# STEREOTYPE TRAITS OF OLDER ADULTS GENERATED BY YOUNG, MIDDLE-AGED, AND OLDER CHINESE PARTICIPANTS\*

YAN BING ZHANG

MARY LEE HUMMERT

#### TERI A. GARSTKA

University of Kanses, Lawrence

#### ABSTRACT

This study examined strenotype traits of older adults elicited from 40 young ( $M \approx e = 16$ , A) on diddl-ender (M = 3.6.3), and 40 older (chirkes adults (M = 64.7). Trait lists were compared across age groups and to traits reported by U.S. and Chinese New Zealand participasts in cacilar research (Hummert, Garsdra, Shaner, & Sruhm, 1994; Ng, Liu, Loong, & Wentherall, 1999). Results indicated considerable overlap between szerostype trails of dheat Chines participants and those from the acriter studies with Wattern participants, but also revealed 22 stereotype traits than negative ones, with young participants reporting the highest number of positive traits. Consistent with Ng et al. (1999), the latter result suggest that views of aging zee noore positive in Chinese than in Western cultures. Discussion focuses on age streotwes in the context of Chinese cultures.

Key Words: stereotype traits of Chinese older adults

\*This research was supported by National Institutes of Health/National Institute on Aging Grant R01 AG16352 to the second author.

© 2002, Institute of Aging Biotechnology

From a social cognitive perspective, stereotypes are person perception schemas, which reflect shared cultural beliefs and attitudes, personality traits, or behaviors of a group of people (Ashmore & Del Boca, 1981: Hamilton & Trolier, 1986: Hummert, 1999: Hummert, Shaner, & Garstka, 1995), This perspective views stereotypes as part of the conscious or unconscious knowledge base guiding individuals' social judgments and behaviors, rather than as innately negative. The majority of the research on age stereotypes has emphasized those held in the United States and other Western cultures (Brewer, Dull, & Lui, 1981; Brewer & Lui, 1984; Heckhausen, Dixon, & Baltes, 1989; Hummert, Garstka, Shaner, & Strahm, 1994; Schmidt & Boland, 1986), However, because stereotype schemas reflect cultural beliefs, these studies may not adequately represent the age stereotypes of those in other cultures (Ng et al., 1999). For example, Ng et al. (1999) found that the age stereotypes of New Zealanders of Chinese descent included categories (e.g., Old Timer, Honourable Elder) related to the emphasis on Xiao or filial piety in the Chinese culture. Similar categories were not found in the Western studies

This study extends the research on age stereotypes to consider the views of young, middle-aged, and older persons in the People's Republic of China (PRC). We begin with an overview of prior research on age stereotype traits in the West, and then outline how the cultural values in the PRC may be reflected in the age stereotype traits reported by Chinese participants.

# AGE STEREOTYPE TRAITS IN WESTERN RESEARCH

In the last 20 years, the demographic increase of the older population and bumanistic concerns for the physical and psychological well-being of older adults have motivated research on age stereotypes. Age stereotypes have become an important research topic not only because stereotypes are pervasive but also because they influence attitudes, communication beliefs, and behaviors (Hummert, 1999). For example, research has demonstrated that negative stereotypes of older adults (and sometimes even positive ones) can induce age discrimination and prompt patronizing communication with older adults (Harwood & Williams, 1996; Hummert et al., 1994; Hummert, Shaner, Garska, & Henry, 1998). Such behaviors may begin a negative feedback cycle for older persons, which, in the long run, may induce lower self-esteem, emotional decline, and beath problems (Ryan, Giles, Bartolucci, & Heawood, 1986).

Age stereotypes can be considered in terms of their valence (i.e., positive or negative) and their content (i.e., the specific cognitive, physical, and personality traits attributed to a group of people) (Ashmore & Del Boca, 1981; Hamilton & Trolier, 1986). Considerable research in the West indicates that aging is viewed as being negative in physical, social, and psychological ways. Studies show that older people are perceived as incompetent, fragile, complaining, less socially stillful, overly self-disclosive, and dominating (e.g., Kite, Deux, & Miele, 1991; Kite & Johnson, 1988; Palmore, 1999). These negative perceptions of aging have been verified in several age stereotype studies (e.g., Brewer, Dull, & Lui, 1981; Brewer & Lui, 1984; Hummert et al., 1994; Schmidt & Boland, 1986). In addition, the stereotype studies have demonstrated that positive perceptions of aging co-exist with the negative ones, so that individuals hold multiple age stereotypes varying in content and valence. Peopleof different ages largely agree on the traits associated with age stereotypes, though older persons make finer discriminations regarding the onset of age-related changes in traits and group the traits into more subcategories (i.e., have more age stereotypes) than do younger persons (Brewer & Lui, 1984; Heckhausen, Dixon, & Baltes, 1989; Hummert et al., 1994).

For example, Hummert et al. (1994) asked 40 young, 40 middle-aged, and 40 older participants (predominantly white) to generate traits associated with older adults. The trait lists produced by the three groups were positively correlated (correlation ranged from .44 between the young and the older adult lists, to. 64 between the middle-aged and older adult lists to .72 between the young and the middle-aged lists) showing that participants of all ages shared similar conceptions of age traits. The individual lists were collapsed, based upon frequency of mentions, to a set of 97 personality and cognitive characteristics of older adults, roughly balf of which were positive. The frequently reported positive traits included active, happy, sociable, fun-loving, healthy, skilled; loving lind, generous, understanding, supportive, family-oriented; patrice, old-fashioned, mellow, conservative. The frequently mentioned negative traits included stubborn, bitter, complaining, ill-tempered, quiet, timid, sedentary; inarticulate, forgetful, incompetent, sick, semile, rambing.

These trait groupings were verified in a subsequent trait-sorting task involving additional young, middle-aged, and older participants. The results indicated that there were seven consensual sterotypes of aging across the three age groups, three of which were positive in valence (i.e., Golden Ager, John Wayne Conservative, and Perfect Grandparent), and four of which were negative (i.e., Sherw/Curmudgeon, Rechue, Despondent, and Severely Impaired). However, the results also verified that the older participants had more complex streeotypes (both positive and negative) that were not shared with the young participants, and the older participants had additional streeotypes (also both positive and negative) that were not shared with either the young or undidle-aged groups.

## CHINESE CULTURAL VALUES AND AGE STEREOTYPE TRAITS

Thephilosophical tradition of *Xiao* or filial piety is the primary Chinese cultural value with implications for age stereotypes. This value would suggest that those in Eastern cultures may view aging more positively than would those from Western cultures, emphasizing the wisdom and knowledge that come with age. Some research has supported this view (Lervy & Langer, 1994; Nagasawa, 1980; Sher, 1984). For instance, Levy and Langer acked Chinsee (RPC) and American participants to generate five traits that they associated with older adults. The Chinese participants generated more positive terms than did the Americans, suggesting amore positive view of aging in the PRC than in the United States. On the other hand, several recent studies (Giles, Harwood, Pierson, Clément, & Fox, 1998; Harwood, Giles, Clément, Pierson, & Fox, 1994; Harwood et al., 1996, 2001) in Pacific Rim countries have found that young people in Asian nations (e.g., Korea, Philippines, Taiwan, Hong Kong) rated older adults more negatively than did those in Western nations (e.g., Canada, United State, Zealand, Australia). In particular, the participants from Eastern cultures saw older adults as less active, strong, generous, and wise than did the young participants from the Western antions.

Methodological differences between the Levy and Langer (1994) and Pacific Rim studies (Giles et al., 1998; Harwood et al., 1994, 1996, 2001) may account for these conflicting patterns of results. That is, by restricting the number of traits to five, Levy and Langer may not have fully tapped the scope of participants' sets of age stereotype traits: although more positive traits were listed by the Chinese participants, they may also have many of the same negative age perceptions as the American participants. The Pacific Rim studies, on the other hand were limited by their use of Western-generated trait raits gracies, which may not have adequately represented the range of age-related traits in the Eastern cultures (Harwood et al., 2001; Ng et al., 1999; Zhang & Humeert, 2001). In addition, the velence of specific traits might vary cross-culturally. As a result, the conflicting results may illustrate that, like participants in Western nations, those in Eastern nations have both positive and segurity eage streeotypes.

Two recent studies support this conclusion, one involving New Zealanders of both Chinese ancestry and European descent (Liu, Ng, Loong, & Weatherall, 2001; Ng et al., 1999) and the other involving participants from the PRC (Zhang & Hummert, 2001). In order to generate a set of age traits that is culturally grounded. Ng et al. and Liu et al. used procedures similar to Hummert et al. (1994). They interviewed and asked 24 Chinese (12 young: 6 males and 6 females; 12 middle aged: 6 young and 6 middle aged) and 24 European (12 young: 6 males and 6 females: 12 middle aged: 6 young and 6 middle aged) New Zealanders to describe either older Chinese or older Europeans. They found 94 age traits (some were positive and some were negative) that young and middle-aged participants (both Chinese and Europeans) associated with older New Zealanders. The majority age traits in this list duplicate those reported by Hummert et al. (1994). This finding is not surprising, because they included European participants in the sample and their goal was to generate traits descriptive of New Zealanders of both Chinese and European descent. However, some traits appear to be more related to the characteristics or values of Chinese older adults and may have been generated by the Chinese participants. These include the traits superstitious, flavor of having boys, poor in English, and hardworking. In addition, although subgroups of these traits describe stereotypes equivalent to those reported by Hummert et al. (e.g., Shrew/Curmudgeon, Golden Ager), others (e.g., Old Timer, Honorable Elder) seemed to reflect the Chinese cultural emphasis on filial piety.

Additional evidence that Chinese individuals have conceptions of aging that different from those in the West comes from an interview study involving young and old Chinese shults in the PRC (Zhang & Hummert, 2001). In response to questions about intergenerational communication, interviewes from both age groups spontaneously offered comments reflecting positive and negative age traits, even though age stereotypes were not the focus of the interview. Positive age traits emphasized by the interviewes included experienced and coring, while negative traits were superstition; conservative, old-fashioned, complaining, interfering, and stubborn. These comments were often tied to examples of intergenerational communication reflecting filial obligation and respect for elders.

In sum, these studies (Liu et al., 2001; Ng et al., 1999) suggested that the emphasis on filial piety in Chinese culture influenced images of older adults, but that this did not mean that those images were eatirely positive. At the same time, the studies fail to provide a comprehensive picture of perceptions of age-related traits in Chinese culture. The Ng et al. (1999) and Liu et al. (2001) research was conducted on members of the Chinese community within New Zealand, who were variously identified with their ethnic culture and the Euro-New Zealand culture. In addition, that research did not include older adults. The Zhang and Hummert (2001) study, though conducted in the PRC, did not directly assess perceptions of age stereotype traits, nor did it involve middle-aged participants.

The current study extends prior research on age stereotype traits within the Chinese culture by 1) soliciting perceptions of young, middle-aged, and older individuals in the People's Republic of China, and 2) using an open-ended trait generation task (Hummert et al., 1994; Ng etal., 1999) to casure a comprehensive picture of age-related trait associations. It is hoped that results from this study will provide baseline data for further culture specific and cross-cultural research on social geroutology involving the Chinese community.

The study addressed the following research questions:

- RQ 1: What traits do Chinese young, middle-aged, and older adults associate with older people?
  - 1a: What are the proportions of positive and negative traits?
  - 1b: What are the similarities and differences across age groups?
- RQ 2: How do these traits compare to the 97 traits generated by U.S. participants in Hummert et al. (1994)?

#### METHOD

#### Participants

Forty young (M age = 19.63; Age range: 17-23), 40 middle-aged (M = 36.8; Age range: 32-48), and 40 older Chinese adults (M = 64.7; Age range: 58-86) participated in this study in the summer of 1999 in the PRC. There were 20 males and 20 females in each age group. The younger, participants were student volunteers from a small Chinese vocational college. The college is located in a small coastal city in Northern China, and younger participants were either residing in the city or from the local raral areas. The middle-aged and older participants were recruited from a local community. They were residing in a medium-sized city or a small town in northern China. Years of education did not differ among the young (M = 12.15; SD = 1.44), the middle-aged (M = 12.89; SD = 2.0), and the older (M = 12.69; SD = -4.34), the middle-aged (M = 12.89; SD = 2.0).

## Data Collection

Following the procedures of Hummert et al. (1994) and Schmidt and Boland (1986), participants were first asked to think about how they would describe the typical Chinese older adult based on their personal options. They were then asked to write down these traits using short phrases or single words. Participants were informed that they could include all descriptors that they associated with older adults regardless whether these descriptors were positive or negative or whether they personally believed the descriptors were true. Participants were also told that there was no limit on the number of descriptors that they accould list.

### Translation and Coding Procedures

There were three major phases involved in coding the participants' responses for the analysis: 1) computing the total number of descriptors listed by each participant, 2) translating the Chinese descriptors into English, and 3) coding the English versions of truits as either synonyms of one of the 97 traits in Hummert et al. (1994) or a new trait and positive versus negative traits.

#### Computing the Total Number of Traits for Each Participant

The first step in this phase involved reading the descriptors and eliminating any that did not refer to traits of older adults (e.g., "the new society is prosperous," "young people should respect older adults"). Two Chinese coders completed this task independently on the total sample, coding each descriptor as a trait or non-trait. Reliability was assessed for each age group by percentage agreement (young = .96, middle-aged = .99, and elderty = .97) and by Scott's pi (Holsti, 1969) (young = .92, middle-aged = .98, and elderty = .94). After eluminating non-trait descriptions, the total number of descriptors reported by each participant was computed in the original Chainsce data. When a participant listed several descriptors that were similar in meaning, those descriptors were grouped and counted as one-trait. For example, if a participant listed "like fishing," "like swirming," "like externing," and "like to play Tai("), these were counted once as the trait "active." Decisions were made based on the constrants between the two Chinese coders.

### Translating the Chinese Descriptors into English

After computing the total descriptors reported by each participant, the Chinese descriptors were translated into English. Translation from Chinese to English requires a true understanding of the Chinese descriptors and correct English word choice to represent the original meaning. To ensure the validity of the translated descriptors, the translation process involved four specific steps. First, the Chinese descriptors were examined in terms of semantics by the author and the two Chinese coders currently studying in the United States. Second, the first author described the meaning of each Chinese descriptor in English to the two other American authors. From that, an English word was identified collectively that represented the original meaning. There were occasions where the corresponding English word to represent the whole meaning of a Chinese descriptor could not be found. In such situations, the Westernized Chinese characters or PinYin (e.g., Laodao) were used as the label. Third, the English version of the descriptors was then read and interpreted by an independent coder with knowledge of both English and Chinese to make sure the original meaning was not distorted in translation. Fourth, samples of the English descriptors (i.e., eight from each age group) were back translated to Chinese to ensure the accuracy of the translation. Both the Chinese and American coders discussed discrepancies in meaning or word choice until consensus was reached.

### Coding the English Versions of Traits

As the first step, physical traits were removed from the English wersions of traits before any further analysis was done in order to make the current data congarable with Hummert et al. (1994). Physical traits refer to the descriptors describing older adults' physical characteristics, for example, hair color, facial characteristics, and body features. Specifically, these traits induded white/gray haired, bent back, wriakled face, bad hearing or eye sight, bad teeth, bail bead, short, trembing hands or legs. A Chinese coder and an American coder worked together on this task and achieved 100% agreement on the set of physical descriptors.

Second, the English versions of the remaining descriptors were coded as synotyms of traits or new traits by comparing them to the list of traits generated by young, middle-aged, and older participants in Hummert et al. (1994). The same coders completed the above coding and reliab liny was computed by having both coders code 20% of the trait lists from each group. Reliability was assessed for each age group by percentage agreement ( $y \circ ung = 92$ , middle-aged = 97, and elderly = .93) and by Scott's pi (Holsti, 1969) ( $y \circ ung = .88$ , middle-aged = .95, and elderly = .90). Third, the English versions of the descriptors were also coded as positive or negative. Reliability was also computed by percent agreement ( $y \circ ung = .96$ , middle-aged = .99, and elderly = .97) and by Sc ott's pi ( $y \circ ung = .92$ , middle-aged = .98, and elderly = .94).

#### RESULTS

### Number of Traits and Trait Valence

A 2 (velence) + 3 (age group) analysis of variance with repeated measures was conducted to examine whether each age group generated an equal number of positive and negative traits. Results indicated a significant age group main effect (F(2, 119) = 43.705, p < .001), as significant valence main effect (F(1, 117) = 13.9, p < .001), and a significant valence main effect (F(1, 117) = 13.9, p < .001), and a significant interaction effect thermose age group and trait valence (F(2, 117) = 3.85, p < .051). Tukey's post hoc analyses of the age group main effect indicated that young participants listed the most traits (M = 2228, D = 666), followed by older adults (M = 13.50, SD = 6.77), and middle-aged adults (M = 13.9, SD = 3.89). Analysis of the valence main effect trevealed that participants in all three age group generated significantly more positive traits (M = 6.98, SD = 5.39) than negative traits (M = 6.39, SD = 3.80, F(1, 117) = 3.92, p < .001. Interaction contrastsrevealed that young adults for two age groups, they also listed proportionately more positive traits than did middle-aged and older participants (parts 1).

## Comparison to Western Traits

Overall, there were a total of 125 different descriptors generated by the three age groups. As described previously, these descriptors were coded as either synonyms of the traits generated by the participants in Hummert et al. (1994) or as new traits. Results indicated that 86 (43 positive traits and 43 negative traits) of the 97 roits from Hummert et al. (1994) were listed by at least one Chinese participant. However, only 66 (32 positive traits and 34 negative traits; see Table 1) of these traits were reported with a grif feart frequency (p < 0.03, Binomial distribution; Kenney, 1897) to be considered traits of shared stereotypes.<sup>1</sup> The eleven Hummert

<sup>&</sup>lt;sup>1</sup> Based on Kerney's Binomial distribution formula (1987, p. 154), the probability of having the same single descriptor from the pool of 125 listed by five participants out of 120 is .003. This conservative standard (listing by 5 or more participants) was applied to identify stereotypical Western (Hummert et al., 1994) and new Chinoac truits in this study.

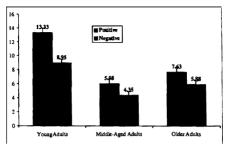


Figure 1. Mean number of positive and negative traits by age group.

et al. age traits that we re not listed by any of the participants included intelligent, sexual, greedy, and tired (see Table 2).

Amoing the 66 frequently listed traits that corresponded to those from Hummert et al. (1994), seven positive traits and two negative traits were listed by 25% or more of the participants in all three age groups and these traits included family-oriented, frugal, loving, health-conscious, kind, socia kle, supportive, sizk, and slow-moving. In addition, reminiscent, old-fashioned, family-livempered, and worried were listed by 20% or more of the participants in all three age groups. There were two traits (i.e., political and stubborn) that were listed by a relatively high percentage of young and middle aged participants (i.e., 15% or more), but not by the old participants. In addition, there were four positive traits (i.e., patriotic, independent, skiled) and four negative traits (i.e., row troits, positive snobbsh) that were listed by the young and old participants, but not by the middle-aged participants.

# New Chinese Age Traits

Thirty-rine (39)ne wage traits we relisted by at least one Chinese participant. In order to decide whether to keep or drop these descriptors the same frequency standard was used as for the Hummert et al. (1994) traits. That is, any new descriptors that were reported by at least five people across the three age groups were included and any descriptors with fewer than five memotions were dropped.

	Flequency by Char	ese raiscipali	•	
		Age group		
		Young	Middle- aged	Older
		roung	ageo	Cidei
Positively Valenced				
English	Chinese			
Family-Oriented	以家庭为中心的	57.5	57.5	50.0
Frugai	节俭的	77.5	37.5	42.5
Loving	有爱心的	77.5	47.5	25.0
Health-conscious	注重健康的	65.0	27.5	52.5
Fun-loving	富有生活情趣的	70.0	7.5	42.5
Active	活跃的	67.5	10.0	37.5
Kind	好心肠的	60.0	32.5	20.0
Sociable	爱交际的	60.0	27.5	25.0
Supportive	乐于助人的	50.0	30.0	30.0
Reminiscent	愿意谈论过去的	55.0	20.0	27.5
Нарру	愉快的	25.0	10.0	25.0
Quiet*	安静的	27.5	7.5	25.0
Generous	慷慨大方的	32.5	15.0	10.0
Well-informed	注意时事的	30.0	7.5	20.0
Mellow	<b>●</b> 闲自得的	27.5	10.0	17.5
Understanding	蕃解人意的	27.5	10.0	17.5
Political	热衷政治的	25.0	15.0	7.5
Nostalgic	愿意怀旧的	10.0	10.0	22.5
Healthy	身体鐺摩的	30.0	2.5	7.5

# Table 1. Western Age Traits (Hummert et al., 1994) Reported Frequently<sup>4</sup> by Chinese Participants

	Table 1. (C	onia.)		
		Age group		
		Young	Middle- aged	Older
Positively Valence	d Traits			
English	Chinese			
Capable	有能力的	10.0	17.5	5.0
Patriotic	漫曲的	17.5	0.0	10.0
Determined	有主见的	5.0	5.0	15.0
Wise	有智慧的	15.0	7.5	2.5
Future-Oriented	对未来充满非望的	17.5	2.5	2.5
Independent	独立的	12.5	0.0	10
Knowledgeable	知识丰富的	15.0	5.0	2.5
Productive	效率高的	7.5	0.0	10.0
Self-accepting	对自己满意的	5.0	2.5	10.0
Tough	坚韧不拔的	7.5	2.5	7.5
Liberal	思想开放的	7.5	5.0	2.5
Skilled	有技术的	12.5	0.0	2.5
Well-traveled	旅行经验丰富的	10.0	5.0	0.0
Negatively Valen	ced Traits			
English	Chinese			
Sick	好生病的	55.0	25.0	30.0
Old-fashioned	藩伍的	50.0	25.0	20.0
Slow-moving	行动缓慢的	35.0	30.0	15.0
Afraid	但小的	25.0	20.0	32.5
III-tempered	脾气坏的	30.0	22.5	25.0
Worried	愿意操心的	30.0	25.0	22.5
Conservative*	保守的	35.0	15.0	15.0
Complaining	喜欢抱怨的	22.5	12.5	25.0

Table 1. (Cont'd.)

# 130 / ZHANG, HUMMERT AND GARSTKA

		Age group		
		Young	Middle- aged	Older
Negatively Valer	ced Traits			
English	Chinese			
Lonely	基独的	20.0	20.0	12.5
Stubborn	頑鄙的	30.0	17.5	5.0
Sedentary	不愿意活动的	22.5	10.0	12.5
Demanding	愿意准号施令的	22.5	2.5	17.5
Forgetful	易忘事的	7.5	2.5	32.5
Emotional	感情用事的	17.5	10.0	12.5
Inflexible	不謹和的	20.0	2.5	10.0
Feeble	虚弱的	12.5	10.0	5.0
Prejudiced	有靈见的	20.0	0.0	7.
Slow-thinking	思维缓慢的	7.5	10.0	10.0
Sad	悲伤的的	10.0	2.5	12.
Bitter	尖歐刻薄的	7.5	7.5	7.
incompetent	能力差的	7.5	2.5	12.
Nosy	好打听的	10.0	0.0	12.
Dependent	依赖别人的	7.5	2.5	10.
Naive	无知的	10.0	5.0	5.
Selfish	自私的	2.5	7.5	10.
Frustraled	有挫败感的	7.5	0.0	10.
Hopeless	失去希望的	7.5	0.0	10.
Jealous	嫉妒的	10.0	2.5	5.
Miserly	小气的	15.0	0.0	0.
Poor	带空的	0.0	7.5	2.

		Age group		
		Young	Middle- aged	Older
Negatively Vale	nced Traits			
English	Chinese			
Rambling	说话不连贯的	5.0	5.0	5.0
Snobbish	势力暇的	7.5	0.0	7.5
Bored	对生活失去兴趣的	2.5	2.5	7.5
Depressed	情绪低落的	7.5	2.5	2.5

Table 1. (Cont'd.)

Frequently means that Westernage traits reported by five or more people across the three age groups (p < .003, Binomiel distribution; Kenney, 1987).</p>

\*Quiet was negatively valenced by American participants in Hummart et al. (1994).

Conservative was positively valenced by American participants in Hummert et al. (1984). Note: Chinese: young N = 40; middle-aged N = 40; elderly N = 40.

This procedure resulted in a total of 22 new age traits (15 positive traits and 7 negative traits) that were reported with significant frequency by the participants (see Table 3).

Laodao was the most frequently listed trait in the current study. It was listed by 45% or more of the participants in each age group. Two positive traits (i.e., reperienced and young at-least) and one negative trait (i.e., meddlesome) were listed by 20% or more of the participants in all three age groups. Three traits (tidy, face-conscious, and superstitious) appeared more often in the lists of young than older participants. Those traits by 25% or more of the young participants, but by 5% or less of the older participants.

### Correlation between Age Group Trait Lists

To examine the relationships among the trait lists generated by the young, middle-aged, and older participants, each trait was treated as a case (N = 125) and the age group frequencies for each trait were treated as its variables. Correlations among these variables revealed that, despite differences across the age groups in the number and frequency of traits listed, their trait lists were significantly correlated (all  $p^* \le .01$ ); young and middle-aged lists, r = .81; young and older lists, r = .05, middle-aged and older lists, r = .64.

# 132 / ZHANG, HUMMERT AND GARSTKA

		Age group		
		Young	Middle- aged	Older
Positively Valence	ced Traits			
English	Chinese			
Alert	机敏的	5.0	0.0	5.0
Curious	好奇的	10.0	0.0	0.0
Lively	有活力的	2.5	5.0	0.0
Retired	退休在家的	2.5	0.0	5.0
Witty	机管的	7.5	0.0	0.0
Courageous	有胆量的	2.5	0.0	2.5
Religious	信教的	0.0	2.5	2.5
Interesting	有量的	2.5	0.0	0.0
Proud	自豪的	2.5	0.0	0.0
Wary	极其小心的	2.5	0.0	0.0
Wealthy	富有的	0.0	2.5	0.0
Adventurous	喜欢冒险的	0.0	0.0	0.0
Grateful	充清谢意的	0.0	0.0	0.0
Intelligent	聪明的	0.0	0.0	0.0
Sexual	性感的	0.0	0.0	0.0
Successful	成功的	0.0	0.0	0.0
Trustworthy	值得信任的	0.0	0.0	0.0
Volunteer	愿意当自愿者的	0.0	0.0	0.0

# Table 2. Western Age Traits (Hummert et al., 1994) Reported Infrequently<sup>a</sup> or Not At All by Chinese Participants

		Age group			
		Young	Middle- aged	Older	
Negatively Valenc	ed Traits				
English	Chinese				
Fragile	脆弱的	0.0	2.5	5.0	
Humorless	无曲默虑的	5.0	0.0	0.0	
Inarticulate	读吐不清的	0.0	2.5	2.5	
Incoherent	语无伦次的	0.0	0.0	5.0	
Senile	雕涂的	0.0	0.0	5.0	
Timid	胆小的	0.0	2.5	2.5	
Emotionless	不善於表达情感的	2.5	0.0	0.0	
Neglected	被忽视的	0.0	0.0	2.5	
Sexless	性冷淡的	0.0	0.0	2.5	
Greedy	贪婪的	0.0	0.0	0.0	
Hypochondriac	有忧郁症的	0.0	0.0	0.0	
Tired	疲惫的	0.0	0.0	0.0	
Victimized	易受伤害的	0.0	0.0	0.0	

Table 2. (Cont'd.)

Infrequently means that Western age traits reported by four or fewer people across the three age groups ( $\rho > .01$ , Binomial distribution; Kenney, 1967).

# 134 / ZHANG, HUMMERT AND GARSTKA

			Age group	
		Young	Middle- aged	Older
Positive Traits English	Chinese			
Experienced	经验丰富的	62.5	32.5	20.0
Young at- heart	富有重心的	37.5	22.5	22.5
Hard-working	工作奖力的	47.5	10.0	15.0
Content	容易满足的	17.5	10.0	12.5
Prudent	谨慎的	7.5	15.0	12.5
Tidy	臺洁干净的	27.5	2.5	0.0
Honest	诚实的	10.0	2.5	15.
Noncompetitive	不愿与人竞争的	7.5	5.0	15.0
Principled	有原则的	12.5	0.0	15.6
Responsible	有责任心的	5.0	15.0	7.
Polite	有礼貌的	5.0	7.5	12.
Face- conscious	爱面子的	20.0	0.0	0.
Friendly	友好的	5.0	5.0	7.
Sacrificing	有自我牺牲精神的	5.0	5.0	5.
Confident	有自信心的	2.5	5.0	5.

Table 3. New Chinese Traits Reported Frequently\*

			Age group	
		Young	Middle- eged	Older
Negative-T.raits				
English	Chinese			
Laodao	愿意唠叨的	82.5	60.0	45.0
Meddlesome	爱管闲事的	50.0	22.5	20.0
Superstitious	遗信的	32.5	0.0	5.0
Gossipy	思嘲舌头的	22.5	2.5	10.0
Boastful	好吹牛的	12.5	10.0	10.0
Male- favoritism	重明轻女的	25.0	5.0	2.5
Careless	粗心的	0.0	2.5	10.0

Table 3. (Cont'd.)

\*Frequently means that Western age traits reported by five or more people across the three age groups (p > .003, Binomial distribution; Kanney, 1987).

### DISCUSSION

The results of this study indicate that some traits are universally associated with old age in the Chinese and Western cultures, but that others reflect views of aging distinct to each culture. Examining these similarities (universality) and differences (cultural grounding) provides insight into the cross-cultural applicability of current research on age stereotypes.

# Universal Traits of Age Stereotypes

Although 89% (86) of the age traits from the U.S. participants in Hummert et al. (1994) were listed by at least one participant in this study, only 68% (66) were listed by a sufficient number of participants to indicate that they are associated with age stereotypes within the Chinese culture. In this group, the most frequently reportedpositive traits include: *family-oriented frequal.lowing.leagl.lowing.l*  traits of the Perfect Orandparent and Golden Ager stereotypes of U.S. adults (Hummert et al., 1994) and the Nurturing Grandparent and Golden Ager stereotypes of Chinese New Zealanders (Liu et al., 2001; Ng et al., 1999). These traits also reflect the positive behavioral descriptions (e.g., caring and helping) of Chinese older adults reported by Chinese participants in Zhang and Hummert (2001). The most frequently reported negative traits included: sick, old-fashioned, slow-moving. afraid, ill-tempered, worried, complaining, lonely, stubborn, sedentary, demanding. These traits correspond to the Taits of the Despondent and Shrew/Curmudgeon stenotypes listed by the U.S. adults (Hummert et al., 1994) and the Shrew/Curmudgeon and Impaired (Marginalized) stereotypes of Chinese New Zealanders (Liu et al., 2001; Ng et al., 1999).

# Traits Unique to Western Age Stereotypes

Eighteen positive and 13 negative traits from Hummert et al. (1994) were in frequently reported by the Chinese participants in this study, suggesting that are unique to Western age stereolypes. The positive traits in this category included: volunteer, trutworthy, successful, scenal, intelligent, adventuroux, wealthy, and reitred. These traits may not reflect the reality of Chinese older adults (e.g., wealthy, retired, adventuroux) or may not be appropriate in content (e.g., sexual, religious) or expression (e.g., intelligent, withy) to be used as descriptors within the Chinese cit are.

The 13 negative traits infrequently reported by the Chinese participants included: victimized, tired, hypochondriac, greedy, sexless, timid, senile, incoherent, inerticulate, humoreless, and fragile. Many were traits of the extreme negative Severely Impaired age stereotype (Hummert et al., 1994), suggesting that this stereotype is not endorsed in the Chinese culture. Ng et al. (1999) reported

a similar finding with Chinese New Zeal anders.

## Traits Unique to Chinese Age Stereotypes

Twenty-two (22) new age stretotype trais were reported by the Chinese participants in this study. These trais were either uniquely Chinese in content (e.g., Loado or cadless repeating, face-conscious, male-favoritism) or emphasized specific aspects of related traits found in Western studies. For example, while the participants in Hummert et al. (1994) listed the traits wise, trastworthy, and religious to describe older persons, the participants in this study more frequently listed experienced than wise, principled than trustworthy, and supersitions than religious. Supporting the notion that these traits represent views of aging grounded in the Chinese culture, several of these traits is (e.g., superstitious, male-favoritism) also emerged in the Liu et al. (2001) and Ng et al. (1999) studies with Chinese New Zealanders. Inclusion of these traits in future research will provide a more complete picture of age stereotypes in China. The identification of these uniquely Chinese traits reinforce the notion that age stereotypes have some universal aspects, but are grounded within a particular culture (Ng et al., 1997, 1999).

#### Valence of Traits

The proportion of positive to negative age traits generated by participants supports the contention that there are more positive associations with age in the Chinese culture than in Western cultures. Although participants listed both positive and negative traits for older adults, those in all three age groups generated more positive than negative traits. Further, young participants were the most positive in their descriptions, which may reflect the influence of the Chinese social norm of filial piety. Compared with the American participants in Hummert et al. (1994), who listed an equal number of positive versus negative traits. He Chinese participants in this study were more positive in their descriptions of older adults. Supporting the notion that these findings represent cultural differences, Liu et al. (2001) found that young and middle-aged Chinese New Zealanders generated more positive than negative age traits.

This finding contradicts cross-cultural studies that have found more negative perceptions of aging in Eastern (including Chinese) than in Western cultures (Giles et al., 1998; Harwood et al., 1994; Harwood et al., 2001). This may be due to the fact that questionnaire items used in those studies were derived solely from Western research on age stercotypes and may not have adequately represented associations with age stercotypes in the Chinese culture. As the results of this study show, not only are some trust (e.g., *Loadon*) unique to Chinese age stereotypes (e.g., experienced and wise) may represent culturally distinct views of aging. Thus, the contradictions between the results of this study and earlier research on age stereotypes in Eastern culturally and earlier research on age stereotypes in Eastern culturally and earlier research on age stereotypes in Eastern cultures the importance of developing culturally appropriate measures.

## Future Research

There are two major routes for future research suggested by the findings in this study. First, this study revealed similarities and differences between age stereotype trains in the Chinese and U.S. cultures. Results suggested that some traits are universal, others are uniquely Americaa, and others are uniquely Chinese. The validity and generalizability of these conclusions must be demonstrated. One useful line of research would be to ask Chinese and U.S. participants to rate all three sets of traits on, their typicality and appropriateness as traits of older adults, as well as their valence (positive/negative). Validation studies such as this will provide a strong foundation for future cross-cultural research on age stereotypes in China and the United States.

Second, findings in this study indicated that the trait lists generated by the three age groups were highly and significantly correlated, suggesting that one trait list can be used in stereotype studies involving Chinese adults of all ages. The variability in valence and characteristics within this list of 86 mits, however, suggests that there are multiple age stereotypes within the Chinese culture just as there are within the U.S. culture. Investigating the nature and structure of these multiple stereotypes is an important goal for future research. Such research could use the trait list from this study and follow the sorting procedures used to investigate multiple stereotypes in the U.S. studies (Hummert et al., 1994; Schmidt & Boland, 1986).

In conclusion, this study revealed that some traits associated with old age are shared in both the Chinese and Western cultures indicating the universality of age streeotypes. At the same time, this study demonstrated that other traits of aging are unique to each culture, supporting the notion that age stereotypes are culturally grounded. The study also found more positive perceptions of aging in the PRC than has prior research in the West, perhaps because of the endorstement of filial piety within the Chinese culture. It must be noted, however, that the perceptions of the Chinese participants were not exclusively positive, suggesting that filial piety does not eliminate all negative perceptions of aging. Together these findings reinforce the conclusion that Western cunters. Cross-cultural research on age stereotypes should be grounded in the recognition of both the universality and the culturally specific nature of perceptions of aging.

### REFERENCES

Ashmore, R. D., & Del Boca, F. K. (1981). Conceptual approaches to storeotypes and stereotyping. In D. L. Hamilton (Ed.), Cognitive processes in stereotyping and in intergroup behavior (pp. 1-35). Hillsdale, NJ: Erlbaum.

Brewer, M. B., Dull, V., & Lui, L. (1981). Perceptions of the elderly: Stereotypes as prototypes. Journal of Personality and Social Psychology, 41, 656-670.

Brewer, M. B., & Lui, L. (1984). Categorization of the elderly by the elderly. Personality and Social Psychology Bulletin, J0, 585-595.

Giles, H., Harwood, J., Pierson, H. D., Clément, R., & Fox, S. (1998). Stereotypes of the elderly and oralitations of patronizing speech: A cross-cultural foray. In R. K. Agnibotri, A. L. Khanna, & I. Sachdev (Eds.), Social psychological perspectives on second language learning (pp. 151-186). New Dethi: Sage.

Hamilton, D. L., & Trolier, T. K. (1986). Stereotypes and stereotyping: An overview of cognitive approach. In J. F. Dovidie & S. L. Gaertner (Eds.), *Prejudice, discrimination,* and racism (pp. 127-163). Orlando, FL: Academic Press. Harwood, J., Giles, H., Clément, R., Pierson, H. D., & Fox, S. (1994). Perceived vitality of age categories in California and Hong Kong. Journal of Multilingual and Multicultural Development, 15, 311-318.

Harwood, J., Giles, H., Oca, H., Pierson, H. D., Gallois, C., Ng, S. H., Lim, T. S., & Somera, L. (1996). College students' trait natings of three age groups around the Pacific Rim. Journal of Cross-Cultural Geronicology. 11, 307-317.

Harwood, J., Giles, H., McCann, R. M., Cai, D., Somern, L., Ng, S. H., Gallois, C., & Noels, K. (2001). Older adults' trait ratings of three age-groups around the Pacific Rim. Journal of Cross-Cultural Genomology, 1, 1-15.

Harwood, J., & Williams, A. (1996). Expectations for communication with positive and negative subtypes of older adults. International Journal of Aging and Human Development, 47, 11-33.

Heckhausen, J., Dixon, R. A., & Baltes, P. B. (1989). Gains and losses in development throughout adulhood as perceived by different adult age groups. Developmenta Psychology, 25, 109-121.

Holsti, O. R. (1969). Content analysis for the social sciences and humanities. Mealc Park: CA: Addison-Wesley.

Hummert, M. L. (1994). Startotypes of the elderly and patronizing speech. In M. L. Hummert, J. M. Wiemsan, & J. F. Nussbaum (Eds.), Interpersonal communication in older adulthood: Interdisciplinary research (pp. 162-184). Thousand Oaks, CA: Sage.

Hummert, M. L. (1999). A social cognitive perspective on age stareotypes. In T. M Hess & F. Blanchard-Fields (Eds.), Social cognition and aging. San Diego: Academic Press.

Hummert, M. L., Garstka, T. A., Shaner, J. L., Strahm, S. (1994). Stereotypes o: the elderty held by young, middle-aged, and elderly adults. *Journal of Gerontology Psychological Sciences*, 49, 240-249.

Hummert, M. L., Shaner, J. L., & Garstka, T. A. (1995). Cognitive processes affecting communication with older adults: The case for screexypes, atbiades, and beliefs abou communication. In J. F. Nuesbaum & J. Coupland (Eds.), Handbook of communicationance aging research (pp. 133-160). Mahwah, NJ: Erlbaum.

Hummert, M. L., Shaner, J. L., & Garstka, T. A., & Henry, C. (1998). Communication with older adults: The influence of age stereotypes, context, and communication age Human Communication Research, 25, 124-151.

Kenney, D. A. (1987). Statistics for the social and behavioralsciences. Boston: Little Brown, & Company.

Kite, M. E., Deaux, K., & Miele, M. (1991). Stereotypes of old and young: Doe age outweigh gender? Psychology and Aging, 6, 19-27.

Kite, M. E., & Johnson, B. (1988). Attitudes toward older and younger adults A meta-analysis. Psychology and Aging, 3, 233-244.

Levy, B., & Langer, E. (1994). Aging free from negative stareotypes: Successfu memory in China and among the American deaf. Journal of Personality and Socia Psychology, 66, 899-997.

Liu, J. H., Ng, S. H., Loong, C. F., & Weatherall, A. (2001). Cultural stereotype and social representations of elderly persons from Chinese and European perspective. Uppublished manuscript. School of Psychology, Victoria University of Wellington.

Nagasawa, R. (1980). The elderly Chinese: A forgotten minority. Chicago: Pacific Asia: American Mental Health Research Center. Ng, S. H., Liu, J. H., Weatherall, A., & Loong, C. F. (1997). Younger adults' communication experiences and contact with elders and peers. *Human Communication Research*, 24, 82-108.

Ng, S. H., Liu, J. H., Loong, C. F., & Weatherall, A. (1999). Links across generations among New Zealand Chinese. Unpublished manuscript. School of Psychology, Victoria University of Wellington.

Palmore, E. B. (1999). Agesim: Negative and positive. New York: Springer.

Ryan, E. R., Giltes, H., Bartolucci, G., & Henwood, K. (1986). Psycholinguistic and social psychological components of communication by and with the elderly. *Language & Communication*, 6, 1-24.

Schmidt, D. F., & Boland, S. M. (1986). The structure of impressions of older adults: Evidence for multiple stereotypes. Psychology and Aging, 1, 255-260.

Sher, A. E. (1984). Aging in post-Mao China: The politics of veneration. Boulder, CO: Westview.

Zhang, Y. B., & Hummert, M. L. (2001). Harmonies and tensions in Chinese intergenerational communication. Journal of Asian Pacific Communication, 11(2), 203-230.

Direct reprint requests to:

Yan Bing Zhang, Ph.D. Assistant Professor 102 Bailey Hall, 1440 Jayhawk Blvd. University of Kansas Lawrence, KS 66045 e-mail: ybzhang@earthlink.net