College students' trait ratings of three age groups around the Pacific Rim

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Abstract. In this paper, the traits which younger adults associate with younger, middle-aged, and older adults in a number of Pacific Rim nations were assessed. Two dependent variables ('personal vitality' and 'benevolence') emerged from factor analyses of a series of trait adjectives. Cross cultural trends emerged which replicated patterns found in the US context. Main effects indicated declines in ratings of personal vitality and increases in ratings of benevolence with increasing target-age. However, interesting variations on this pattern emerged in different cultures. In particular, very negative evaluations of aging in Hong Kong, and a lack of differentiation between middle-aged and older adults in the Philippines and New Zealand were found. Little evidence emerged supporting the notion of particular positive evaluations of older adults in Asian cultures.

Key words: Age stereotypes, Elderly, Filial piety, Pacific Rim, Asia, North America, College students

Introduction

The expectations that people have as they pass through the life-span are crucial in determining the limits placed upon them by others, and indeed themselves, as they age. An important component for such expectations are the traits that are associated with individuals of different ages. That such expectation might vary across cultures is important in terms of understanding the variation that exists in the aging process around the world. The Pacific Rim is a fascinating context for examining these issues, containing as it does multiple cultures, which traditionally have fostered very different attitudes towards age and aging. In this research, we examined the traits associated with three different

age groups by younger adults in six Pacific Rim contexts (Australia, Hong Kong, Korea, New Zealand, Philippines, USA).

Considerable research has investigated stereotypes of older adults not only in the USA (O'Connell & Rotter 1979; Perdue & Gurtman 1990), but also other Western cultures, for example, New Zealand (Koopman-Boyden 1993; Wither & Hodges 1987) and Australia (Braithwaite, Lynd-Stevenson & Pigram 1993). Kite and Johnson (1988) using a meta-analysis, concluded that such stereotypes are primarily negative when compared to stereotypes of younger adults (although not uniformly so). Research in Australia and the USA has shown positive evaluations of older adults on traits such as wisdom and generosity, but negative evaluations on competence-related dimensions (Braithwaite et al. 1993; Branco & Williamson 1982). Little research has examined stereotypes of the middle-aged (although, see Harwood & Giles 1993; Levin 1988). Recent research in the USA has also demonstrated that multiple stereotypes of older adults exist in society (Brewer, Dull & Lui 1981; Hummert 1990). This is important in terms of understanding that in 'real life', conceptions of older adults are probably more complex than some research acknowledges.

Asian cultures are often characterized in the West as having more positive attitudes toward old age (Tobin 1987), a stereotype that is grounded in the Confucian ideals of filial piety (Cheun 1989; Ho 1994, Ota et al. 1996a; Sung 1995; Yum 1988). In particular, increased age is associated with increased respect, and tremendous social power in certain Asian cultures, e.g., Japan (Koyano 1989), China (Levy & Langer 1994), and Korea (Park & Kim 1992; Sung 1995). However, in Hong Kong, Ikels et al. (1992) have demonstrated that the stereotype of filial piety does not always hold true (see also Chang, Chang & Yung 1984). This is borne out by recent work examining stereotypes and perceptions of the sociostructural power of age groups in Hong Kong versus North America (Cheung, Lee & Chan 1994; Giles et al. in press; Harwood et al. 1994; Ota et al. 1996b), as well as in linguistic analyses of texts produced by Hong Kong Chinese students (Ng 1992).

It has been suggested that traditional values of filial piety have been eroded by the industrialization and urbanization of Asia in recent years (Bengtson & Smith 1968). An alternative explanation is that public avowals of filial piety belie private ascriptions to a negative view of aging and older adults (for related work, see Koyano 1989; McGee & Barker 1982). We are currently unaware of any research examining such attitudes toward older adults and the aging process in one of our data collection sites – the Philippines. Moreover, no work exists which examines these attitudes across the range of Pacific Rim cultures that the current paper does.

Certainly, it seems likely that evaluations of old age differ across cultures: Cultural differences in demography, philosophy, and family structure would seem to ensure such variation. Such differences are important in reminding us that the experience of aging (in terms of societal expectations) is not universal, and is therefore changeable/malleable. It is possible that by examining cross-cultural variation in perceptions of aging that we can come closer to an understanding of how to improve the experience of aging within specific cultures. The current study investigated evaluative trait profiles of three different age groups in six cultures around the Pacific Rim.

Following from the literature review above, and given the mixed nature of findings concerning cross-cultural evaluations of age, we proposed a single research question.

RQ: How do evaluations of young, middle-aged, and older adults differ across cultures around the Pacific Rim?

Method

A total of 1073 respondents participated in the study. All were volunteer college students, and some received extra credit in undergraduate social science courses for their participation. The respondents were drawn from six sites around the Pacific Rim: Australia (Queensland), Hong Kong, Korea (Seoul), New Zealand (Wellington), the Philippines (Manila) and the USA (California), with sample sizes in each culture ranging from 133 (USA) to 223 (Korea). Three 'European' and three Asian cultures were selected: the specific cultures were largely a function of the availability of data collection sites within our group. While the samples within each culture are not scientifically random, across cultures they are similar in terms of their ages, educational levels, and socio-economic level (across all sites, the majority of respondents could be characterized as middle-class within their particular setting). The gender mix across the different cultures ranged from 65.4% female (USA) to 50.5% female (Hong Kong). Only dominant ethnic group members were included in all cultures. Hence, in Australia, New Zealand, and the USA, only respondents of European origin were included. Likewise. only individuals describing themselves as ethnic Korean and ethnic Chinese were included from Seoul and Hong Kong respectively. In the Philippines. while Tagalog constitute a numerical majority, local informants believed that they did not constitute a dominant ethnic group. Hence, respondents were drawn from a variety of groups (the largest being Tagalog).

Data for the current study were collected as part of a lengthy questionnaire which measured perceptions of the aging process. The data reported here cover trait evaluations of young (20–30 year olds), middle-aged (45–55 year

Table 1. F	Pactor matrices	for pancultural	analysis
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	Young adults		Middle-aged adults		Older adults	
	Personal vitality	Benevolence	Personal vitality	Benevolence	Personal vitality	Benevolence
Active	0.76433		0.77804		0.84291	
Attractive	0.71056		0.64210	0.24941	0.78755	
Liberal	0.63781		0.67591		0.75824	
Strong	0.61348		0.41831		0.57415	
Healthy	0.60750	0.47291	0.63445	0.34660	0.65993	
Kind		0.80161		0.83018		0.81690
Generous		0.77434		0.80314		0.81682
Wise		0.72175		0.75296		0.79113

olds), and older adults (65–85 year olds), on nine semantic differential scales measuring physical and psychological traits (attractive-unattractive, active-inactive, healthy-unhealthy, strong-weak, liberal-conservative, wise-unwise, kind-unkind, generous-ungenerous, and flexible-inflexible). For example, the respondents were asked the extent to which they saw young, middle-aged, and older adults as attractive, on a scale where a score of 1 indicated highly unattractive and 7 indicated highly attractive. The adjectival scales adopted for the study were derived from our own previous research into age stereotypes (Giles et al. in press; Harwood & Giles 1993). The scales were translated into the language appropriate for the particular context, and back-translated to check the reliability of translation. In the case of the Philippines, the questionnaires were administered in English, which is the language of tertiary education, and hence familiar to all respondents.

Results

A series of factor and cluster analyses were performed on the nine scales for subjects from each of the six cultures and for each of the target-ages. While the pattern was not completely uniform for each of the cultures and each of the target-ages, there was overwhelming evidence that a two factor solution accounted best for the variation in the items. The two factor solution also emerged when the factor analysis was run across individuals from all cultures (pancultural analysis: Leung & Bond 1989), the results of this analysis are presented in Table 1. One item (*flexibility*) was dropped because of double loadings, and inconsistent loadings. Two scales were hence constructed. The first scale represented a dimension labeled 'personal vitality'. Loading on this

factor were the items attractive, active, healthy, strong, and liberal. While being 'liberal' relates more to an individual's beliefs than their 'vitality', it is nonetheless clear empirically that this item relates quite closely to the items concerned with vitality, and it is retained with them. It appears that the item was interpreted in terms of openness to change and new ideas, and was translated as such (e.g., Cantonese translation: hoi fong). This is a notion which is traditionally/stereotypically associated with younger age groups. The second factor consisted of three items which together seemed to indicate a 'benevolence' factor. Items loading on this factor were wise, kind, and generous (see Cheung et al. 1994, for similar dimensions related to perceptions of age groups). Separate scales were computed from these factors for each of the target-age groups (hence six total scales: two factors for younger, middle-aged, and older adult targets). Cronbach's alpha reliabilities for these scales ranged from 0.66 to 0.78. This is a little lower than might be desirable, but is nonetheless acceptable given the diversity of the samples, multiple questionnaire languages, and the like.

For both dependent variables, 3 (target-age: younger, middle-aged, older) × 6 (culture: Australia, Hong Kong, Korea, New Zealand, Philippines, USA) ANOVAs were calculated, with target-age being a within-subjects factor. In the event of a significant interaction effect, pairwise comparisons (younger vs middle-aged targets, and middle-aged vs older targets) were performed for each culture. To control for the large number of comparisons, Dunn's multiple comparison procedure was adopted. This is the most appropriate way of controlling Type I error rate in a within-subjects design (Toothaker 1991). Across various analyses, up to 11 subjects are dropped due to missing data. Main effects for *culture* are not reported.² Our interest is in cultural differences in *patterns* of evaluations. Main effects for the within subjects' variable (target-age) and interaction effects are of primary interest.³

A main effect for target-age emerged for the personal vitality variable [F(2,2114)=1175.72; p<0.001]. This indicated that ratings on this variable decline across the three age groups (younger adults being seen as most vital, older adults as least vital) across all cultures. This effect was mediated by a target-age by culture interaction effect [F(10,2114)=25.42; p<0.001]. This effect is broken down in Table 2, which indicates both the statistical significance of the particular comparisons, and the *effect size* (partial η^2) of each comparison. As can be seen, the linear decline across cultures is apparent in the USA, Australia, Korea, and Hong Kong. In New Zealand and the Philippines, however, the decline is only significant between youth and middle-age: there is no significant change between middle-age and older adulthood in ratings of personal vitality. In addition, it should be noted that

-	Personal vitali	ty	Benevolence	
	Younger	Middle-aged ↓	Younger	Middle-aged
	Middle-aged	Older	Middle-aged	Older
Hong Kong	0.635	0.648	(0.017)	0.090
Korea	0.460	0.164	0.079++	0.175++
Philippines	0.600	(0.007)	0.134++	(0.014)
Australia	0.543	0.555	0.386++	0.353++
New Zealand	0.656-~	(0.015)	0.410++	(0.056)
USA	0.674	0.690	0.590++	0.349++

Table 2. Effect sizes (η^2) and direction of pairwise comparisons between age groups

the change from middle-age to older adulthood is considerably smaller in the Korean group, as reflected by the effect size measure.

For the benevolence variable, the target-age main effect is again significant $[F(2,2112)=301.28;\ p<0.001]$. This time, the effect reflects a crosscultural tendency to rate *increases* in benevolence with increasing age. This effect was mediated by a target-age by culture interaction $[F(10,2112)=20.94;\ p<0.001]$. As can be seen in Table 2, Australia and the USA appear to share similar perceptions. As with the main effect, respondents from these nations saw benevolence increasing in a linear pattern with increasing age. This pattern was shared by Korea, although again the effect sizes in this context were substantially smaller.

Again, New Zealand and the Philippines differed from the other cultures, and shared similar perceptions. In these two sites, benevolence was seen to increase between young adulthood and middle-age, but no significant change was seen between middle-age and older adulthood. Finally, Hong Kong displayed a unique pattern. Respondents in this context saw no significant change in benevolence between younger adulthood and middle-age, followed by a significant decline between middle-age and older adulthood.

Discussion

A number of interesting points emerge from these analyses. First, the samples from the USA and Australia demonstrate the stereotype pattern which is familiar from much North American research – declines in personal vitality and increases in benevolence with increasing age. It is useful to see this

⁺⁺ indicates increase between two age groups (p < 0.05); ⁻⁻ indicates decline between two age groups (p < 0.05). Comparisons in parentheses are non-significant (p > 0.05).

pattern replicated in other Western cultures (we also have data from central Canada showing the same pattern).⁴ The fact that the New Zealand group does not share this perception is worthy of further examination. In contrast with Western conceptions of filial piety in Asia, Korea demonstrates a similar pattern to the Euro-cultures, albeit with substantially smaller effect sizes.

Indeed, the Asian cultures do not appear to display consistent patterns of filial piety, or particularly positive evaluations of increased age (see also, Ota et al. 1996a). Hong Kong demonstrates a unique pattern which is perhaps reflective of the most negative attitudes toward old age of any culture – it is the only location which perceives no positive developments with increasing age. The impact of non-Confucian influences during the postwar years through the British administration, entreport trade, and international commerce and finance have allowed a relatively free and open society to emerge. These factors might account for this dynamic non-Asian shift in core cultural attitudes of youth. Older adults, especially those with mainland Chinese roots and 'memories', have often been left behind in the modernization of the territory, and are perceived as continuing to lead traditional, and hence out-of-date. lives (see Williams et al. 1996). In contrast to cultures such as Singapore, Taiwan, and Korea, the urbanization and industrialization of Hong Kong have so far occurred without overt propagandizing pressure of traditional Confucian values. In this context, older adults remain something of a vestige of the previous society, and the generation gap is more marked, perhaps, than in any other site.

Finally, there are some notable similarities between perceptions of age groups in New Zealand and the Philippines. On both dependent variables these groups fail to differentiate between middle-aged and older target-ages. In the New Zealand context it is noticeable that ratings of older adults had the highest standard deviations. The high level of variability suggests that New Zealand respondents' attitudes may be in a state of flux, possibly as a result of heightened public awareness of ageism owing to debates regarding the Human Rights Act, which will outlaw age discrimination. This, of course, does not explain the similarity between New Zealand and the Philippines, and we should be aware that the factors leading to the similar pattern in the Philippines may independent of the factors causing such a pattern in New Zealand. At present, explanations of these findings are sketchy, and we are cautious about drawing any firm conclusions regarding this result from the current data alone. It will be important to pay particular attention to similarities between these two cultures in future research. If such patterns recur then clearly a search for coherent explanations will become a priority.

Future directions for research are raised by these findings. In particular, we see a need to generate culturally-sensitive lists of traits. It is probable

that the closed-ended questions used in the current study may have accessed only partial accounts of age stereotypes in each of the cultures. More openended (i.e., emic) methods will be essential in generating more comprehensive understandings of how cultures differ not only in terms of how they rate age groups, but also the culturally unique dimensions along which such ratings occur. Such techniques should allow us to investigate a broader range of factors than those in the current investigation. In a similar vein, the perceptions of middle-aged and older adults will also be crucial to our investigation. Do older adults share the perceptions of younger adults, and how do the perceptions of older adults vary across cultures? Likewise, the perceptions of non-students (and particularly rural younger adults) will be important in providing us with an understanding of the role that the urban, educated lifestyle plays in our findings. We are well aware that, as they currently stand, our samples are not representative of their national contexts. The students were all volunteers, and all were from social science backgrounds. It is possible that we might receive quite different responses from non-students, or even students with other disciplinary backgrounds.

In addition, as mentioned in the Introduction, research in the USA has described particular subtypes of the elderly stereotype (see Hummert 1990). It would be fascinating to uncover whether such subtypes exist in other cultures, and whether they parallel those uncovered in North America. In addition, perceptions of other *target* categories will be useful to examine (e.g., young-old and old-old; men and women). Further, there is a need to examine how these stereotypes relate to behavior. What can we understand about intergenerational communication across these cultures from the stereotype ratings reported in this paper (see, for example, Williams et al. 1996)?

In closing, we would reiterate the importance of these findings. The ratings indicate that younger individuals' perceptions of the life-span in these different cultures display some striking similarities, and also some notable differences. The similarities may be notable in providing evidence for some sociobiological origins for age stereotypes (Kogan & Mills 1992). In addition, they are important in terms of understanding that similar problems may be faced by older adults in very different cultural contexts in their dealings with the young. The observed differences raise the possibility that our young adult subjects' expectations for their own aging, and hence perhaps their interpersonal dealings with adults of different ages, may differ in important ways. Uncovering more detailed components of these attitudinal differences, and any behavioral manifestations, is a crucial next step, and one which will have implications for the nature of aging in each of the cultures.

Notes

- Details of these and any other unreported analyses are available from the first author. Factor
 matrices from individual cultural analyses are not provided due to the number of analyses
 conducted (18 one for each target-age group in each of the six cultures). However, these
 results were broadly consistent with the pan-cultural analysis in Table 1.
- Main effects for culture are likely to reveal cross-cultural differences in the use of rating scales, but are unlikely to reveal interesting information about cross-cultural differences in relative evaluations of age groups. We regard the interaction effects as revealing this information.
- 3. Initially, sex was also included as a factor in these analyses. However, the effects described for culture and target-age were entirely consistent across male and female subjects. A few differences emerged in terms of the *magnitude* of particular differences for instance, US men showed a slightly stronger evaluation of decline in vitality with increasing target age. However, the *pattern* of differences was identical for men and women across all cultures and target groups.
- 4. Data collected by Ellen Ryan indicates the same pattern as the USA shows in Table 2 (with very similar effect sizes). These data were excluded from the current paper since they are not from a Pacific Rim location.

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