1-1-2003

Stereotype Beliefs, Contextual Age, and Knowledge of Aging in the Elderly

Angela Walker
angela.r.walker@wv.gov

Stereotype Beliefs, Contextual Age, and Knowledge of Aging in the Elderly

Thesis submitted
To the Graduate College
Of Marshall University

In partial fulfillment of the
Requirements for the degree of
Master of Arts
In General Psychology

By

Angela Walker

Department of Psychology

Helen Linkey, Ph.D., Committee Chairperson
Stephen O'Keefe, Ph.D., Committee Member
Carolyn Suppa, Ph.D., Committee Member
Tony Goudy, Ph.D., Committee Member

Marshall University

August, 2003

ABSTRACT

Stereotype Beliefs, Contextual Age, and Knowledge of Aging in the Elderly

By Angela Walker

Stereotype beliefs, contextual ages, and knowledge on aging of independent and intervention-receiving elderly living in both rural and urban communities and institutions were examined in a convenience sample of 114 participants who were assigned to location and setting. Contextual age is defined as one's quality of life in regard to environmental, social, and health factors. Participants' acceptance of stereotypes about the elderly, contextual ages, and knowledge of aging was measured by questionnaires. Results indicated there were no significant differences regarding stereotype acceptance, contextual age, and knowledge of aging between rural and urban elderly. However, differences between community-dwelling and institutionalized elderly were significant at the .01 level. Those living in the community had lower stereotype acceptance levels, lower contextual ages, and greater knowledge of aging than those in institutions.

Table of Contents

List of Tables

Stereotype Beliefs, Contextual Age, and Knowledge of Aging in the Elderly

Due to advances in medical technology, proper nutrition, and healthier lifestyles, Americans are living longer. In some states, like West Virginia, the elderly population is demonstrating rapid growth. Great strides have been made in the physical sciences that have significantly impacted the lives of older people. It is equally important that the social sciences make such progress, and provide beneficial, accurate information about aging and the later stages of life. It is important to study how the elderly perceive themselves, and to examine how that perception affects not only their lives, but also their life satisfaction. Such studies will increase knowledge about the psychosocial needs of the elderly; in turn, better services and improved quality of life will be afforded to the aged.

This study examined what, if any, stereotypes the elderly believe about old people, and examined the factors that define contextual age for independent and intervention receiving elderly in rural and urban areas, both living in their homes and in institutions. This study also measured how the elderly view themselves. Finally, various demographic variables, such as age, income, location, and level of education, were studied to determine correlates of stereotype beliefs and contextual age. This study, unlike many others, considered the differences that residential locations pose on stereotypical attitudes and contextual age of the elderly.

Stereotypes

Several studies have been completed measuring stereotypes about elderly people. Brehm, Kassin, and Fein (1999) define a stereotype as, “A belief that associates a group of people with certain traits” (p. 130). Traits are adjectives used to describe individuals;

however, particular traits are often falsely assigned as descriptors for an entire group. Just as stereotypes have been paired with Hispanics, African Americans, homosexuals, women, and such, elders have also been stereotyped. A theory regarding how stereotypes are formed involves the out-group homogeneity effect; this notion holds that people belonging to out-groups are perceived as more similar than in-group members (Brehm, Kassin, and Fein, 1999). Therefore, it could be said that young and middle-aged people may classify all old people in the same way simply because they are old.

Attitudes about aging. Previous research on attitudes regarding the elderly indicated that much of society viewed the aged negatively. One study by Nussbaum and Robinson (1984) examined popular periodical articles about the elderly from 1970-1979. The results of the project showed that as the years progressed, attitudes portrayed by the media became more negative. These negative attitudes presented by the media could possibly be one explanation for attitudes and stereotypes held by young people about old people.

However, research has shown that elderly people hold stereotypes about other elderly people. Hummert, Garstka, Shaner, and Strahm (1994) asked 240 adult participants to list traits describing the typical elderly person. Traits were sorted into categories of positive and negative stereotypes. It was found that elderly participants often shared stereotypes of the aged with young and middle-aged participants. Elderly participants listed fewer stereotypes than did the others, but their stereotypes were in more complex sets. In another study, Hummert (1993) found that young adults and old adults tended to concur on positive and negative stereotypes about the aged; however, older adults more often judged the age-group 75 and older as stereotypical, especially for

positive traits. Younger participants described those elders between the ages of 55-64 more positively. Hummert concluded in this study that the differences found between young and old participants could be a reflection of the participants' differing perceptions on aging.

In another study by Rothbaum (1983), participants were placed into two age groups: 30-45 and 55-70. Participants were then given a list of 100 traits, and told to rate how well each trait described people aged 30-45 and 55-70 by using a scale. Rothbaum concluded that subjects aged 55-70 were more likely to classify elderly people in a stereotypical way, both positively and negatively. A study by Luszcz (1986) also examined how participants within 3 age groups (adolescence, middle-age, and elderly) rated adjectives describing the same three age groups. Overall, elderly participants rated elderly people in a more positive manner than did adolescents or middle-aged.

Research by Hummert and Garstka (1995) gave some support to Rothbaum's (1983) finding. In their study that measured attitudes, typicality judgments, and age judgments, it was determined that elderly subjects' attitudes about aging stereotypes were similar to the attitudes of young and middle-aged subjects. However, elderly subjects significantly demonstrated more positive attitudes about stereotypes than did middle-aged subjects, but not the younger ones. Elderly subjects also rated stereotypes about the aged as less typical than participants in the other two groups. Some of the stereotypes that were rated in the Hummert and Garstka (1995) study were: Golden Ager, Perfect Grandparent, Small-town Neighbor, Mildly Impaired, and Curmudgeon.

In a later project by Chasteen (2000), young adults (18-22) and old adults (62-85) were asked to rate age-related attitudes, as well as describe their own feelings about

getting older, using the Anxiety About Aging Scale by Lasher and Faulkender (1993). They were also given a description of an elderly individual, and then instructed to rate that individual as favorable or unfavorable. As it turned out, the older adults were more positive about their own aging and exhibited more favorable attitudes about the elderly than the younger participants.

Ethnic differences. A number of the studies on stereotypes about the elderly do not indicate the race or ethnicity of participants. Some studies do factor in the effect of ethnicity, though. For example, Harris, Page, and Begay (1988) focused on the attitudes that Hispanics and American Indians held about aging compared to those held by Anglo-Americans. The majority of the participants were from New Mexico; 40% percent of the subjects were of the American Indian race. Participants were given a questionnaire entitled "Feelings About Growing Older"; questions about demographic information, attitudes on aging, and age association were on the questionnaire. Results showed that Anglo-American subjects indicated at a significant level that they were less likely to find pleasure in spending time with the elderly. Hispanics and American Indians were more apt to feel that older people are less active. Differences in sex were also noted; it was found that male participants desired living longer than women, and were more likely to anticipate growing older. The study in general concluded that despite age or ethnicity, participants held positive attitudes about the elderly and the aging process, and anticipated getting older.

Life Satisfaction

In correlation with how elders feel about their own aging are life satisfaction and contextual age. The Life Satisfaction Index was developed by Neugarten, Havighurst,

and Tobin (1961) in an attempt to measure how successfully people feel they have aged. The Life Satisfaction Index A used in their study consisted of 20 statements to which participants were given the ability to agree, disagree, or mark as uncertain. Life Satisfaction Index B was 12 open-ended questions about the person's feelings regarding aging. Two age groups were given the questionnaires; the first group of participants was aged 50-70, and the second group of participants was aged 70-90. Neugarten et al. (1961) found that there appeared to be no correlation with age and life satisfaction.

Guy (1982) used the Life Satisfaction Index A along with other questions that focused on aspects of elders' lives, such as religion, family and friends, and health. All participants of this study were 60 and over in age. The results showed that the relationship between church attendance and life satisfaction was significant. Also found to be significant was the decline in church attendance as participant age increased; this is undoubtedly due to the physical limitations the aging process often places on individuals. Finally, no significant relationship was found regarding aging and church contact.

Rural and urban differences. One study by Lee and Whitbeck (1987) examined the difference in social relations between rural and urban elderly. It has been found that social, or interpersonal, interaction is related to life satisfaction; both life satisfaction and interpersonal interaction were included in the facets that determined contextual age in the study by Rubin and Rubin (1982), discussed in this paper later. In the Lee and Whitbeck (1987) study, over 2,000 participants, age 55 and over, completed questionnaires about loneliness. Variables such as proximity of family or friends, frequency of social interaction, and involvement in the community were also taken into account. Lastly, a scale rating location population was used. It was found that a significant difference in

social interaction existed between rural and urban elderly; rural elderly showed higher levels of social interaction with family and friends. However, there was no significant difference noted between location and loneliness.

Outside of the United States, some research has been completed on attitudes toward aging. One study in particular, by Ramamurti and Reddy (1986), examined attitudes of a number of different age groups about aging; the impact of participants' location was also considered. Age groups ranged from 15-25 through 55 and older. Subjects were from both rural villages in Andhra Pradesh, and from the urban area of Cuddapah. The subjects were given an attitude inventory authored by Shaw and Wright (1953); this measured sentiments about the elderly, and was translated into Telugu. The study showed no significant differences regarding sex and location on attitudes; however, differences between age groups were significant. Apparently, as age increased, more favorable attitudes about aging appeared.

Influence of attitudes. Geared in this direction was the question asked by Levy, Ashman, and Dror (1999) about how negative stereotypes of the elderly impact their will to live. The study involved both young and old subjects. Groups were given a priming task that flashed positive or negative adjectives about elderly people on a computer screen. Then, the subjects were given the Will to Live questionnaire designed by the authors; this questionnaire provided several scenarios with varying odds of life and death. Participants had to respond using a continuum score between refuse treatment and accept treatment. This study concluded that the older participants' scores on the Will to Live questionnaire were shaped by the priming technique, but scores of younger participants were not. Thus, the elderly subjects who received the negative adjectives in the priming

task were more likely to refuse treatment in the scenarios regarding life or death, and vice-versa. Apparently, negative stereotypes can influence the attitudes that elderly people have about aging, as well as influence satisfaction with life and the will to live.

In a manner similar to the priming tasks, Jackson and Sullivan (1987) designed a study to measure stereotypes after subjects were given disconfirming information about elderly people. A group of senior citizens and a group of young adults were given the Person Perception Survey. This survey included three descriptions: a social target, a physical target, and a psychological target. The targets were either a young age or an old age. All descriptions portrayed targets in a manner that was inconsistent with negative stereotypes about the elderly. Participants then rated each target by using bipolar adjectives. Finally, participants were given the Attitudes Toward Old People Scale, designed by Kogan (1961). Jackson and Sullivan concluded that the younger participants gave old targets more favorable ratings than young targets; older participants rated the old targets as favorably as the young targets. In this case, disconfirming information given about the elderly led to reported positive attitudes about older people.

Contextual Age

As previously mentioned, contextual age is of great importance to the study of the elderly. Rubin and Rubin (1982) examined contextual age, and found it to be a better indicator of aging than chronological age. Contextual age is a measure of how factors such as environment, social life, and psychological status affect an individual's quality of life. This measure may more appropriately determine the age of an individual than simply the number of years an individual has lived (Rubin and Rubin, 1982). In an attempt to get a measure on contextual age, Rubin and Rubin developed an index that

included statements about factors including physical health, interpersonal interaction, mobility, life satisfaction, social activity, and economic security. Participants, aged 17-92, were then asked to rate each statement on a five point scale ranging from strongly disagree to strongly agree. Pearson correlations were calculated between each contextual age factor and chronological age. Partial correlations were also calculated between other demographic variables, like income and education, and contextual age factors. When scores were examined, it was determined that those participants with greater life satisfaction also had better health, higher levels of social activity, economic security, and interpersonal interaction. This finding held true for younger and older participants; chronological age, therefore, is not significantly related to contextual age. The findings did suggest that several factors are interrelated, thus solidifying the notion of contextual age. Finally, and most importantly for the elderly, the findings indicated that negative concepts about aging may not necessarily be true.

Hofstetter and Schultze (1993) used the Contextual Age Index in conjunction with an instrument that assessed perception of ageist stereotyping to determine how senior citizens perceived stereotypes about aging in relation to television exposure. Results of this study showed that a vast majority of participants perceived TV news as <u>not</u> portraying the elderly unfavorably; less than half of the participants felt that TV dramas and talk shows portrayed the elderly unfavorably (Hofstetter and Schultze, 1993). Finally, results also showed that those participants who felt that TV did negatively stereotype the elderly usually had higher contextual aging scores. Higher contextual age was defined by low life satisfaction, impaired health and mobility, and decreased levels of social activity. Thus, the study found a stronger relationship between contextual age

and perceptions of negative stereotypes than between TV exposure and perceptions of negative stereotypes.

Decreasing Stereotypes

Making contact. The contact hypothesis has been used to theorize about in-groups and out-groups, namely different racial groups. The theory states that as contact increases between the in-group and the out-group, stereotypes and prejudices decrease (Brehm, Kassin, and Fein, 1999). Studies on the contact hypothesis have been completed to determine if the theory holds true for stereotypes about the elderly. Knox, Gekoski, and Johnson (1986) completed such a study. Their study examined participants' responses to Miller and Dodder's (1980) revision of the Facts on Aging Quiz (the original FAQ was authored by Palmore in 1977), and Rosencranz and McNevin's (1969) Aging Semantic Differential. Contact with elders was also measured using a 7-point scale; this focused on quality of contact rather than quantity. Subjects were within the age range of 17 and 22. Findings showed that a strong relationship existed between perceptions of the elderly and quality contact with the elderly for those studied. Hale (1998) completed a similar study with an additional age group. Fifty young and fifty elderly participants were given surveys to measure both contact with the elderly, as well as knowledge about aging. The results of the experiment indicated that those with higher levels of contact with the elderly did have more knowledge and fewer stereotypes about the aged. However, younger participants had higher scores on the knowledge survey than did the elderly participants. Also, younger participants did not demonstrate a significantly higher stereotype score than did the elderly.

Schulz and Fritz (1987) also examined the influence of contact on stereotypes. Their study focused on how young and old adults attributed certain characteristics to the following groups: most people 65 and over, themselves, and specific persons 65 and older with whom they were acquainted. As it turned out, both young and old participants attributed negative characteristics to the aged; however, both participant groups evaluated elder acquaintances more positively. These results suggest that people are less likely to negatively stereotype the elderly with whom they are familiar.

Knowledge on aging. More studies focusing on knowledge of aging and stereotypes were also completed. For example, Kluge, Mansbach, and Johnson (1984) gave undergraduates and elderly participants the revised Facts on Aging Quiz by Miller-Dodder (1980). This strategy was used to determine fallacies held by undergraduates, as well as older participants, about the elderly. This experiment revealed that both groups of participants held similar misconceptions about the elderly. Both groups also reported obtaining their knowledge on aging from personal experience and observation, rather than from the media.

O'Hanlon, Camp, and Osofsky (1993) used Palmore's (1977) Facts on Aging Quiz (FAQ) too, but took the study a step further. They included middle-aged persons with young and old participants. All participants were college students. In addition to the FAQ, subjects were given the Knowledge of Aging and Elderly (KAE) scale (Kline, Scialfa, Stein, and Babbitt, 1990), and the Aging Semantic Differential (ASD) (Rosencranz and McNevin, 1969). The elderly college students scored significantly higher on both FAQ and KAE questionnaires than did the other two groups; they also had

significantly lower scores on the ASD than did the younger students, indicating that older students viewed aging more positively.

With the above cited evidence that increased knowledge of the elderly is correlated with positive attitudes about aging, it may be inferred that education can be used to help decrease negative attitudes and stereotypes. Guttman's (1978) study supports this inference. Guttman examined elderly paraprofessionals' attitudes about the elderly, and then attempted to determine if negative attitudes could be decreased as a result of positive learning. A questionnaire was administered to a control group of 28 subjects, and to 2 experimental groups of 20 subjects. Subjects in the experimental group went through a four- week training program that aimed at increasing knowledge about the aged. Pre-test and post-test questionnaires were given; the questionnaire utilized measured myths and realities about old people. All subjects were between 55 and 85 years of age. Guttman concluded that there was no significant difference between pre-test scores of control and experimental groups. A significant difference was noted, however, between post-test scores of the experimental groups. Participants provided more correct answers concerning attitudes about the elderly on the post-test. The overall assumption from this study was that education and training do in fact decrease negative attitudes and stereotypes about the elderly.

Perspective taking. Galinsky and Moskowitz (2000) researched another idea about how to decrease stereotype exhibition; they examined the theory of perspective-taking. Perspective-taking is the idea of standing in another's shoes, and grasping what that person might experience. Perspective-taking is believed to indirectly decrease the accessibility of stereotypes when attributions are made toward other individuals.

Galinsky and Moskowitz compared three groups of participants (control, stereotype suppressors, and perspective-takers) on a narrative essay writing task and a lexical decision task. The results revealed that perspective-takers demonstrated stereotyped expression to a lesser degree than the control group; perspective-takers also expressed more positive attitudes than the other two groups. These results are encouraging to those studying stereotypes of the elderly. It appears that increased contact, education, and a perspective-taking attitude can not only reduce an individual's use of stereotypes about the elderly, but also promote positive feelings on aging.

Independence Vs. Receiving Intervention

The continuum of the aging process moves from independence to receiving intervention to being interdependent (Weddle and Fanelli-Kuczmarski, 2000). An independent elder is defined as one who remains fully active, and is functionally meeting his or her own needs, and does not receive free, public, or fee-for-service assistance with activities of daily living. Activities of daily living are those tasks performed to maintain physical functioning and personal care, like bathing, dressing, grooming, toileting, eating, and transferring (South Dakota Legislative Research Council, retrieved 11/11/02, from http://legis.state.sd.us/rules/Rules/6744.htm#67:44:02). An elder receiving intervention from senior social services or alternative care services is defined as one who is receiving free, public, or fee-for-service assistance with the above listed activities of daily living. Alternative care services include: adult day care, maintenance nursing, case management, medication management, personal care, nutrition programs, etc. (South Dakota Legislative Research Council, retrieved 11/11/02, from http://legis.state.sd.us/rules/Rules/6744.htm#67:44:02). An elder who is considered

interdependent is one who has substantial impairments, and is incapable of remaining in the community due to requiring a high level of care; this person may be found in nursing or long-term care facilities (American Dietetic Association, retrieved 10/30/02, from http://www.eatright.org/adap0500.html). The World Health Organization found that within the developed countries of the world, one-fifth of the elderly receive medical or social services; two-thirds of those services are provided in the home, while one-third of those services are provided in institutions (retrieved 10/31/02, from http://www.who.int/archives/whday/en/pages1999/whd99_5.html).

This study attempted to measure stereotypes held by, and contextual age of, elderly in institutions and in the community of both rural and urban areas; also measured were the stereotypes held by, and contextual age of, elderly who are independent versus those who receive intervention from senior social services. Obviously, much research as been completed about attitudes and stereotypes held about the elderly; however, very little research has examined what, if any, impact a rural or urban location of the elder has on stereotypes and contextual age. The 1990 United States Census Bureau defined an urban area as those incorporated places where 2,500 or more people lived; a rural area was defined as having less than 2,500 habitants, and unincorporated (U.S. Census Bureau, retrieved 9/3/02, from http://www.census.gov/population/censusdata/urdef.txt). Community dwelling, or non-institutionalized, elderly are defined as those who continue to live in a private residence, retirement community, assisted- living facility, or attend an adult day care (American Dietetic Association, retrieved 10/30/02, from http://www.eatright.org/adap0500.html). Conversely, institutionalized elderly are defined as those who are living in facilities such as residential board and care homes,

personal care homes, adult emergency shelters, nursing homes, and adult family care homes (West Virginia Department of Health and Human Resources, retrieved 11/7/02, from http://www.wvdhhr.org/oss/adult/arseligibility.htm).

It was hypothesized that rural participants would have higher scores on the Facts and Knowledge on Aging questionnaire than urban participants, and have lower scores on the Stereotype Acceptance questionnaire than urban participants. It was also hypothesized that the rural participants would have a lower contextual age than urban participants.

It was also hypothesized that participants in institutions would not only have higher scores on the Facts and Knowledge on Aging questionnaire, but also higher scores on the Stereotype Acceptance questionnaire. It was also hypothesized that institutionalized participants would have a higher contextual age than community-dwelling participants.

Method

Participants

To measure stereotypes about and contextual age of older people, 250 volunteers were given an anonymous questionnaire. One hundred fourteen completed questionnaires were returned. Half of the participants were from rural areas of West Virginia; the other half from an urban area. The original 250 were also divided in terms of residence; half of the participants were community-dwelling residents living in senior high-rises or neighborhoods. The other half of the participants were residents of nursing facilities. Participants' ages were 65 and over. This cut-off was selected due to the belief of North Americans that at age 65 one is considered a senior citizen. This sentiment was

reinforced by research completed by McEdwards (1982). McEdwards found that 67% of participants who responded to the given questionnaire felt that an individual is a senior citizen at age 65. Also, 28% of subjects expressed that an individual is considered old at age 70.

Demographic information. The participants were asked to indicate their level of education, their sex, their age, their income level, and their level of participation in religious activities, such as prayer/meditation, Bible reading, etc. Also, participants were asked to indicate how important their religious faith is to them. Participants noted whether they live in a rural or urban area, as well as in their own home, the home of a family member, or in a nursing facility. Lastly, participants were asked to select what, if any, senior services they are receiving. The demographic information was correlated with each other measure to highlight any patterns.

Measures

Stereotype acceptance. A two-page questionnaire was administered. It was a 13-item yes/no measure that indicated participants' level of stereotype acceptance. Yes responses were given the value of 2 points; no responses were given the value of 1 point. The score of the measure was obtained by adding the number of yes and no responses. A high score indicated a high level of stereotype acceptance; a low score indicated a low level of stereotype acceptance. One of the statements included in this questionnaire was, "Since age 65, I have had no interest, or capacity for, sexual relations." A copy of the questionnaire is found in Appendix B.

Contextual age index. A two page anonymous questionnaire with questions derived from Rubin and Rubin's (1982) Contextual Age Index was administered. The

questionnaire measured participants' scores on the six factors that comprise contextual age. Three statements per factor were listed, for a total of 18 statements. Participants indicated their responses to the 18-item index on a 5 point Likert scale, ranging from 1 = strongly agree to 5 = strongly disagree. The first factor measured was physical health, which focuses on general physical health and medical problems. One of the statements from this grouping was, "I usually feel in top-notch physical condition."

The second factor on the index was interpersonal interaction. This factor is related to the amount of contact the participant has with family and friends. One of the statements from this grouping was, "I spend enough time communicating with my family or friends by telephone or mail.

The third factor on the index was mobility. This factor is related to how the participant is able to get out of his/her residence, and travel. One of the statements from this grouping was, "I usually don't travel more than a few blocks/miles from my house each day."

The fourth factor on the index was life satisfaction. This is how successfully people feel they have aged, and the amount of happiness they have found over the years. One of the statements from this grouping was, "I've been very successful in achieving my aims or goals in life."

The fifth factor on the index was social activity. This factor involves the amount of social involvement in which the participant engages. One of the statements from this grouping was, "I often participate in games, sports, or activities with others."

The final factor on the index was economic security. This involves the degree of financial stability that the participant has in life. One of the statements in this grouping was, "I have no major financial worries.

In combination, these six factors measured the contextual age of the participant. The score of the index was the total of the numbers circled in the Likert scale that corresponded with each statement. Higher scores indicated a high contextual age, or declining physical health, few interpersonal interactions, very limited mobility, decreased life-satisfaction, etc. Lower scores conversely indicated a low contextual age, or a healthy physical condition, ample interaction with others, financial stability, etc. A copy of the questionnaire is found in Appendix C.

Facts and knowledge on aging. A one-page, anonymous questionnaire was administered. This questionnaire examined participants' knowledge about aging, and was a 13-item true/false measure. Seven statements from the measure were derived from Palmore's (1977) Facts on Aging Quiz. Those statements were:

Most older people have no interest in, or capacity for, sexual relations. F

Aged drivers have fewer accidents per person than drivers under 65. T

Most older workers cannot work as effectively as younger workers. F

The majority of old people are socially isolated and lonely. F

The majority of old people are working or would like some kind of work to do (including housework and volunteer work). T

About 80% of older people say they are healthy enough to carry out their normal activities. T

Older people tend to become more religious as they age. F

Four statements were derived from the Knowledge of Aging and the Elderly Scale by Kline et. al (1990). Those statements were:

Retirement is not a very difficult experience for almost all old people. T

Old people are more likely than young adults to have a low socioeconomic status. T

Old people are less alike than young people. T

Over 10% of all aged live in long-term health care institutions (i.e., nursing homes, homes for the aged, mental hospitals, etc.). F

The final two statements were derived from the Miller-Dodder (1980) questionnaire. Those statements were:

The majority of older people say they are happy most (more than half) of the time. T

The majority of older people are unable to adapt to change. F

The measure was scored according to the accuracy of the response. Higher scores indicated accurate knowledge about the elderly and aging, and thus, a low level of stereotypes. Lower scores indicated inaccurate knowledge, or a high level of stereotypes, about old people. A copy of the questionnaire is found in Appendix D.

Results

To see if there were differences in stereotype acceptance, contextual age, and knowledge about aging, and a 2 (location: rural or urban) x 2 (setting: community-dwelling or institutionalized) ANOVA design was used to analyze collected data. A second ANOVA was used to detect differences between the two levels of the services

variable (independent or intervention recipient). This separate analysis was completed because the services variable was nested within the community-dwelling variable only.

Rural Vs. Urban

No significant main effects of the location variable were noted, nor was a significant location x setting interaction found. Thus, there were no significant differences found between rural and urban participants on the Stereotype Acceptance measure, Contextual Age measure, or the Facts and Knowledge on Aging (FKOA) measure. The means and standard deviations for rural and urban participants on each of the three measures are shown in Table 1.

Community-dwelling Vs. Institutionalized

Significant main effects were found on the Stereotype Acceptance measure and the Contextual Age measure; scores were $F(1,114) = 11.86$, $p<.01$ and $F(1,114) = 18.44$, $p<.01$ respectively. As seen in Table 2, community-dwelling participants overall had a lower stereotype acceptance level and a lower contextual age than did the institutionalized participants. On the Facts and Knowledge on Aging measure, the main effect of setting was significant, $F(1,114) = 17.63$, $p<.01$. As seen in Table 2, community-dwelling participants overall scored higher on the FKOA questionnaire than did institutionalized participants. Again, no significant location x setting interaction was found.

Table 1

Mean Scores for Rural and Urban Elderly

	Mean		Standard Deviation		Sample Size	
Measure	Rural	Urban	Rural	Urban	Rural	Urban
SA	18.16	18.09	2.85	2.81	61	53
CA	44.34	43.43	10.93	11.00	61	53
FKOA	7.21	7.45	1.93	2.31	61	53

Note. SA = Stereotype Acceptance; CA = Contextual Aging; FKOA = Facts and Knowledge on Aging.

Table 2

Mean Scores for Community-dwelling and Institutionalized Elderly

	Mean		Standard Deviation		Sample Size	
Measure	C-D	I	C-D	I	C-D	I
SA	17.62	19.62	2.90	1.93	85	29
CA	41.52	50.97	10.62	8.60	85	29
FKOA	7.78	6.00	2.07	1.63	85	29

Note. SA = Stereotype Acceptance; CA = Contextual Aging; FKOA = Facts and Knowledge on Aging; C-D = community-dwelling participants; I = institutionalized participants.

Independence Vs. Receiving Intervention

On the Stereotype Acceptance, Contextual Age, and Facts and Knowledge on Aging measures, no significant differences between independent participants and participants receiving intervention were noted.

Demographic Correlations

The six demographic variables were correlated with the three independent variables and the three dependent variables. Of the 12 variables, there were only 16 modest correlations that were significant; they were the following: location*education, setting*FKOA, setting*contextual age, setting*age, setting*importance of faith, setting*stereotype acceptance, FKOA*age, FKOA*income, FKOA*stereotype acceptance, contextual age*income, contextual age*religious activities, contextual age*importance of faith, education*income, sex*income, income*services, and religious activities*importance of faith. Significant correlations ranged from low level (r = .2) to modest level (r = .6) with religious activity and importance of faith showing modest positive correlation. The other demographics were low level correlations except (r = -.37) for a low negative correlation between gender and income.

Discussion

The purpose of this study was to examine how factors such as location, setting, and services impact attitudes that the elderly have about themselves, namely stereotypical beliefs about aging and how old they feel. Akin to outcomes of the Ramamurti and Reddy (1986) study that examined the influence of location on attitudes about the elderly,

results from this study indicated that location did not have a significant impact on stereotype beliefs or contextual age for the elderly. Rural participants did not have more accurate knowledge about aging, and did not have lower stereotype acceptance scores than urban participants. Also, rural participants did not have a lower contextual age, or feel younger, than urban participants. These findings were somewhat in contrast with the results from the Lee and Whitbeck (1987) study that found rural participants had higher levels of social interaction than urban participants; as previously mentioned, social interaction is one of the factors that define contextual age.

It was determined, though, that setting does significantly impact elders' self-perception. As predicted, elderly people living in the community do not view themselves as stereotypically as institutionalized elderly. Community-dwellers, as hypothesized, do have a lower contextual age than their institutionalized peers. In congruence with the findings of Hofstetter and Schultze (1993), institutionalized participants exhibited a relationship between higher Stereotype Acceptance scores and higher contextual age. Also, the findings of this study support the notion examined by Rubin and Rubin (1982) that contextual age is linked to factors such as physical health and life satisfaction. Clearly, the aged participants who were still physically able to live in their own homes or communities felt more satisfied with their lives, and thus felt younger than their actual chronological ages.

Contrary to the predicted outcome, though, institutionalized elderly did not have higher scores on the FKOA questionnaire than community-dwelling elderly. Research by Knox, Gekoski, and Johnson (1986), and Hale (1998) showed a relationship between contact with the elderly and perceptions of the elderly. Results from the study by Hale

(1998) indicated that participants with high levels of contact with the elderly had higher scores on the knowledge survey. The hypothesis that institutionalized elderly would have higher scores on the FKOA questionnaire was based on the premise that institutionalized elderly have more contact with the aged than community-dwelling elderly. However, the aged population with which institutionalized elderly have the greatest contact is other institutionalized elderly; these people often are confined to a bed, have serious physical and/or mental limitations, and more closely resemble the stereotypical old person. This fact could explain why the institutionalized participants scored lower on the FKOA questionnaire than did community-dwelling participants.

The limitations of this study include the fact that the services variable was nested within the community-dwelling variable only. A more sufficient list of the social services provided to elderly people in institutions needs to be added to the demographic questionnaire. By including services that are offered to all population samples, it could be determined which main effects and interactions are posed on stereotypical beliefs and contextual age when all three independent variables are analyzed together. Also, a larger sample size of institutionalized elderly may prove beneficial in more accurately representing this population. Thirdly, other studies examining the impact of location on the attitudes of the elderly may want to consider alternative definitions for rural and urban areas. This study analyzed participants in West Virginia, which as a state is one of the least populous in the U.S. Despite using the population definition given by the U.S. Census Bureau for the term urban, many people inside and outside the borders of WV perceive the state, as a whole, as being rural. Different results may be obtained if this

study was replicated in another state that has densely populated areas as well as sparsely populated areas.

Implications from this study may be useful to groups outside of the academic setting which provide services to the elderly, such as healthcare workers, social service workers, government/state sponsored agencies, etc. It is important to understand when providing services to senior citizens how self-perception is interrelated with factors like life-satisfaction, mental health, and physical well-being. It is also extremely important to understand the relationships of such aforementioned factors with quality of life. Since the average life expectancy has increased over the years, it is imperative that society address the needs of senior citizens. Society will benefit both financially and socially by educating the public about the truths and processes of aging. Finally, more emphasis should be placed on interventions that allow senior citizens to remain in the community for as long as possible.

Future research should expand the services list to make the selection more inclusive of institutionalized participants. The medically handicapped and illiterate participants might be more included through the use of oral administration. The effects of oral administration could be investigated by alternating oral and written administration with able participants. The highly correlated religious items could be used to develop a new variable of spirituality to investigate the effect of that variable on contextual age and need for institutional placement.

References

Brehm, S.S., Kassin, S.M., & Fein, S. (1999). *Social Psychology* (4th ed.). Boston: Houghton Mifflin Company.

Chasteen, A.L. (2000). The role of age and age related attitudes in perceptions of elderly individuals. *Basic And Applied Social Psychology, 22(3),* 147-156.

Galinsky, A.D., & Moskowitz, G.B. (2000). Perspective-taking: Decreasing stereotype expression, stereotype accessibility, and in-group favoritism. *Journal of Personality and Social Psychology, 78(4),* 708-724.

Guttman, R.A. (1978, November). *Impact of Training on Attitudes of Older Paraprofessionals Toward Aging.* Paper presented at the Conference of the Gerontological Society, San Francisco, CA.

Guy, R.F. (1982). Religion, physical disabilities, and life satisfaction in older age cohorts. *International Journal of Aging and Human Development,* 15(3), 225-232.

Hale, N.M. (1998). Effects of age and interpersonal contact on stereotyping of the elderly. *Current Psychology, 17(1),* 28-48.

Harris, M.B., Page, P., & Begay, C. (1998). Attitudes toward aging in a Southwestern sample: Effects of ethnicity, age, and sex. *Psychological Reports, 62(3),* 735-746.

Hofstetter, C.R., & Schultze, W.A. (1993). The elderly's perception of TV ageist stereotyping: TV or contextual aging*? Communication Reports, 6(2),* 92-101.

Hummert, M.L. (1993). Age and typicality judgments of stereotypes of the elderly: Perceptions of elderly vs. young adults. *International Journal of Aging and Human Development, 37(3),* 217-226.

Hummert, M.L. & Garstka, T.A. (1995). Judgments about stereotypes of the elderly. *Research on Aging, 17(2),* 168-190.

Hummert, M.L., Garstka, T.A., Shaner, J.L., & Strahm, S. (1994). Stereotypes of the elderly held by young, middle-aged, and elderly adults. *Journal of Gerontology, 49(5),* 240-249.

Jackson, L.A., & Sullivan, L.A. (1987). Age stereotype disconfirming information and evaluations of old people. *The Journal of Social Psychology, 128(6),* 721-729.

Kline, D.W., Scialfa, C., Stien D., & Babbitt, T.J. (1990). Effects of bias and educational experience on two knowledge of aging questionnaires. *Educational Gerontology, 16,* 297-310.

Kluge, N.A., & others. (1984, November). *Sources of Stereotypes and Misconceptions of Aging: A Comparative Study of Cohort Differences.* Paper presented at the Annual Scientific Meeting of the Gerontological Society, San Antonio, TX.

Knox, V.J., Gekoski, W.L., & Johnson, E.A. (1986). Contact with and perceptions of the elderly. *The Gerontologist, 26(3),* 309-313.

Kogan, N. (1961). Attitudes toward old people: The development of a scale and an examination of correlates. *Journal of Abnormal and Social Psychology, 62(1),* 44-54.

Lasher, K.P., & Faulkender, P.J. (1993). Measurement of aging anxiety: Development of the anxiety about aging scale. *International Journal of Aging and Human Development, 37,* 247-259.

Lee, G.R., & Whitbeck, L.B. (1987). Residential location and social relations among older persons. *Rural Sociology, 52(1),* 89-97.

Levy, B., Ashman, O. & Dror, I. (1999). To be or not to be: the effects of aging stereotypes on the will to live. *Omega: Journal of Death & Dying, 40(3),* 409-420.

Luszcz, M.A. (1985). Characterizing adolescents, middle-aged, and elderly adults: Putting the elderly into perspective. *International Journal of Aging and Human Development, 22(2),* 105-121.

McEdwards, M.G. (1982, February). *The Older American Audience: How 'Old' Is 'Older'?* Paper presented at the Annual Meeting of the Western Speech Communication Association, Denver, CO.

Miller, R.B. & Dodder, R.A. (1980). A revision of Palmore's facts on aging quiz. *The Gerontologist, 20(6),* 673-679.

Neugarten, B.L., Havighurst, R.J., & Tobin, S.S. (1961). The measurement of life satisfaction. *Journal of Gerontology, 16,* 134-143.

Nussbaum, J.F., & Robinson, J.D. (1984). Attitudes toward aging. *Communication Research Reports, 1(1),* 21-27.

O'Hanlon, A.M., & Camp, C.J. (1993). Knowledge of and attitudes toward aging in young, middle-aged, and older college students: A comparison of two measures of knowledge of aging. *Educational Gerontology, 19(8),* 753-767.

Rothbaum, F. (1983). Aging and age stereotypes. *Social Cognition, 2(2),* 171-184.

Rubin, A.M., & Rubin, R.B. (1982, November). *Contextual Age: Development of a Life-Position Index.* Paper presented at the Annual Meeting of the Speech Communication Association, Louisville, KY.

Shaw, M.E., & Wright, J.M. (1953). *Scales for the measurement of attitudes.* New York: McGraw Book Co.

Schulz, R., & Fritz, S. (1987). Origins of stereotypes of the elderly: An experimental study of the self-other discrepancy. *Experimental Aging Research, 13(4),* 189-195.

South Dakota Legislative Research Council. (November, 2002). Alternative Care Services. Retrieved November 11, 2002, from http://legis.state.sd.us/rules/Rules/6744.htm#67:44:02

Weddle, D.O., & Fanelli-Kuczmarksi, M. (2000). Nutrition, aging, and the continuum of care – Position of ADA. *Journal of American Dietetic Association, 100,* 580-595.

West Virginia Department of Health and Human Resources. (November, 2002). Adult Residential Service. Retrieved November 7, 2002, from http://www.wvdhhr.org/oss/adult/arseligibility.htm

World Health Organization. (April, 1999). World Health Day. Retrieved October 31, 2002, from http://www.who.int/archives/whday/en/pages1999/whd99_5.html

United States Census Bureau. (October, 1995). Urban and Rural Definitions. Retrieved September 3, 2002, from http://www.census.gov/population/censusdata/urdef.txt

Appendix A

MARSHALL UNIVERSITY
www.marshall.edu

Office of Research Integrity
Institutional Review Board

MEMORANDUM

To: Helen E. Linkey, Ph.D.
Psychology

From: Henry K. Driscoll, M.D.
IRB Chairperson

Date: December 6, 2002

Re: IRB Exempt Protocol No. EX03-0041 - Stereotype Beliefs and Contextual Age of Rural, Urban, Community-Dwelling, and Institutionalized Elderly - Student Angela Walker

Thank you for the submission of the above non-risk study. The study consists of an anonymous survey to gather data about how knowledgeable people are about the elderly.

The study as submitted would be exempt from IRB review and approval in accordance with 45 CFR 46.101 b.

HKD/tjs

Principal investigator: Angela Walker, Co-investigator: Helen Linkey, Ph.D.

MU/UP&S

EX03041walkerdec02

Appendix B

Stereotype Acceptance Questionnaire

1. Since age 65, I have had no interest in, or capacity for, sexual relations.

Yes No

2. Since age 65, I have had more vehicle accidents than when I was younger.

Yes No

3. Since age 65, I cannot work as effectively as I did in younger years.

Yes No

4. Since age 65, I have been socially alone and lonely.

Yes No

5. I have continued to work since age 65, or would like to work (including housework and volunteer work).

Yes No

6. Retirement has been a very difficult experience for me.

Yes No

7. I am not as financially secure as I was prior to age 65.

Yes No

8. Since age 65, I have lived (permanently or temporarily) in a nursing home, a home for the aged, or a mental hospital.

Yes No

9. Since age 65, I have been happy more than half of the time.

Yes No

10. Since age 65, I have been able to carry out the normal activities of my life.

Yes No

11. Since age 65, I have not been able to adapt to change as well as I did in younger years.

Yes No

12. I have become more religious since age 65.

Yes No

13. Since age 65, I am more like my peers than in younger years.

Yes No

Appendix C

Contextual Age Index

Please indicate your response to the following statements using the key seen below:

1=strongly agree 2=agree 3=no opinion 4=disagree 5=strongly disagree

1. I usually feel in top-notch physical condition.

   1 2 3 4 5

2. Healthwise, I am no worse off than anyone else my age.

   1 2 3 4 5

3. I have serious medical or health problems

   1 2 3 4 5

4. I get to see my friends as often as I would like

   1 2 3 4 5

5. I spend enough time communicating with my family or friends by telephone or mail.

   1 2 3 4 5

6. I have ample opportunity for conversation with other people

   1 2 3 4 5

7. I usually drive my own car or use the city bus/senior bus to get around

   1 2 3 4 5

8. I have to rely on other people to take me places.

   1 2 3 4 5

9. I usually don’t travel more than a few blocks/miles from my house each day

   1 2 3 4 5

10. I find a great deal of happiness in my life

1 2 3 4 5

11. I've been very successful in achieving my aims or goals in life.

1 2 3 4 5

12. I am very content and satisfied with my life.

1 2 3 4 5

13. I often travel, vacation, or take trips with others.

1 2 3 4 5

14. I often visit with friends, relatives, or neighbors in their homes.

1 2 3 4 5

15. I often participate in games, sports, or activities with others.

1 2 3 4 5

16. I have no major financial worries.

1 2 3 4 5

17. I have enough money to buy things I want, even if I don't really need them.

1 2 3 4 5

18. I live quite comfortably now and have enough money to buy what I need or want.

1 2 3 4 5

Appendix D

Facts and Knowledge On Aging Questionnaire

Dear Participant,

To help me gather information about how knowledgeable people are about the elderly, I would greatly appreciate your completion of the following questionnaire. Please do **not** give your name. All replies are confidential. Thank you for your cooperation.

1. Most older people have no interest in, or capacity for, sexual relations.

   T F

2. Aged drivers have fewer accidents per person than drivers under 65.

   T F

3. Most older workers cannot work as effectively as younger workers.

   T F

4. The majority of old people are socially isolated and lonely.

   T F

5. The majority of old people are working or would like some kind of work to do (including housework and volunteer work).

   T F

6. Retirement is not a very difficult experience for almost all old people.

   T F

7. Old people are more likely than young adults to have a low socioeconomic status.

T F

8. Old people are less alike than young people.

T F

9. Over 10% of all aged live in long-term health care institutions (i.e., Nursing homes, homes for the aged, mental hospitals, etc.).

T F

10. The majority of older people say they are happy most (more than half) of the time.

T F

11. About 80% of older people say they are healthy enough to carry out their normal activities.

T F

12. The majority of older people are unable to adapt to change.

T F

13. Older people tend to become more religious as they age.

T F

Appendix E

Demographic Information

The following information is for demographic purposes only. You will NOT be able to be identified. Your name will NEVER be connected to your answers. Please circle your response.

1. Education: high school _____ some college _____

college degree_____ some postgraduate work_____

postgraduate degree_____

2. Sex: M_____ F_____ 3. Age _____

4. Please circle your income level:

Below $10,000 _____ $10-20,000 _____ $20-30,000 ____

$30-40,000_____ $40-50,000_____ above $50,000 _____

5. How often do you participate in religious activities, such as prayer/meditation, Bible reading, watching religious shows on TV, and attending worship services? Please circle your response.

Daily _____ Weekly_____ Occasionally _____

Almost Never _____ Never _____

6. How important is your religious faith to you? Please circle your response.

Not at all _____ Little importance _____

Moderate importance _____ Great Importance _____

7. Present residence: Rural _____ Urban _____

8. Where do you live: Own home _____

   Family member's home _____ Nursing Facility _____

9. Please circle any of the following services that you use or attend:

   Adult Day Care Hospice

   Golden Mountaineer Discount Card Senior Nutrition Program

   Senior Transportation Legal Assistance Meals On Wheels

   Home Health Nurse/Aide Homemaker/Chore Services

   Case Management Community Care Ombudsman Program

Appendix E

Correlation Matrix for Demographic, Independent, and Dependent Variables

Variable	1	2	3	4	5
		(N = 114)			
1. Location	---	-.02	.00	-.06	.04
2. Setting		---	[a]	-.37**	.38**
3. Services			---	-.00	-.05
4. KOA				---	-.15
5. CA					---
6. SA					
7. Education					
8. Sex					
9. Age					
10. Income					
11. RA					
12. IF					

Variable	6	7	8	9	10
1. Location	.01	-.36**	.06	-.03	-.20
2. Setting	.31**	-.15	.01	.29**	-.19
3. Services	-.21	.19	-.01	.01	.24*
4. KOA	-.27**	.17	.01	-.20*	.27**
5. CA	.20*	-.07	-.07	.04	-.33**
6. SA	---	-.14	-.05	-.03	-.07
7. Education		---	-.14	-.10	.53**
8. Sex			---	.19	-.37**
9. Age				---	-.19
10. Income					---
11. RA					
12. IF					

Variable	11	12
1. Location	.08	.03
2. Setting	-.18	-.25**
3. Services	.05	.03
4. KOA	-.02	-.05
5. CA	-.29**	-.20*
6. SA	-.02	-.08
7. Education	-.04	-.08
8. Sex	.09	.09
9. Age	.00	-.05
10. Income	.11	.02
11. RA	---	.60**
12. IF		---

Note. KOA = Knowledge On Aging; CA = Contextual Age; SA= Stereotype Acceptance; RA = Religious Activities; IF = Importance of Faith.

[a]Correlation cannot be computed because at least one of the variables is constant.

*p < .05. ** p < .01.