfield & Marks, 2004) using MIDUS data, which demonstrated that being a formal volunteer can protect older adults with higher levels of role loss from decreased levels of purpose in life.

Drawing on Western distinctions between eudaimonic and hedonic well-being, our collaborative team compared a Japanese sample of midlife and older adults (Midlife in Japan, MIDJA) to a national sample (MIDUS) of comparably aged adults in the United States (Karasawa et al., 2011). Guided by the conceptual frameworks described earlier, we were interested in whether aging in Japan might be more positive, given Buddhist, Confucian, and Taoist philosophical traditions (Hwang, 1999), combined with the aforementioned negative portrayals of aging in the United States (e.g., roleless role, social breakdown syndrome). Partial support for the prediction was found. Older compared to midlife adults in Japan showed higher levels of personal growth, whereas the opposite age pattern was evident in the United States—older adults showed lower levels of personal growth compared to midlife adults.

In both cultural contexts, however, purpose in life scores were lower among older compared to midlife adults, suggesting this aspect of well-being may constitute an area of vulnerability for aging adults in advanced, technological societies like Japan and the United States. Interpersonal well-being, as hypothesized, was rated significantly higher relative to overall well-being among Japanese compared to US respondents, but only in young adulthood. Thus, the prominence of social relational well-being was evident in the relatively more interdependent culture of Japan, but findings suggested possible decline in this emphasis with age. Finally, women in both cultures showed higher interpersonal well-being than men, but women also reported higher negative affect compared to men in both Japan and the United States. It is possible that Japanese women may minimize the expression of negative emotions while caring for children in an effort to promote mother-child *amae*, the ideal in Japan, as described in the chapter by de St. Aubin and Bach (this volume). Perhaps the experience and expression of negative affect among Japanese women may thus change as children age and life roles shift.

A more recent MIDJA study based on a large probability sample of Japanese adults from Tokyo was compared to

the longitudinal follow-up of the MIDUS sample (Karasawa, 2012). A key question was whether the positivity trend evident in later life well-being in the United States (i.e., age increments in positive affect, age decrements in negative affect) would be evident in representative sample from Tokyo. We reasoned that the positivity effect may be more pronounced in independent cultures that encourage older persons to proactively select positive social experiences. These, in turn, may contribute to adaptive mental health outcomes. The results, which included both eudaimonic and hedonic measures of well-being, showed that Americans, in fact, reported more positive well-being with aging. For example, with regard to life satisfaction and positive relationship with others, age increments were evident in the United States, and they were contrasted with age decrements in Japan. However, positive age trends were found in affect balance (positive minus negative affect) as well as in autonomy and environmental mastery in both Japan and the United States. The findings also revealed a number of gender-by-age interactions, which generally tended show more compromised profiles of well-being among older Japanese men. These patterns may relate to work by Ishida (2012) who pointed out that older Japanese men have fewer relationships outside of their marital partner. The lack of a wider social network may mean that older Japanese men easily lose key social support once their relationship with a spouse is gone.

In a separate line of inquiry, the link between aging and wisdom has been investigated with a focus on U.S./Japanese cultural differences (Grossman et al., 2012). Although wisdom has been of interest throughout history and across cultures and thus has many definitions, there is some consensus that it involves certain kinds of pragmatic reasoning needed to navigate important challenges in life (Baltes & Smith, 2008). Cultures differ notably, however, in how life conflicts are to be approached. Japanese culture stresses interpersonal harmony and the importance of carefully attending to relationships so as to avoid conflicts and maintain stability in close relationships. In contrast, American culture places more emphasis on fulfillment of personal preferences and individuation in social relationships, which may allow interpersonal conflict to flare (Markus & Lin, 1999). Grossman and colleagues examined how culture influences reasoning about social conflicts over the life span. The prediction was that socialization toward an interdependent social orientation in Japan may result in wiser reasoning skills (e.g., recognition of multiple perspectives, limits of personal knowledge, importance of compromise) earlier in the life course as a way of preempting social conflict. In contrast, Americans may continue to learn about conflict resolution over the life course thus leading to greater gains in wisdom with aging. As predicted, wise responses were shown to increase with age among Americans, but not in Japan. In addition, as predicted, younger and middle-aged Japanese adults showed greater use of wise-reasoning strategies than their same-aged counterparts in the United States.

In summary, ongoing empirical research in Japan has placed more of an emphasis on aging per se than a focus on adult development. The concept of *ikigai* has garnered considerable interest as a potential influence on health and length of life. Linked to the emphasis on worthwhile living, Japanese studies have examined actual life engagements of aging adults, such as being a grandparent or volunteering, which have demonstrated positive links between these activities and subjective well-being. Direct comparisons of aging and well-being have been conducted via the MIDJA and MIDUS investigations. These have shown that older compared to midlife adults show advantages in some aspects of well-being in Japan (e.g., personal growth) and other aspects of well-being in the U.S. (e.g., life satisfaction, positive relations with others). In both cultures, positive age trends were evident in autonomy, environmental mastery, and affect balance (positive vs. negative affect). Gender differences are increasingly evident in the pattern of findings, underscoring vulnerabilities among older men in Japan. Cultural differences in how adults reason in resolving social conflicts is another line of inquiry, wherein wise responses were shown to increase with age in the United States but not Japan, although among younger adults, wise responses were more strongly evident in Japan than in the United States. Taken as a whole, the just described empirical summaries from these two cultural contexts makes clear the striking paucity of research that involves direct comparisons of aging and adult development in both settings.

Future Directions

Building on the theoretical and empirical studies described in preceding sections, we see many promising lines of inquiry for future research. These possibilities are organized into five themes: (1) lacunae, or areas of missing research that follow from this review; (2) the need for greater interplay between cultural psychology and life course development; (3) within-cultural differences, particularly as they relate to issues of social inequality in opportunities for adult development; (4) the need to link psychological changes across the adult life course to

health outcomes, including biological risk factors; and (5) the fundamental importance of longitudinal studies that track intraindividual processes across time while also attending to possible historical changes.

With regard to lacunae, our review makes clear that the field of adult development and aging has a longer history and thereby, greater record of scientific productivity in the United States than in Japan. Thus, a key message is the need to build a parallel field in Japan, which may unfold with its own theories, perhaps linked to traditions of filial piety deeply embedded within the culture and current demographic trends. We drew attention to the Japanese concept of *ikigai*, which appears to be similar to purpose in life as studied in the United States, although we note the two constructs evolved from different theoretical and philosophical traditions. Future inquiries need to ascertain what is culturally common versus distinct in these close concepts, as well as probe why some older persons, but not others, possess these positive life outlooks. Using an emic approach, as described in the chapter by de St. Aubin and Bach (this volume), may be especially fruitful in this venture because it calls for perspective taking and concept generation from the Japanese themselves. So doing may identify culturally distinctive concepts, in contrast to the etic methodology, which may illuminate culturally common phenomena.

Our findings suggest the importance of attending to gender differences in future studies of adult development and aging, noting that gender-role prescriptions have traditionally been of greater prominence in Japan than in the United States. Other promising avenues of inquiry build on U.S. studies investigating the influence of psychological traits in how life course processes of maturity unfold. For example, significant life events (e.g., divorce, remarriage, becoming a parent) may be linked with personality characteristics (e.g., conscientiousness, extraversion, neuroticism) both in predicting the likelihood of such events, as well as in constituting forms of personal change that follow in the aftermath of such transitions. Finally, we underscore that our emphasis on theories and empirical evidence on cultural influences on adult development and aging in Japan and the United States represent only two contexts. What has been generated here thus needs to be augmented with future work examining the generalizability of theories and findings to other Western or Asian cultures and societies.

On the interplay between cultural psychology and life course development, we note the substantial body of research amassed to demonstrate cultural differences in various domains of psychological processes (Heine, 2010; Kitayama, Duffy, & Uchida, 2007; Miyamoto & Eggen, 2013). This work has, however, been conducted primarily with young adults. The upshot is that little is known about how culturally characteristic ways of thinking and feeling are patterned across the life course. What has been established is that the self tends to be viewed as an autonomous being that is more independent from others in the United States, whereas the self tends to be viewed as an interdependent being that is fundamentally embedded in relationships in Japan (Markus & Kitayama, 1991; 2010). Whether these cultural differences in self-views are maintained over the adult life course or whether they change and show divergent paths into middle adulthood and later life is unknown. Neugarten (1968; 1973) long ago described a process of turning inward in the later years, which she asserted involved the individual experiencing a sense of freedom from the norms governing everyday life. Is this a quintessentially Western idea, or might older adults across cultural contexts see their thoughts, feelings, and behaviors as less constrained by surrounding norms as they age? Paradoxically, such change could mean that older U.S. adults might give themselves license to be less independent as they age, whereas older adults in Japan might experience a shift toward a less interdependent self, perhaps especially for older women. Whatever patterns of change (or stability) are evident, these speculations point to empirically tractable questions for future research.

Prior cultural studies have also shown that emotional styles differ across cultural contexts. For example, positive and negative emotions are more strongly inversely related to each other in the United States than in Japan (e.g., Miyamoto & Ryff, 2011), suggesting that positive and negative emotions are more differentiated in Japan. The latter has been described as a dialectical emotion style in Japan but, again, whether these culturally different emotional styles persist or change across the life span is not well understood, although Western studies have suggested that emotional complexity increases with age (Carstensen, Mayr, Pasupathi, & Nesselroade, 2000; Labouvie-Vief & Medler, 2002; Magai, Consedine, Krivoshekova, Kudadjie-Gyamfi, & McPherson, 2006). It is thus important to investigate if emotional complexity also increases with age in Japan, or, alternatively, if Japanese older adults simply maintain their dialectical emotional styles. If the latter is the case, it could have a net effect of reducing cultural differences in emotional experience as individuals grow old in both Japan and the United States (i.e., emotional complexity changes in the United States begin to converge with dialectical emotional styles in Japan).

Moving to variation within cultures, we note that although extensive work has probed varieties of cultural

differences, relatively little attention has been given to variation among individuals within particular cultural contexts. Interestingly, some within-cultural differences may be similar across cultures. In this regard, we see value in pursuing research at the intersection of adult development and aging with studies of social inequalities. A key question, posed years ago (Dowd, 1990), was whether opportunities for growth and development in adult life are equally distributed across society or instead accrue disproportionately to advantaged segments of society. Structural barriers, such as economic divisions of labor and opportunities for social action, often compromise chances for development among disadvantaged constituents. That is, opportunities for self-realization are granted to those who are better educated and economically privileged.

Research in the United States has documented an educational gradient in eudaimonic well-being (Ryff & Singer, 2002) such that those with college degrees report higher levels on multiple dimensions of well-being compared to those with only a high school education or some college. A relevant question is whether such patterns are evident in interdependent societies like Japan as well, or might interdependent norms mitigate against such inequality in experienced well-being? Further inquiries are needed to illuminate how patterns of growth and development across the life course may vary depending on socioeconomic hierarchies *within* Eastern and Western cultural contexts.

The fourth future theme mentioned earlier involves mapping connections between profiles of age-related social and psychological change with health broadly defined. Across culture, the aging process is inherently characterized by increased profiles of disease and disability due to normative biological declines that accompany growing old. However, there is considerable variability in the timing, severity, and cause of health declines as people age. A key question is whether positive psychosocial aging and continued adult development might attenuate age-associated declines in health. Similarly, and building on the preceding theme, it is known that social inequalities defined by one's position in the socioeconomic hierarchy are also significant influences on later life health (Alwin & Wray, 2005). Thus, there are both protective (i.e., good psychological resources) and vulnerability factors (i.e., socioeconomic inequality) bearing on individuals' health as they age. Importantly, and not sufficiently understood, is that these influences may also be contoured by cultural context. That is, which psychosocial factors are salubrious or deleterious for health may differ depending on the cultural setting.

For example, positive affect and life satisfaction predict lower morbidity and mortality (e.g., Pressman & Cohen, 2005), whereas negative affect predicts higher morbidity and mortality (e.g., Kiecolt-Glaser, McGuire, Robles, & Glaser, 2002), particularly in the United States. These psychological qualities may, however, reflect largely independent values of Western culture. In Eastern cultural contexts, such qualities may play a smaller role, whereas interdependent qualities, like having flexible self-adjustment or experiencing dialectical emotions, may instead be especially important for health. In fact, our recent research found that negative emotions are linked with elevated biological risk in the United States but not in Japan (Miyamoto et al., 2013). Other factors, such as social support, may transcend cultural boundaries and be equally beneficial to health in both cultural contexts. However, even in this realm, our work has shown stronger links between perceived social support and health in Japan compared to the United States, albeit under particular conditions—namely, that the support is needed (respondents report high stress), and they can easily accept it (respondents are low on neuroticism; see Park et al., 2013). We have also shown that constructs of independence and interdependence predict health and well-being differentially in Japan and the United States (Kitayama et al., 2010). What is missing from these studies is a life course perspective—that is, when do these patterns become evident as individuals age and mature, and further, how persistent are they across the adult life course?

With regard to inequalities and health, we have examined psychological factors (neuroticism, optimism, self-efficacy, mastery) as mediators of the links between socioeconomic status and health, with the findings showing both common and culture- or gender-specific pathways (Kan et al., 2014). For instance, sense of control and neuroticism respectively mediated the association between education and self-rated health in both the United States and Japan, whereas self-esteem functioned as a mediator only in the United States. Furthermore, optimism was a mediator of the link between social class and health among females in both countries, but similar relationships were not found in either American or Japanese males.

Another study (Morozink et al., 2010), based on US data, has showed that aspects of psychological well-being moderate the influence of low educational attainment on a biological risk factor known as interleukin-6 (IL-6). This inflammatory marker is implicated in numerous disease outcomes (cardiovascular disease, cancer, Alzheimer disease) and is known to be higher among individuals with lower educational standing, but that inverse association

is moderated by levels of psychological well-being. Thus, less-educated adults with high levels of environmental mastery, purpose in life, positive relations with others, positive affect, and self-acceptance were protected from showing elevated IL-6. Whether this pattern might hold in Japan or whether other, more culturally attuned factors (e.g., sympathy for others, dialectical emotions) might be the relevant moderators is a worthwhile future question. Clarifying when in the life course these patterns emerge and how persistent they are across time is also important.

To be truly informative, future research must be based on longitudinal data (capturing both individual and historical change) in Japan and the United States. The central limitation of cross-sectional age findings is that obtained age differences may not be due to maturational processes, but instead may reflect cohort differences, which imply changing life contexts (i.e., living through a “different slice of time”). Change in surrounding historical contexts also shapes lives in persistent and lasting ways. For example, contemporary older persons in both Japan and the United States experienced world wars and significant economic downturns as part of their adult journeys. They may also have had fewer opportunities for advanced educational attainment compared to younger-aged adults. These factors, which define the broader historical context of people’s lives, are also essential for understanding psychological changes that may be evident across the decades of adult life.

Related to changing historical contexts, we close with observations about the dramatic growth in the size of aging populations in both countries, but especially in Japan. This major demographic change raises many important challenges, not only in terms of the health and well-being of the elderly, but for society as a whole. Of interest in future research will be whether patterns of intergenerational relations change as older persons assume greater prominence. Will the aged take on new roles, such as volunteering, that may potentially benefit other age groups? Alternatively, will previous U.S. views of the old as occupying a “roleless role” become increasingly salient in Japan as it faces growing demands of an aged population that is not contributing extensively to the market economy? What effect these realities will have on the cultural tradition of filial piety is itself an important future question. Whether East or West, what is certain is that advanced technological societies, such as Japan and the United States, face notable challenges with regard to utilizing the talents and capacities of their growing aged populations while also caring for the ill and dependent members among them.

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