THE ROLE OF AFFECT AND COGNITION IN
PREDICTING ATTITUDES TOWARD THE ELDERLY

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The Role of Affect and Cognition in Predicting

Attitudes Toward the Elderly

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fulfilment of the requirements for the degree of Masters of Science

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of the above variables predicted attitudes toward younger targets. The implications of this finding are discussed and suggestions are made for future research.

Abstract

The purpose of the present study was to examine the attitudes of both younger and older adults toward two target groups -older adults (65-74 year-olds) and younger adults (18-25 year-olds). This study was also designed to assess the importance of cognitive and affective information in predicting attitudes toward the elderly. As expected, when an evaluation thermometer was used to assess attitudes toward older targets, results revealed that both younger and older adults held positive attitudes toward the elderly and that older adults evaluated others more positively than did younger adults. In addition, the results of this study suggest that older and younger participants do not differ in their evaluations of younger and older targets.

Although past research suggests that gender plays a role in determining attitudes toward older adults, these findings were not supported in the present study. Results revealed that older male and female targets were evaluated similarly regardless of the respondents' gender. In addition, no relationship was found between contact with elderly adults and attitudes toward this group.

The results of the present study only partially support the tripartite model of attitude formation. When stereotypes, emotional responses, symbolic beliefs, age of target, and age and gender of participant were used to predict attitudes toward older targets, only affect was found to be a significant predictor of attitudes. In addition, none

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Introduction

Past research on attitudes toward the elderly has yielded a substantial yet contradictory literature regarding how older adults are perceived and evaluated (Kite & Johnson, 1988). Although many researchers have found that attitudes toward the elderly are more negative than those toward younger adults (Kite & Johnson, 1988), other researchers have found that the elderly are evaluated more positively than younger adults or that there is no difference in attitudes toward the two age groups (Braithwaite, 1986; Kogan, 1961; Kogan & Shelton, 1962). The present study will examine the attitudes of both younger and older adults toward two target groups -older adults and younger adults. In addition, this study will assess the importance of cognitive and affective information in predicting attitudes toward the elderly.

Rationale

In recent years, there has been an increase in research aimed at assessing attitudes towards the elderly and in determining the antecedents of these attitudes (Baiyewu et al., 1997; Hummert, 1993). For several reasons it is clear that this increased emphasis is warranted. First, it may be assumed that how elderly adults are perceived will influence how members of that group are treated by others (Knox, Gekoski & Kelly, 1995). If negative attitudes are prevalent, these attitudes may lead to ageism, which is a form of age based stereotyping. Ageism may in turn lead to discrimination against the elderly,

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and distorted perceptions (Schaie, 1993). In addition, greater negativity in attitudes may lead to less concern for programs that benefit older adults, and result in decreased social support for these programs (Ferraro, 1992; Neussel, 1982); an area of particular importance given the increasing numbers of elderly people in today's society.

A second reason for studying the antecedents of attitudes toward the elderly is that negative attitudes may not only affect how individuals view others, but may affect how individuals view themselves. Age categories differ from other social categorisations in that age groups are not totally exclusive. Those who are members of the elderly category will all have been members of a younger category at some point in their lives (Brewer & Lui, 1984). At the same time, elderly individuals represent a minority group to which all individuals may someday belong. In addition, most people have family members or close friends who are elderly (Ivester & King, 1977; Kogan, 1961). For these reasons the elderly can not be categorised as strictly an out-group and, if individuals view the elderly negatively, then they may experience difficulty accepting their own ageing, thus resulting in decreased self-esteem (Hawkins, 1996, Schonfield, 1982).

Background

As previously noted a review of the literature yields conflicting results regarding attitudes toward the elderly. The general societal belief that stereotypes toward the

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elderly are negative was supported by a meta-analysis conducted by Kite and Johnson (1988). These authors reviewed 43 studies which appeared prior to December 1985 and compared attitudes toward the elderly with attitudes toward the young. Of these studies, 30 indicated more negative attitudes toward the elderly than toward younger individuals, 11 indicated more negative attitudes toward younger individuals than toward the elderly and two studies indicated no difference. These authors concluded, in general, that elderly targets were more negatively evaluated than were young targets. However, although a majority of the studies identified by Kite and Johnson (1988) suggested that attitudes toward the elderly were more negative than those toward the young, this finding has not been consistently supported (Kogan, 1961). For example, Kahana et al. (1996) found not only that health care workers had positive attitudes toward the elderly, but also that these attitudes were positive regardless of whether respondents evaluated well-elderly, physically ill elderly, or elderly patients with Alzheimers.

Factors Influencing Individuals Responses to Attitudinal Assessment

Kite and Johnson (1988) suggest that the nature of attitudes toward the elderly can not be understood without a better understanding of the factors that influence individuals responses to attitudinal assessments. Several of these factors, which may be at least partially responsible for the mixed findings, have been discussed in the attitudes literature. These include methodological issues such as the type of attitudinal instrument

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used (Slotterback & Saarnio, 1996), the type of design used in the study (Luszcz, 1986), the type of target chosen and the attributes of the attitude object that are being measured (Kite & Johnson, 1988).

Rating scales and open-ended measures are two types of instruments that have been used in the study of attitudes toward the elderly. Examples of ratings scales that are commonly used include Tuckman and Lorge's Attitude Toward Old People Instrument (Tuckman & Lorge, 1958), Kogan's Attitude Toward Old People Scale (Kogan, 1961) and Rosencrantz and McNevin's Ageing Semantic Differential (ASD) (Rosencratz & McNevin, 1969). Both Tuckman and Lorge's and Kogans's scales have recently been criticised as not being adaptable for measuring attitudes toward other age groups (Knox, et al., 1995). In addition, it has been suggested that the utility of the Kogan Scale may be limited due to the fact that the language used in the scale is reflective of how society viewed the elderly at the time of the scales construction (Hilt, 1997) rather than current views. Kite and Johnson (1988) suggest that progress in the literature may be hindered by the lack of a commonly used instrument and that the ones that are currently in use have not been supplemented by additional validity and reliability tests.

In general, the results of rating scale measures such as those listed above, yield less negative attitudes toward the elderly than do open-ended measures (Kite & Johnson, 1988). Researchers have found that open-ended measures, such as sentence completion,

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elicit a spontaneous evaluation without bias and result in prevalently negative attitudes (Slotterback & Saarnio, 1996). Kogan and Shelton (1962) noted that respondents who are asked to indicate their attitude toward an object by using a sentence completion task are limited only by the sentence stem in choosing their own set of response categories. In comparison, rating scales provide the respondent with a list of attributes on which to evaluate the elderly target. Slotterback and Saarnio have suggested that this presence of both positive and negative attributes yields less negative evaluations because respondents are not as reliant upon stereotypical information.

As mentioned above, the research design employed has also been shown to affect the outcome of attitudinal research. Specifically, studies that use between-group designs and within-group designs often yield different attitude valences. Most researchers have found that when a between-group design is used, there are usually few differences in attitudes toward the elderly relative to other groups. Research by Luszcz (1986) suggests that negative attitudes are further attenuated in between-group designs depending upon the nature of the person judged and the attitudinal dimension assessed (Luszcz, 1986).

In contrast to the results of between-group designs, large differences in attitude valences are found when using within-group designs (Kite & Johnson, 1988; Luszcz, 1986). According to Kogan (1979b), one possible explanation for this discrepancy is that within-group designs create demand characteristics. Researchers have argued that

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this type of design makes age salient, leads participants to believe that the researcher is asking for a comparative judgement (Luszcz, 1986), and suggests to respondents that differences may exist.

Another instance where negative attitudes toward the elderly may be attenuated, occurs when reference is made to targets who are specific elderly individuals rather than to "the elderly" as a group (Luszcz, 1986). In their meta-analysis, Kite and Johnson (1988) found that studies using specific target persons often did not show negative attitudes toward the elderly when compared to general targets. For example, it has been found that elderly job applicants are not evaluated more negatively than younger applicants regardless of whether they are male or female (Locke-Connor & Walsh, 1980).

Furthermore, there is evidence to suggest that the type of design and target may interact to influence the valence of attitudes toward the elderly. Kite and Johnson (1988) found that studies using a between-group design and a specific target person reported little or no difference between young and old targets compared to studies using a within-group design and a general or specific target person.

Several explanations have been offered as to why specific targets are rated less negatively than general targets. Green (1981) suggested that it is the nature of the stimulus that influences results. That is, in the case of a general target person, people must rely on cultural stereotypes that do not take into account the specific characteristic

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of the person being evaluated. This may result in a situation where global decisions are demanded (Luszcz, 1986). In contrast, when specific target characteristics are presented, there is a greater likelihood that individual characteristics will become more salient. If these characteristics violate the general stereotype less negative ratings may result.

A second explanation for the finding that specific target persons are rated less negatively than general target persons has been offered by Braithwaite, Gibson and Holman (1985-86). These researchers found that Rosencratz and McNevin's Semantic Differential displayed different psychometric properties when it was used to measure evaluations of specific individuals in specific contexts as compared to when it was used to measure a more global and general age group. It has been suggested that this scale may be well suited to measuring global stereotypes of persons of certain ages, but not for measuring more specific stereotypes (Braithwaite et al., 1985-86).

A great deal of the research in attitudes and the elderly has focused on determining whether or not attitudes are positive on a global scale, that is, whether or not the elderly, in general, are viewed as positive or negative. Nevertheless, a smaller body of research has examined the attributes that comprise an attitude, and researchers have suggested that differences and inconsistencies between studies might be due to the attributes of older adults that the study focuses on (Slotterback, 1996; Slotterback & Saarnio, 1996). By organising attributes into categories more subtle distinctions can be made about the areas in which participants feel negatively and positively toward older

adults and the types of attributes that individuals use to make distinctions about different
ages of adults.

Past research has looked at person attributes such as those related to intellectual
abilities (cognitive attributes), state of mind and social relations (personal-expressive
attributes), and physical appearance or physical state (physical attributes). Slotterback
and Saarnio (1996) asked university students to compare three target age groups (young,
middle aged, and older adults[1]). It was found that there was an increasingly negative
attitude for physical attributes with increasing target age. They also found that attitudes
toward older and younger adults were more negative than those toward middle-aged
individuals. Research by Luszcz (1986) also categorized attributes and found that age
had little effect on attitude judgements on two dimensions of the ASD, Autonomous-
Dependent (i.e., decisive/indecisive; certain/uncertain) and Personal Acceptability-
Unacceptability (i.e., friendly/unfriendly; generous/selfish), but not in the case of the
third dimension, Instrumental-Ineffective (i.e., active/passive; strong/weak), where
adolescents saw a decline in instrumentality between each increasing age interval.

Research has also shown that personality variables combined with demographics
may account for up to thirty percent of the variance in attitudes toward ageing (Katz,
1990). Using the Cattell 16 Personality Factors Test (16PF) and the Ageing Opinion
Survey (AOP), Katz found three clusters of personality traits that were positively related
to attitudes toward the elderly. These included low anxiety, sensitive-intuition, and

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intellectual abilities. This suggests that those who have positive attitudes toward the elderly tend to be less anxious, have higher ego strength, are more tender minded, indulgent of self and others and more thoughtful and conscientious than those who do not hold positive attitudes toward the elderly.

Age of Respondent and Age of Target

Most studies that have focused on the age of the respondent, use college or university students as participants (Hawkins, 1996; Naus, 1973). One explanation for concentrating on this group is that there is an implicit assumption that it is young adults who need to enhance their attitudes toward the elderly and who need to be educated about ageing (Bailey, 1991). Nevertheless, research suggests that the choice of this age group as respondents may result in age stratification which may lead to reduced social interaction among age groups thus enhancing feelings of social distance (Kidwell & Booth, 1977) as well as a distaste for ageing (Luszcz, 1986). Doka (1985-86) also noted that this lack of intergenerational contact contributes to negative perceptions of this group. In fact, several studies provide evidence that contact with the elderly moderates negative attitudes (Tuckman & Lorge, 1958). Specifically, a positive correlation has been found both between prior contact with the elderly, in general, and attitudes (Tuckman & Lorge, 1958) as well as between prior family contact and attitudes (Kahana et al., 1996; Knox, Gekoski & Johnson, 1986).

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Several studies have gone beyond using a single group of respondents and have included respondents from two or more different age groups (Bailey, 1991; Brewer & Lui, 1984). Results of such studies have shown that adolescents (Doka, 1985-1986) as well as young adults (O'Hanlon, Camp & Osofsky, 1993) evaluate elderly adults more negatively than do older respondents. This finding has also been supported by Katz (1990) who found that age of undergraduates, graduate students and continuing education respondents was positively related to measures of their attitudes towards the elderly. Specifically, older respondents tended to have more positive attitudes towards the elderly than did younger respondents.

Although early research focussed on more than one group of respondents, early research on this topic generally included only one target group - the elderly and used only younger participants. More recent research has led to a new body of literature which compares attitudes toward the elderly with attitudes toward other age groups (Kite, Deaux & Miele, 1991; Locke-Conner & Walsh, 1980). This research shows that elderly individuals tend to be viewed more negatively than do middle-aged (Slotterback & Saarnio, 1996) or younger adults (Braithwaite et al., 1985-1986).

The Relationship Between Age of Respondent and Age of Target

Few studies have examined the effects of varying both the age of the target and the age of the respondent. In one study which did take this approach, Netz and Ben-Sira

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(1993) used a semantic differential scale which consisted of 21 bipolar adjective pairs
(e.g., interesting/dull) to measure the attitudes of youngsters (mean age of 18.92;
SD=4.92), middle-aged persons (mean age of 44.98; SD=8.92) and the elderly (mean
age of 68.8; SD=8.04) toward four target groups including the "Ideal Person", "Youth",
"Adult" and "Old Person". The results of this study showed that for all three rating
groups (youngsters, middle-aged and the elderly) that the "Ideal Person" was rated
highest and was followed by "Youth", "Adult" and "Old Person". "Old Person" was
considered most positive by elderly respondents followed by middle-aged respondents
and then youth.

When they factor analysed their data Netz and Ben-Sira's (1993) found four
factors. These included Instrumental-Ineffective (i.e., active-passive; fast-slow),
Contributor-Recipient of Social System (e.g., productive-unproductive; useful-
worthless), Self-sufficient-Dependent (e.g., organized-disorganized; good memory-
forgetful) and Acceptable-Unacceptable (e.g., friendly-unfriendly; cooperative-
despicable). Results showed that the target "Old Person" was rated the lowest on the
dimensions instrumental-effective, self-sufficient-dependent and contributor-recipient of
social system. The only dimension for which a difference across target groups was not
found was the acceptable-unacceptable dimension.

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Another consideration in assessing attitudes toward the elderly is gender (Schaie, 1993). Past research has shown that gender may interact with or be confounded with age in producing impressions of the elderly (Green, 1981). Research by Kogan (1979a) showed that female targets were assumed to reach early adulthood and middle-age earlier than male targets. Other research by O'Connell and Rotter (1979) found differences in how males and females were perceived at different ages. Specifically, males were evaluated more positively than females at ages 25 and 50, but not at age 75.

Although several researchers have found that young women have more positive attitudes toward the elderly than their male peers, this finding has not been consistently supported in the literature. Bailey (1991) found that young women and men (mean age 18.9) did not significantly differ in their attitudes toward the elderly (mean age 74.0). Nevertheless, a larger number of studies have found that female respondents rate elderly targets more positively than males (Hawkins, 1996; Katz, 1990; Knox, Gekoski and Kelley, 1995). This finding was also supported by Katz (1990) who found that women have more positive attitudes both toward their own ageing and toward other age groups than do males.

Other research has asked college students to evaluate elderly individuals in three age groups (65-74 year-olds, 75-99 year-olds and individuals 100 years-old or older) separated by gender of target and respondent (Hawkins, 1996). The researchers found

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that as male and female targets aged, that college students viewed them increasingly more negatively, but that, in general, female targets were more favourably perceived than male targets. It was also found that male respondents viewed female elderly targets in the 65-74 year-old group and the 75-99 year-old group more negatively than did female respondents. Male respondents also viewed male targets in the 65-74 age group more negatively than did female respondents. Overall, it appears that respondents viewed elderly targets more negatively as the target aged regardless of target gender (Hawkins, 1996).

In a similar vein, Kite et al. (1991) examined the relationship between age and gender by asking college students (mean age 22) and elderly community residents (mean age 70) to evaluate one of four targets using a free attribute listing task and by completing both a measure of gender stereotypes and a measure of stereotypes toward the elderly. These targets included a 35-year-old man, a 35-year-old woman, a 65-year-old man and a 65-year-old-women. The results of the free attribute listing task revealed that when respondents were not asked specifically about gender linked characteristics they were more likely to characterize individuals on the basis of their age, rather than their sex. The characteristics that subjects used to describe old men and old women were highly correlated as were those used to describe young men and women. In comparison, there was little overlap in the adjectives that people used to describe young and old men and young and old women.

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The results of this study also showed that, overall, female targets were rated higher on feminine components (feminine traits, role behaviours and physical characteristics) and male targets were rated higher on two masculine components (masculine role behaviours and physical characteristics) but not on a third masculine component, masculine traits. This finding suggests that when gender-linked characteristics were made salient the sex of the target was more influential than age. The tendency to view elderly targets negatively did not prevent respondents from rating women and men in gender stereotypic ways. Nevertheless, it was also found that target age affected ratings of the likelihood that targets possessed gender-related attributes. Specifically, 35 year-old targets were rated as more likely to possess all three masculine components and feminine role behaviours than 65 year old targets. In addition, a significant target sex by target age interaction was found. Male targets were rated similarly regardless of target age whereas 35 year-old female targets were considered more likely to possess feminine physical characteristics than were 65-year-old female targets.

Overall, these results suggest that the weighting of age and gender information is dependent upon the characteristics being examined. Other studies have found that the particular measures employed have an effect on the results of studies on attitudes towards the elderly. Similarly, research by Knox et al. (1995) using the AGED Inventory, a semantic differential scale, suggests that the dimension on which the elderly

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are being evaluated may affect how male and female elderly targets are evaluated. Their research shows that although males are rated higher than females on the dimension of Vitality (e.g., adventurous/cautious; independent/dependent), females are rated higher on the dimensions possessiveness (e.g., flexible/inflexible; sociable/unsociable), goodness (e.g., wise/foolish; sincere/insincere) and maturity (e.g., modest/boastful; satisfied/dissatisfied).

The Affective-Cognitive-Behavioural Model

Past research clearly demonstrates the importance of identifying the predictors of attitudes toward the elderly and of finding a method for measuring and conceptualising these antecedents (Luszcz, 1986). Recent developments in the attitudes literature have led to a new method for thinking about the consequences and antecedents of attitudes (Olson & Zanna, 1993). According to this affective-cognitive-behavioural model, an attitude may be defined as the categorisation of a stimulus object along an evaluative dimension (Zanna & Rempel, 1988). The evaluative component of the attitude is based upon a tripartite model of attitude source or antecedents which includes cognitive information (beliefs), affective information (feelings or emotion) and behavioural information (Donakowski & Esses, 1996; Eagly & Chaiken, 1993; Esses & Zanna, 1995; Zanna & Rempel, 1988).

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Cognitive evaluative responses are thoughts or ideas about the attitude object which may range from extremely positive to extremely negative and may therefore be located on an evaluative continuum (Haddock, Zanna, & Esses, 1994). Within this definition of cognitive evaluation, cognition may be conceptualised as beliefs, which in this model are comprised of stereotypes and symbolic beliefs (Eagly & Chaiken, 1993). Stereotypes are beliefs about specific characteristics possessed by members of a social group (Esses, Haddock & Zanna, 1993). For example, research suggests that the accepted stereotype of elderly individuals is that they suffer from a deterioration of intellectual ability, are unattractive, unhappy, and not physically able (Slotterback Saarnio, 1996). Symbolic beliefs refer to beliefs that social groups violate or uphold cherished values or norms (Esses et al., 1993).

Affective evaluative responses consist of sympathetic nervous system activity, feelings, moods and emotions that occur in relation to the attitude objects (Eagly & Chaiken, 1993). According to Stanger, Sullivan and Ford (1991), affect is an important determinant of attitudes. Researchers have shown that affective responses are based upon direct experience with an attitude object and that stereotypes may be learned from a secondary source and develop later than the affective response which is based upon direct experience (Jackson, et.al, 1996). This might suggest that affect would be a stronger predictor of attitudes than stereotypes depending upon the extent to which direct experience produces stronger emotional responses.

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The Present Study

The framework for the present study was developed, based on the work of Stanger et al. (1991) and Esses et al., (1993) as a method for measuring both affective and cognitive determinants of intergroup attitudes. This model suggests not only that an attitude may contain both cognitive and affective components but also that these two classes of information can determine evaluations separately or in combination (Zanna & Rempel, 1988) and that both classes of information may not apply to a given attitude (Olson & Zanna, 1993). In fact, Zanna and Rempel have demonstrated that although measures of affect and cognition are related, that they are also measuring different concepts. The measures used in this study, with some variation, were adopted from past research by Haddock, Zanna and Esses (1993).

Both younger and older adults were used as respondents and targets in this study. According to Schaie (1993), it is generally unacceptable to characterise the elderly using one large grouping since titles such as "old" presume a unifying feature for which there is no conceptual basis. Therefore, rather than creating age categories by labelling older adults by a global category such as "elderly" or "old" the elderly target group was described as individuals between 65-74 years old and the younger target group was described as individuals between 18-25 years-old. This multi-generational approach made it possible to assess peer group ratings of the elderly as well as out-group ratings.

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The present research had two goals. The first goal was primarily exploratory, that is, to assess the importance of cognitive and affective information in predicting attitudes toward the elderly. Specifically, attitudes toward the elderly were measured and the predictive value of stereotypes, affect and symbolic beliefs was determined. The second goal of this study was to examine attitudes toward both younger and older adults toward two age groups -younger adults (ages 18-25) and older adults (ages 65-74).

Hypothesis 1: Both younger adults and older adults will have a positive attitude toward 65-74 year-old targets.

Hypothesis one comes from research by Ivester and King (1977), Kahana et al. (1996) and Luszcz (1986) who found that attitudes toward older adults tend to be more positive than negative.

Hypothesis 2: Older respondents will evaluate 65-74 year-old targets more positively than will younger respondents.

Hypothesis 3: Respondents will evaluate 18- 25 year-old targets more positively than 65 to 74 year-old targets.

Hypothesis two and three come from research by Netz and Ben-Sira (1993) who found that all respondents, regardless of age, rated the target group "youth" more positively than either the target "adult" or "old person". This research also demonstrated that older respondents (mean age 68.8) rated the target "Old Person" more positively

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than youngsters (mean age 18.92) and middle-aged adults (mean age 44.98) and that young targets were rated most positively by young respondents.

Hypothesis 4: Female respondents will evaluate targets between the age of 65 and 74 more positively than will male respondents.

Hypothesis four, comes from research by Knox, Gekoski and Kelley (1995) and Katz (1990) who found that young women have more positive attitudes toward the elderly than do young men.

Hypothesis 5: Female targets will be evaluated more favourably than will male targets.

Hypothesis five comes from research by Hawkins (1996) who found that, in general, female targets are more favourably perceived than male targets.

Hypothesis 6: The more contact respondents report having with individuals between the ages of 65 and 74, the more positive their attitudes will be toward that group.

Hypothesis six comes from Tuckman and Lorge's (1958) research which found a positive correlation between prior contact with the elderly and attitudes.

Method

Participants

Participants were 56 young adults (28 males and 28 females) between the ages of 17-31 from the St. John's, Newfoundland campus of a private college and 56 older adults between the ages of age 50-87 (see Table 1). The majority of older adults (28 males and 14 females) were from St. John's, Newfoundland while fourteen males were from Halifax, Nova Scotia. All participants completed the study and were reimbursed, $2.75.

Table 1
Age and Gender of Participants

Age of Participant	Gender of Participant		Total (n=112)
	Males (n=56)	Female (n=56)	
17-23	16	13	29
22-26	12	11	23
27-31	0	4	4
50-54	0	1	1
55-59	5	2	7
60-64	6	3	9
65-69	7	5	12
70-74	6	4	10
75-79	3	5	8
80-84	1	7	8
older than 84	0	1	1

Procedure

Recruitment of Participants

To recruit student participants from the private college, the administrator of the school was contacted and a meeting was scheduled where the procedure used in this study was described and permission to contact and interview clients of the school was requested. Once permission was obtained arrangements were made for the researcher to visit a number of classes at the college. A convenience sample of classes was chosen at the discretion of the administrator irrespective of gender distribution and class content.

The recruitment of older adults was done in a similar manner to that used for recruiting students. First, the co-ordinators of several groups for mature adults were contacted. These groups included the Seniors' Resource Centre (Friday Friendship Club and Mall Walkers), the Mews Centre 50+ Community Program (Lions Chalet), the Singing Legionnaires, the Life Members Group Telephone Pioneers of America, the St. John's Rotary Club and the Halifax Rotary Club. The procedure used in this study was described to the group co-ordinator and permission to contact and interview members of the respective groups was requested.

Once permission was secured to visit students at the college and members of the seniors' clubs, a brief five minute presentation was made to each group. Individuals were told that the purpose of the study was to examine individuals' evaluations of various age groups and that they would be asked to respond to a number of questions on

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a written questionnaire. Participants were told that their responses to the questionnaire would be both anonymous and confidential and that their participation would be completely voluntary. It was explained to participants that they would not be required to identify themselves by name and that the experimental data they supplied would be identified by number only. Individuals were informed that they would be paid $2.75 for participating in the study.

Following the introduction to the study, individuals were told that if they wished to participate they could remain after class. This resulted in groups of approximately four to ten completing the questionnaires.

At five of the seven seniors groups, the co-ordinator of the group did not feel it would be convenient for the researcher to interview group members during the meeting. In this case, participants were told that if they chose to participate it would involve the researcher scheduling an appointment to visit them at their homes for approximately 20 minutes. After answering questions about the research, a sign-up sheet was distributed throughout the group. The sign-up sheet included a space for individuals to indicate their name, phone number, gender and age (see Appendix D). Individuals were told that if they did not want to participate that they should fold-up the sign-up sheet and pass it in when the other sign-up sheets were collected. After approximately five minutes, sign-up sheets were collected and the group was thanked for their time. At the remaining two of the seven seniors groups, the co-ordinator allowed participants to

complete the questionnaires during the regularly scheduled group meeting. In this case, the questionnaires were administered to groups of two to three adults and participants name and phone numbers were not requested.

Questionnaire Administration

Any questions or concerns raised by participants were addressed before participants were asked to sign an "informed consent form" (Appendix B). In addition, participants were told that the experimental session would last approximately 20 minutes, but that they could withdraw from the study at any time without penalty of any kind. Participants were also told that the experimenter would answer any questions regarding the procedure of the experiment after the experimental session was complete.

After the participants signed the "informed consent form", each was given a booklet that contained instructions and measures designed to assess attitudes, emotions, stereotypes and symbolic beliefs about one of four target groups. Target group one was "female individuals between the ages of 18 and 25", target group two was "male individuals between the ages of 18 and 25", target group three was "female individuals between the ages of 65 and 74" and target group four was "male individuals between the ages of 65 and 74". When participants were surveyed in groups, surveys were randomly distributed so that group members received different target groups. Before asking participants to begin, the researcher verbally reviewed the instructions of the study to

ensure that participants understood the procedure. Participants were also told that other people would be rating different groups of individuals. Participants were then instructed to begin the questionnaire.

The first measure in the booklet asked participants to indicate their attitude toward one of the four target groups. The order of the remaining three measures (stereotypes, affect and symbolic beliefs) as well as the presentation of the four target groups, were counterbalanced across participants. Next, participants were asked to respond to several questions designed to measure the frequency of their contact with males and females between the ages of 18 and 25 and with males and females between the ages of 65 and 74.

After completing all measures, participants were asked to write down their age and sex (Appendix C). Participants were then thanked for their participation and asked if they had any questions about the procedure of the experiment. All questions were then answered by the experimenter. In addition, participants were told that the results of the study would be made available to them through either the school administrator or the coordinator of their seniors group. Finally, participants were asked to sign a receipt book and were then paid.

When visiting the homes of older adults, a similar procedure to that outlined for groups of participants was followed except that participants were interviewed

individually.   Also, older adults were given the option of either recording their own responses or having the interviewer record responses.

Pilot Study

Questionnaires were administered to four individuals, three who were between the ages of 18 and 30 and one who was 77 years old. As a result of this pilot it was found that individuals experienced difficulty in generating the values whose achievement was blocked or facilitated by individuals. To facilitate the recall of these values, a list of values was included (Schwartz, 1992) and respondents were told that they could select values from the list and/or from memory (Appendix A).

Measures

Respondents were asked to indicate their attitudes toward the target group using an evaluation thermometer with the lower point on the scale (0) being labelled "very unfavourable" and the upper point of the scale (100) being labelled "extremely favourable" (Appendix E). The evaluation thermometer has been successfully used in the study of intergroup attitudes (Haddock & Zanna, 1994; Maio, Esses & Bell, 1994; Haddock, Zanna & Esses, 1993) and has been found to have high test-retest reliability and to strongly correlate with multiple-item attitude scales (Haddock et al., 1993; Stanger, Sullivan & Ford, 1991).

To assess stereotypes, affect and symbolic beliefs, open-ended measures were used. A complete description of the instructions for these measures have been included in Appendix F. Stereotypes were assessed by asking participants to provide a description of a typical member of the target group. Participants were instructed to do this by listing characteristics or short phrases that they would use to describe the typical member of a group. To reduce the demands of listing only positive information, the questionnaire instructions stated that "almost everyone has positive and negative things to say about most groups" (Haddock, Zanna & Esses, 1993). After completing this task, individuals were asked to rate the valence of each characteristic on a five point scale which ranged from "very negative" (-2) to "very positive" (+2). Next, individuals were asked to indicate the percentage of typical group members who possess each characteristic.

Affect and symbolic beliefs were measured using a procedure similar to that used for stereotypes. To measure affect, participants were asked to list the feelings or emotions they experience when they see, meet or even think about a typical member of the target group. To measure symbolic beliefs, participants were asked to list the values, customs or traditions that they believe are blocked or facilitated by a typical group member. Once again, to reduce the demands of listing only positive information, participants were told that "almost everyone has positive and negative things to say about most groups" (Haddock, Zanna & Esses, 1993). Unlike past research, participants

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were also told that a list of values was included at the end of the questionnaire booklet and that they could refer to this list to help them recall values. For both affect and symbolic beliefs, participants were asked to rate the valence of each characteristic. In the case of affect, the same scale as that used for stereotypes were used, while the scale used for symbolic beliefs ranged from "almost always blocked" (-2) to "almost always facilitated" (+2). Participants were also asked to indicate the percentage of typical group members who possess each characteristic.

Participants' frequency of contact with the elderly was measured by asking them to indicate the frequency of their contact with males and females in two age categories: 18 to 25 and 65 to 74 using response categories ranging from "once a day" to "less than once every six months" (Appendix G).

Results

Comparison of NS Males to NF Males

Independent t-tests were used to ensure that the responses of older male adults in

St. John's Newfoundland did not differ from those of older male adults in Halifax, Nova

Scotia. No significant differences were found between these two groups in attitudes

toward others, $t_{26} = .435$, $p > .05$; stereotypes, $t_{26} = -.627$, $p > .05$; emotional responses $t_{26} = -$

$.705$, $p > .05$; or symbolic beliefs $t_{26} = -1.312$, $p > .05$ (see Table 2).

Table 2

Mean attitude, stereotype, emotional response and symbolic belief scores for NF and NS older males.

	Attitude (sd)	Stereotypes (sd)	Emotional Response (sd)	Symbolic Beliefs (sd)
NF Males (n=14)	81.21 (7.89)	1.03 (.58)	1.07 (.90)	1.26 (.70)
NS Males (n=14)	79.36 (13.91)	1.17 (.63)	1.49 (2.07)	0.91 (.71)

Note: For the attitude variable, possible range is 0 to 100, for the stereotype, emotional responses and symbolic belief variables, possible range is -2 to +2.

Scores on the Evaluation Thermometer can range from 0 (Extremely unfavorable) to 100 (Extremely favorable). The raw scores of participants in this study who rated 18-25 year-olds ranged from 20 to 100 with a mean score of 79.93 and a standard deviation of 14.83. In comparison, the raw scores of participants who rated 65-74 year-olds ranged from 40 to 100 with a mean score of 76.20 and a standard deviation of 12.59.

To examine whether respondents significantly differed in their attitudes toward people in different age groups and gender groups, a 2 (Age of Participant) X 2 (Gender of Participant) X 2 (Age of Target) X 2 (Gender of Target) analysis of variance was performed on participants' responses to the attitude thermometer (see Appendix H, Table H1). The results of this analysis revealed a three-way interaction of age of target by age of participant by gender of participant, $F_{(1, 96)} = 6.03$, $p < .05$. Given this interaction, twelve possible simple effect analysis could be examined: age of target within male and female participants, age of target within younger and older participants, gender of participant within 18-25 year-old and 65-74 year-old targets, age of participant within 18-25 year-old and 65-74 year-old targets, age of participant within male and female targets and gender of participant within younger and older participants. When the Bonferroni adjustment was used to control for familywise error, only one simple effect analysis was significant. Specifically, it was found that young female participants

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held significantly more negative attitudes toward 18-25 year-old targets than did young male participants, $F_{(1,96)} = 25.45$, $p < .05$ (see Table 3). The results of this analysis also revealed a main effect of age of participant, $F_{(1,96)} = 4.76$, $p < .05$. As shown in Table 3, older adults evaluated others more positively than did younger adults.

Individual Differences in Evaluating Others

Simple effects were performed to test specific hypothesis. To begin, simple effects analysis were conducted to determine if younger adults and older adults differed in their evaluation of 65-74 year-old targets and to determine if older adults differed in their evaluations of 18-25 year-old targets and 65-74 year-old targets. Contrary to what was predicted in hypothesis two, no significant difference was found in how younger and older adults evaluated 65-74 year-old targets $F_{(1,96)} = .16$, $p > .05$ (see Table 3). However, a significant difference was found in how the two target age groups were evaluated by older adults, $F_{(1,96)} = 4.11$, $p < .05$. Eighteen to twenty-five year-old targets were evaluated significantly more positively than were 65-74 year-old targets.

Table 3

Attitudes toward individuals by age of participant and age of target.

Age of Participant	Gender of Participant	Age of Target		
		18-25 (n=56)	65-74 (n=56)	Total
Younger adult	**Male**	84.29	74.29	79.29
	Female	66.79	76.07	71.43
		75.54	75.18	75.36
Older adult	**Male**	82.57	78.00	80.29
	Female	86.07	76.43	81.25
		84.32	77.21	80.77
	Total	79.93	76.2	78.06

Note: Range for this scale is from 0 (Extremely unfavorable) to 100 (Extremely favorable).

Contrary to the results predicted in hypothesis three, no significant main effect was found for age of target. That is, 18-25 year-old and 65-74 year-old targets were not evaluated differently by others, $F_{(1,96)} = 2.27$, $p > .05$ (mean=79.93 and 76.20, respectively). In addition, contrary to hypothesis four, no significant main effect was found for gender of the target, $F_{(1,96)} = 2.14$, $p > .05$. Overall, both male and female targets were evaluated positively (mean=76.25 and 79.88, respectively) and there was no significant difference in the magnitude of the evaluations of males and females.

Simple effects analysis were also conducted to test hypothesis five, that female participants would have more positive attitudes toward 65-74 year-old targets than

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would male participants. The results of the analysis failed to support the hypothesis, $F_{(1, 96)} = .16$, $p > .05$. Female and male participants did not differ in their evaluations of older adults (see Table 4).

Table 4
Attitudes toward 65-74 year-old and 18-24 year-old targets as a function of gender of participant.

	Age of Target		
Gender of Participant	18-25 year-old target (n=56)	65-74 year-old target (n=56)	Total (n=112)
Male	83.43	76.14	79.79
Female	76.43	76.25	76.34
Total	79.93	76.2	78.06

Note: Range for this scale is from 0 (Extremely unfavorable) to 100 (Extremely favorable).

The Prediction of Attitudes Toward Others

The following formula, which was developed by Esses, Haddock and Zanna (1993), was used to compute scores for stereotypes, emotional responses and symbolic beliefs.

$$\sum_{i=1}^{n} (P_{ig} \times V_{ig})/n$$

In this formula, "V" represents the valence of each characteristic which ranged between - 2 and +2 while "P" represents the proportion of group members who are perceived to hold that characteristic. These proportions are obtained by dividing the percentage of group members who are perceived to hold that characteristic by 100 and can range between 0.00 to 1.00. The "n" in the above formula is equal to the number of items listed. For example, if a participant listed the characteristics of happy, and sad and stated that happy had a valence of +2 and that 80% of the target group were happy and that sad had a valence of -1 and that 40% of the target group were sad then this participant would have a overall stereotype score of .6.

An average of 4.32 stereotypes, 3.39 emotional responses and 3.18 symbolic beliefs were listed by respondents. The mean scores for each of these variables for all targets, for the two target age groups and the two target gender groups, are shown in Table 5. The mean stereotype, emotional response and symbolic belief score, for the overall sample were .93, .91, and 1.00 respectively. It is notable that the mean for each predictor variable is positive and that each predictor contains a large amount of variability. This suggests that participants are willing to express a range of characteristics, feelings and beliefs regarding the target group that they are evaluating.

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Table 5

Mean attitudes, stereotype scores, emotional responses and symbolic beliefs of 18-25
and 65-74 year-old targets and male and female targets.

Variable	18-25 year-old targets (N=56)	65-74 year-old targets (n=56)	Male Targets (n=56)	Female Targets (n=56)	All targets (n=112)
Attitude	79.93	76.2	76.25	79.87	78.06
Stereotype	0.82	1.04	0.94	0.92	0.93
Emotional Responses	0.76	1.07	0.82	1.01	0.91
Symbolic Belief	0.78	1.21	1.09	0.9	1

Note: For the attitude variable, possible range is 0 to 100, for the stereotype, emotional responses and symbolic belief variable, possible range is -2 to +2.

To determine the relative contribution of stereotypes, emotional responses, symbolic beliefs, gender and age of participant and gender and age of target in predicting attitudes toward others, a simultaneous regression analysis was performed using respondents' responses on the attitude thermometer as the criterion variable for attitudes. Unlike the results found when an analysis of variance was conducted using only gender and age of participant and gender and age of target as variables, the results of this analysis showed that age of target was a unique predictor of participant's attitudes (see Table 6). Respondents expressed significantly more positive attitudes toward younger adults than toward older adults (Beta = -.193, $p < .05$). In addition, age of participant was identified as a marginal predictor of attitudes toward others (Beta = .177, $p = .06$)

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with younger participants expressing more positive attitudes toward others than older participants. All predictor variables combined accounted for a significant amount of the variance in attitudes toward others ($R^2=.13$, $p=.05$).

Table 6

Prediction of attitudes toward others from stereotypes, emotional responses, symbolic beliefs, age of participant, gender of participant, age of target and gender of target.

	B	Std. Error	Beta	t	Sig.
(Constant)	74.088	2.751		26.927	0
Stereotypes	-0.127	2.041	-0.066	-0.06	0.951
Emotional responses	1.703	1.322	0.128	1.288	0.2
Symbolic beliefs	2.543	1.742	0.146	1.46	0.147
Age of participant	2.432	1.28	0.177	1.9	0.06
Gender of participant	-1.209	1.28	-0.088	-0.944	0.347
Age of target	-2.658	1.323	-0.193	-2.009	.047
Gender of target	1.833	1.278	0.137	1.473	0.144

Note: Age of participant (1=older adults, -1=young adults). Gender of participant (1=female, -1=male), Age of target (1=65-74, -1=18-35), Gender of target (1=female, 2=male)
$R^2=.13$

To assess differences in the unique contribution of stereotypes, emotional responses, symbolic beliefs, gender and age of target and participant toward different ages (18-25 year-olds and 65-74 year-olds) and genders (male and female) of target groups, four separate simultaneous regression analysis were performed using respondents' responses on the attitude thermometer as the criterion variable.

Analyses revealed that emotions were a unique predictor (Beta = .340, $p < .05$) of attitudes toward 65-74 year-old targets (see Table 7). Individuals who listed positive emotions in relation to this group were significantly more likely to evaluate this group positively. Stereotypes, symbolic beliefs, gender of target, age of participant and gender of participant were not found to be significant predictors of attitudes toward 65-74 year-old targets. Although not significant, the predictor variables accounted for approximately 19% of the variance in attitudes toward 65-74 year-olds.

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Table 7

Prediction of attitudes toward 65-74 year-old adults from stereotypes, emotional responses, symbolic beliefs, age of participant, gender of participant and gender of target.

	B	Std. Error	Beta	t	Sig.
(Constant)	66.802	4.456		14.991	0
Stereotypes	0.082	2.814	0	0.029	0.977
Emotional responses	5.87	2.417	0.34	2.429	.019
Symbolic beliefs	2.514	2.359	0.14	1.066	0.292
Age of participant	0.607	1.673	0	0.363	0.718
Gender of participant	0.527	1.646	0	0.32	0.75
Gender of target	1.963	1.62	0.16	1.212	0.231

Note: Age of participant (1=older adults, -1=young adults). Gender of participant (1=female, -1=male), Gender of target (1=female, -1=male).
$R^2 = .19$ *ns*

As shown in Table 8, age of participant was found to be a unique predictor of attitudes toward 18-25 year-olds (Beta = .312, $p < .05$). As previously reported, older adults were found to have more positive attitudes toward 18-25 year-old targets than did young adults. Stereotypes, emotional responses, symbolic beliefs, gender of participant and gender of target did not uniquely predicted attitudes toward 18-25 year-old targets. Although not significant, the predictor variables accounted for approximately 18% of the variance in attitudes toward this group.

Table 8

Prediction of attitudes toward 18-25 year-old adults from stereotypes, emotional responses, symbolic beliefs, age of participant, gender of participant and gender of target.

	B	Std. Error	Beta	t	Sig.
(Constant)	78.048	3.436		22.713	0
Stereotypes	-0.687	3.07	0	-0.224	0.824
Emotional responses	-0.291	1.678	0	-0.174	0.863
Symbolic beliefs	3.405	2.634	0.187	1.293	0.202
Age of participant	4.584	1.947	0.312	2.355	.023
Gender of participant	-3.119	1.982	-0.21	-1.573	0.122
Gender of target	1.874	1.992	0.128	0.941	0.351

Note: Age of participant (1=older adults, -1=young adults). Gender of participant (1=female, -1=male), Gender of target (1=female, -1=male).
$R^2 = .18$ ns

As shown in Tables 9 and 10, none of the above predictor variables uniquely predicted attitudes toward female or male targets.

Table 9

Prediction of attitudes toward female adults from stereotypes, emotional responses, symbolic beliefs, age of participant, gender of participant and age of target.

	B	Std. Error	Beta	t	Sig.
(Constant)	76.794	3.904		19.669	0
Stereotypes	0.174	2.941	0.01	0.059	0.953
Emotional responses	1.639	1.522	0.154	1.077	0.287
Symbolic beliefs	1.397	2.25	0.092	0.621	0.538
Age of participant	2.342	1.89	0.169	1.239	0.221
Gender of participant	-2.769	1.894	-0.2	-1.462	0.15
Age of target	-1.907	1.972	-0.138	-0.967	0.338

Note: Age of participant (1=older adults, -1=young adults). Gender of participant (1=female, -1=male), Age of target (-1=18-25, 1=65-74), R^2= .04 *ns*

Table 10

Prediction of attitudes toward male adults from stereotypes, emotional responses, symbolic beliefs, age of participant, gender of participant and age of target.

	B	Std. Error	Beta	t	Sig.
(Constant)	70.684	4.214		16.775	0
Stereotypes	-0.3	3.301	-0.015	-0.091	0.928
Emotional responses	1.566	3.235	0.077	0.484	0.631
Symbolic beliefs	4.189	3.067	0.196	1.366	0.178
Age of participant	2.508	1.825	0.187	1.374	0.176
Gender of participant	0.178	1.824	0.013	0.098	0.922
Age of target	-3.214	1.879	-0.239	-1.71	0.094

Note: Age of participant (1=older adults, -1=young adults). Gender of participant (1=female, -1=male), Age of target (-1=18-25, 1=65-74), R^2= .12 *ns*

Multiple regression analyses were also conducted to determine the contribution of stereotypes, emotional responses, symbolic beliefs, age of participant and gender of participant toward four target groups: 18-25 year-old males and females and 65-74 year-old males and females. As shown in Tables 11 to 14, none of the predictor variables were uniquely predictive of attitudes toward these targets. In addition, the results of this analysis revealed that the predictor variables did not account for a significant amount of the variance in attitudes.

Table 11

Prediction of attitudes toward 18-25 year-old males from stereotypes, emotional responses, symbolic beliefs, age of participant and gender of participant.

	B	Std. Error	Beta	t	Sig.
(Constant)	78.23	5.165		15.158	0
Stereotypes	7.892	5.173	0.369	1.526	0.141
Emotional responses	-4.851	4.079	-0.266	-1.189	0.247
Symbolic beliefs	-2.891	4.462	-0.136	-0.648	0.524
Age of participant	4.299	2.499	0.331	1.721	0.099
Gender of participant	-1.419	2.472	-0.109	-0.574	0.572

Note: Age of participant (1=older adults, -1=young adults). Gender of participant (1=female, -1=male), $R^2 = .21$ *ns*

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Table 12

Prediction of attitudes toward 18-25 year-old females from stereotypes, emotional responses, symbolic beliefs, age of participant and gender of participant.

	B	Std. Error	Beta	t	Sig.
(Constant)	82.062	5.047		16.258	0
Stereotypes	-4.214	4.667	-0.181	-0.903	0.376
Emotional responses	-0.905	2.114	-0.09	-0.422	0.667
Symbolic beliefs	5.674	3.696	0.325	1.535	0.139
Age of participant	6.694	3.286	0.415	2.037	0.054
Gender of participant	-3.851	3.252	-239	-1.184	0.249

Note: Age of participant (1=older adults, -1=young adults). Gender of participant (1=female, -1=male), $R^2 = .30$ *ns*

Table 13

Prediction of attitudes toward 65-74 year-old males from stereotypes, emotional responses, symbolic beliefs, age of participant and gender of participant.

	B	Std. Error	Beta	t	Sig.
(Constant)	61.594	6.435		9.572	0
Stereotypes	-3.255	4.311	-0.163	-0.755	0.458
Emotional responses	8.093	5.488	0.34	1.475	0.154
Symbolic beliefs	6.338	4.474	0.295	1.417	0.171
Age of participant	1.702	2.532	0.127	0.672	0.508
Gender of participant	2.346	2.535	0.175	0.926	0.365

Note: Age of participant (1=older adults, -1=young adults). Gender of participant (1=female, -1=male), $R^2 = .30$ *ns*

Table 14

Prediction of attitudes toward 65-74 year-old females from stereotypes, emotional responses, symbolic beliefs, age of participant and gender of participant.

	B	Std. Error	Beta	t	Sig.
(Constant)	70.67	6.256		11.296	0
Stereotypes	2.782	3.83	0.151	0.726	0.475
Emotional responses	4.331	2.612	0.335	1.658	0.111
Symbolic beliefs	0.151	2.941	0.011	0.051	0.96
Age of participant	0.583	2.279	0.053	0.256	0.8
Gender of participant	-1.236	2.13	-0.133	-0.58	0.568

Note: Age of participant (1=older adults, -1=young adults). Gender of participant (1=female, -1=male), $R^2 = .19$ *ns*

Intercorrelations Among Stereotypes, Emotional Responses and Symbolic Beliefs and Attitudes

To ensure that measures of stereotypes, emotional responses and symbolic beliefs were not redundant, that is that they were not measuring the same thing, Pearson product-moment correlations were computed for the overall sample, for each of the four target groups, for 18-25 year-olds and 65-74 year-olds targets (see Table 15). To control for familywise error, which may be inflated due to the large number of correlations conducted, only those correlations significant at the .01 level were interpreted.

Table 15

Correlations among stereotypes, emotional responses and symbolic beliefs for attitudes toward others and for each of the four target groups.

Variable	Stereotypes	Emotion	Symbolic Beliefs	Attitude
Attitudes toward others (n=112)				
Stereotypes	--	.253**	0.136	0.048
Emotions		--	.279**	0.179
Symbolic Beliefs			--	0.136
Attitudes toward 18-25 year-old males (n=28)				
Stereotypes	--	.515**	0.378	0.181
Emotions		--	0.081	-0.096
Symbolic Beliefs			--	0.026
Attitudes Toward 65-74 year-old females (n=28)				
Stereotypes	--	0.27	0.301	-0.137
Emotions		--	-0.048	0.381
Symbolic Beliefs			--	0
Attitudes Toward 65-74 year-old males (n=28)				
Stereotypes	--	0.442	0.168	0.021
Emotions		--	.491**	0.379
Symbolic Beliefs			--	0.419
Attitudes Toward 65-74 year-old females (n=28)				
Stereotypes	--	.270	.0301	-.137
Emotions		--	-.048	0.381
Symbolic Beliefs		--	--	0

**p<.01 level (2-tailed)

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As shown in Table 15, the three measures were not completely redundant. Although there was some overlap among the measures, it is evident that they are also eliciting different information. When the criterion variable was attitudes toward others, statistically positive correlations were observed between stereotypes and emotional responses and between emotional responses and symbolic beliefs. This suggests that when people express positive stereotypes toward others that they also tend to have positive emotional responses toward that group. It also suggests that those who have positive emotional responses toward others will likely also hold positive symbolic beliefs.

Finally, for those who evaluated 18-25 year-old males, a significantly positive correlation was observed between stereotypes and emotional responses. Those who expressed positive stereotypes toward 65-74 year-old targets also held positive symbolic beliefs toward this group. In addition, a significantly positive correlation was found between emotional responses and values when the target group being evaluated was 65-74 year-old males. Those who expressed positive emotional responses toward older male targets also held positive symbolic beliefs toward this group.

Characteristics Used to Describe Targets

Open-ended responses also provided evidence to suggest that stereotype scores, emotional response scores and symbolic belief scores were not redundant and were

eliciting different information (see Table 16). While completing the stereotype, emotional response and symbolic belief measures, respondents were asked to provide a description of typical members of the group they were evaluating (i.e., 18-25 year-old males, 18-25 year-old females, 65-74 year-old males or 65-74 year-old females). Specifically, in the case of stereotypes, respondents were asked to provide a description of typical group members and were given a few examples, specifically, "intelligent" or "timid". When emotional responses were being measured, respondents were asked to provide a list of feelings and were given the examples of "proud", "angry", "happy" or "disgusted". Similarly, when symbolic beliefs were measured, respondents were asked to indicate the values, customs and traditions that were elicited by group members and were given the examples of "freedom", "world peace", "respect for law and order" and "freedom of speech". In addition, respondents were given a list of values to help them in recalling the values held by the target group being evaluated.

To analyze this descriptive data, content analysis was conducted on the characteristics, feelings and values used to describe each of the four target groups (see Appendix I). This analysis involved establishing categories of descriptors and then counting the number of instances which fell into each category (Silverman, 1993). The results of this analysis are reported by target group and by age and gender of the target. Although it would have been interesting to analyze these data by age and gender of participant, this analysis was not conducted because of limitations of the sample size. In

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addition, although the descriptors used in the examples listed above are included in Appendix I, they were not included in the analysis.

As shown in Table 16, the results of this analysis suggest that the stereotype scores, emotional response scores and symbolic belief scores are eliciting different information. For example, when 18-25 year-old males were characterized, little overlap was observed in the characteristics, emotions and values used to describe this group. The most frequently elicited responses for stereotypes included "enjoys life", "helpful" and "friendly". For emotional responses, the most frequently elicited responses included "disappointed", "curious" and "loving" and for symbolic beliefs, the most frequently elicited responses included "promoting an exciting life", "equality" and "respect for tradition".

Table 16

Sample of most frequently elicited responses for stereotypes, emotional responses and symbolic beliefs by age and gender of target.

Stereotypes	Emotional Responses	Symbolic Beliefs
18-25 year-old Female Targets (n=28)		
honest (n=5)	sad (n=5)	equality (n=5)
confident (n=5)	joyful (n=3)	religious (n=5)
responsible (n=4)	respectful (n=2)	independence (n=4)
irresponsible (n=4)	honest (n=2)	family security (n=4)
outgoing (n=4)	polite (n=2)	politeness (n=4)
18-25 year-old Male Targets (n=28)		
enjoy life (n=5)	disappointed (n=3)	exciting life (n=8)
helpful (n=4)	curious (n=3)	equality (n=6)
friendship (n=4)	loving (n=3)	respect for tradition (n=4)
responsible (n=3)	sad (n=2)	pleasure (n=4)
ambitious (n=4)	joyful (n=2)	family security (n=4)
65-74 year-old Female Targets (n=28)		
helpful (n=6)	respectful (n=6)	wisdom (n=5)
friendship (n=6)	wisdom (n=3)	family security (n=4)
nice (n=6)	sad (n=3)	self respect (n=3)
generous (n=4)	empathy (n=3)	respect for tradition (n=3)
pleasant (n=4)	honest (n=2)	enjoy life (n=3)

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Table 16 Continued

Stereotypes	Emotional Responses	Symbolic Beliefs
65-74 year-old Male Targets (n=28)		
cranky (n=6)	friendly (n=4)	wisdom (n=9)
friendship (n=4)	wisdom (n=3)	family security (n=5)
helpful (n=3)	honest (n=3)	honest (n=4)
forgiving (n=3)	sad (n=3)	religious (n=4)
nice (n=3)	trustworthy (n=2)	politeness (n=4)
18-25 year-old Targets (n=56)		
responsible (n=7)	sad (n=7)	equality (n=11)
honest (n=7)	joyful (n=5)	exciting life (n=9)
helpful (n=6)	disappointed (n=4)	family security (n=8)
friendly (n=6)	curious (n=4)	politeness (n=8)
ambitious (6)	respectful (n=3)	respect for tradition (n=5)
65-74 year-old Targets (n=56)		
friendly (n=10)	respectful (n=7)	wisdom (n=14)
helpful (n=9)	wisdom (n=6)	family security (n=9)
cranky (n=9)	sad (n=6)	religious (n=7)
nice/kind (n=9)	honest (n=5)	respect for tradition (n=6)
giving/generous (6)	friendly (n=5)	honest (n=6)

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Table 16 continued

Stereotypes	Emotional Responses	Symbolic Beliefs
Male Targets (n=56)		
friendly (n=8)	sad (n=5)	wisdom (n=10)
helpful (n=7)	disappointed (n=5)	family security (n=9)
enjoy life (n=7)	curious (n=4)	equality (n=8)
cranky (n=7)	friendly (n=4)	exciting life (n=8)
caring (4)	thoughtful (n=4)	politeness (n=8)
Female Targets (n=56)		
friendly (n=8)	respectful (n=8)	family security (n=8)
helpful (n=8)	sad (n=8)	religious (n=8)
nice/kind (n=8)	honest (n=4)	equality (n=7)
honest (n=7)	joyful (n=4)	independence (n=7)
confident (n=7)	wisdom (n=3)	wisdom (n=6)

Note: A complete list of the stereotypes, emotional responses and symbolic beliefs listed for each target group and by age and gender of target can be found in Appendix I.

Are There Individual Differences in Stereotype Scores, Emotional Response Scores and Symbolic Belief Scores?

To examine whether there were significant differences in stereotype scores, emotional response scores and symbolic belief scores for adults in different age groups and gender groups, three separate 2 (Age of Participant) X 2 (Gender of Participant) X 2 (Age of Target) X 2 (Gender of Target) analysis of variance were performed. The

results of this analysis, when performed on stereotype scores and emotional response scores, revealed no significant difference in scores regardless of the age or the gender of the target or participant (see Appendix H, Tables H3 and H4). A significant main effect of age of target was found when this analysis was conducted on symbolic belief scores $F_{(1, 96)} = 8.99$, $p < .01$ (see Appendix H, Table H7). Higher symbolic belief scores were found when the target being evaluated was 65-74 year-olds (mean =1.21) than when the target being evaluated was 18-25 year-olds (mean=.78).

Are their Individual Differences in the Number of Characteristics, Emotions and Values Listed by Participants?

To examine whether respondents significantly differed in the number of characteristics, emotions and values that they listed for adult targets in different age groups and gender groups, three separate 2 (Age of Participant) X 2 (Gender of Participant) X 2 (Age of Target) X 2 (Gender of Target) analyses of variance were performed. The results of this analysis, when performed on the number of characteristics listed, revealed a significant interaction of age of participant by gender of target (see Appendix H, Table H9). Given this interaction, four simple effects were examined: gender of target within younger and older participants and age of participant within male and female targets. When using the Bonferroni adjustment to control for familywise error, simple effect analysis revealed a significant difference in the number

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of characteristics listed by younger participants when describing male and female targets, $F_{(1,96)} = 13.25$, $p<.01$. Specifically, younger adults listed more characteristics when describing female targets than when describing male targets. Simple effect analysis also revealed a significant difference in the number of characteristics used by younger and older participants to describe females. Significantly more characteristics were used by younger participants when describing female targets than by older participants, $F_{(1,96)} = 16.62$, $p<.01$.

As shown in Appendix H, Table H11, when a 2 (Age of Participant) X 2 (Gender of Participant) X 2 (Age of Target) X 2 (Gender of Target) analysis of variance was performed on the number of emotions listed by participants, results showed an interaction of age of participant by gender of target. Given this interaction, four possible simple effects were examined: age of participant within male and female targets and gender of target within younger and older participants. The results of this analysis, when using Bonferroni adjustment to control for familywise error, revealed a significant difference in the number of emotions listed by older and younger adults when describing their emotional responses to females, $F_{(1,96)} = 7.68$, $p<.01$. Specifically, younger adults listed more emotions than did older adults when describing female targets.

A 2 (Age of Participant) X 2 (Gender of Participant) X 2 (Age of Target) X 2 (Gender of Target) analysis of variance was also performed on the number of values or symbolic beliefs used to describe others (see Appendix H, Table H13). The results of

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this analysis showed an interaction of age of participant by gender of participant and allowed for the analysis of four simple effects: age of participant within male and female participants and gender of participant within older and younger adults. The results of these analysis using the Bonferroni adjustment to control for familywise error, revealed a significant difference in the number of values listed by older male and older female participants when describing others, $F_{(1,96)} = 5.52$, $p > .01$. Older male participants listed fewer values than did older female participants when describing others.

The Effect of Contact on Attitudes toward Older Adults

Another goal of this study was to assess the extent to which contact with the elderly was related to favorability of attitudes toward this group. To assess contact, respondents were asked to indicate how much contact they had with males and females between the ages of 18 and 25 and between the ages of 65 and 74. Respondents could then rate their contact by choosing one of the following six categories: once a day, once a week, once a month, once every three months, once every six months and less than once every six months (see Appendix H, Table H15).

To determine the relationship between contact with each of the four target groups (18-25 year-old males and females and 65 -74 year-olds males and females) and attitudes toward older and younger adults, Pearson product-moment correlations were conducted. As shown in Table 17, reported amount of contact with 18-25 year-old males and

females and 65-74 year-old males and females did not correlate with attitudes. Therefore, hypothesis six, that increased contact with 65-74 year-olds would positively correlate with attitudes toward this group, was not supported.

Pearson product-moment correlations also revealed that contact with each target group was not associated with stereotype scores, emotional response scores or the number of characteristics, emotional responses or symbolic beliefs used to describe others. Nevertheless, a significant correlation was found between contact with 18-25 year-old females and symbolic belief scores. Increased contact with young women was related to negative symbolic belief scores toward this group.

Although it would have been interesting to determine whether age and gender of participant was related to reported contact with each of the four target groups, this analysis was not conducted due to limitations of the sample size.

Table 17

Correlation between contact with target groups and attitudes, stereotypes, emotional responses, symbolic beliefs, number of characteristics listed, number of emotions listed and number of symbolic beliefs listed.

	Target Group							
	18-25 year-olds				65-74 year-olds			
	Males (n=28)		Females (n=28)		Males (n=28)		Females (n=28)	
	r	Sig.	r	Sig.	r	Sig.	r	Sig.
Attitudes	0	0.81	0.15	0.448	0.08	0.7	0	0.9
Stereotype Score	0.33	0.1	0.11	0.6	-0.18	0.4	0.13	0.5
Emotional Responses	0.1	0.79	0	0.879	-0.15	0.4	0.17	0.4
Symbolic Beliefs	0.23	0.24	-0.5	.01**	-0.3	0.1	-0.2	0.4
Number of Characteristics	-0.2	0.26	0	0.993	0.259	0.2	-0.2	0.3
Number of Emotional Responses	0	0.82	0	0.961	-0.1	0.6	0.12	0.5
Number of Symbolic Beliefs	0	0.88	0.12	0.542	0.231	0.2	0	0.8

** significant at .01 level

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Discussion

The main goal of the present study was to examine attitudes toward elderly adults and to compare attitudes of younger and older participants toward 65-74 year-old targets (the elderly). In addition, this study sought to determine the impact of gender on evaluations of elderly adults and to appraise the relationship between contact with elderly adults and attitudes toward this group. Finally, this study attempted to identify possible predictors of attitudes toward the elderly by assessing contact with the group, stereotypes, emotional responses and symbolic beliefs.

Attitudes Toward the Elderly

Although a substantial body of research suggests that attitudes toward the elderly are generally negative (Kite & Johnson, 1988) or mixed (i.e. both positive and negative; Braithwaite, 1986), another body of research has shown attitudes to be predominately positive (Ivester & King, 1977; Kogan, 1967). The results of this study support the latter research, that attitudes toward the elderly are positive. On a thermometer scale where 0 was "extremely unfavorable" and 100 was "extremely favorable", participants in this study evaluated the elderly as being between "fairly" and "quite" favorable. Both the methodology employed and the characteristics of the population may account for the positive attitudes found here.

As previously noted, the evaluation thermometer is a rating scale which allows respondents to evaluate a target by rating them on a scale from 0° to 100°. Past research has shown that this scale is reliable and that it correlates with a five-item semantic differential (Haddock, Zanna & Esses, 1993). However, Slotterback and Saarnio (1996), have suggested that rating scales yield less negative attitudes toward the elderly than do open-ended measures. These authors suggest that by allowing respondents to generate their own descriptors of a target, the attitudes expressed are likely to be predominately negative. In comparison, when a rating scale is used, respondents are less likely to rely upon internal sources of information and are more likely to rely upon external sources, such as the adjectives used in the rating scale, in decision making. Because this study is the first to use the evaluation thermometer to measure attitudes toward the elderly, it is uncertain whether the positive attitudes toward both young adults and elderly are a result of the measurement tool.

In addition to the evaluation thermometer, this study also included open-ended measures which required respondents to generate descriptions of the characteristics, emotional responses and symbolic beliefs elicited by younger and older adults. The results of this study suggest, contrary to the negative descriptions predicted by Slotterback and Saarnio (1996) that these measures may elicit positive descriptions of elderly adults. When asked to list the characteristics, emotions and symbolic beliefs elicited by younger and older adults, respondents listed predominately positive

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descriptors. For example, elderly adults were described as friendly and helpful and as valuing wisdom, family security and religion. However, they were also described as "cranky", a descriptor commonly associated (rightfully or wrongfully) with age. In addition, as represented in the overall stereotype, emotional response and symbolic belief scores, most respondents indicated that the valence of the descriptors they provided were positive.

A second possible methodological reason for the positive attitudes expressed by respondents involves the description used to define elderly adults. Respondents in this study were asked to evaluate male and female targets between the ages of 65-74. However, since the term "elderly" was not used and since the target group was not described as old, it may be that respondents in this study did not consider 65-74 year-olds to be elderly. For example, Hummer (1993) found that more positive stereotypes were associated with young elderly (55-64) than with older elderly adults (75 and over). Future research is needed to determine how personal definitions of age groups affect the results.

In addition to the methodological explanations outlined above, certain characteristics of the sample may also be responsible for the positive attitudes expressed toward the elderly. For example, unlike a majority of the studies cited here (i.e., Katz, 1990; Naus, 1993; O'Hanlan, Camp & Osofsky, 1993; Slotterback and Saarnio, 1996), this study did not use university students to represent young adults. It may be that

attitudes held by university students differ from those held by the general public. Another explanation for the positive attitudes expressed here could be that people's attitudes in today's society may be becoming more accepting of the elderly than they were in the past (Ivester & King, 1977). This awareness may be due to increased understanding and awareness of the plight faced by elderly adults or to increased physical contact with the elderly. Festinger (1964) suggests that attitudes become more congruent with reality when people are exposed to groups of persons to whom they have a negative attitude. Although this study did not find a relationship between physical contact with the elderly and attitudes, a majority of respondents in this study reported having contact with elderly males and females at least once a week. Future research is needed to determine if a relationship exists between attitudes toward the elderly and other dimensions of contact such as quality of contact with older adults and valued family members.

The Role of Age in Evaluating Others

In addition to conflicting findings about the valence of attitudes toward the elderly, past research has also found contradictory results on how younger and older adults evaluate others. The results of the present study suggest that, overall, older adults evaluate others more positively than do younger adults. It was also found that older respondents evaluate young adults more positively than they evaluated their own peer

group. This has also been found by Netz and Ben-Sira (1993) who found that older adults rated both younger and older targets more positively than did young adults.

At first glance, this finding appears to be in conflict with the ingroup-outgroup bias whereby older adults would be expected to favor their own group and to disfavor the outgroup, younger adults (Brewer, 1979). However, in this case, the outgroup differs from other outgroups in that those who are members of the elderly category will all have been members of a younger category at some point in their lives (Brewer & Lui, 1984; Hawkins, 1996). Similarly, although the elderly are a minority group, they differ from other minorities such as ethnic groups since age categorization is not exclusive (Kogan, 1961).

Although the results of this study confirm that older adults have more positive attitudes toward others, this study failed to demonstrate a difference in how older adults were evaluated by both their peers and younger adults. Contrary to the finding of Netz and Ben-Sira (1993), the results of this study suggest that older and younger participants do not differ in their evaluations of 65-74 year-old targets. In fact, participants in general expressed predominately positive attitudes toward all target groups examined, including the elderly.

One possible explanation for the overall lack of difference between the evaluations of the target groups was the type of design employed. Research has shown

that elderly targets are more negatively evaluated than younger targets when attitude assessments are done in the same context (within-subject design). In the present research, the use of a between-subject design failed to identify a difference in attitudes. Past researchers have suggested that this design fails to show a difference because of the absence of demand characteristics (Kogan, 1979). However, in this study, participants were told that other people were evaluating different age groups so this argument may not be relevant.

A second explanation for this finding may be how the target group was defined. The elderly individuals in this study were defined as between the ages of 65 and 74 years-old. Past research has shown that the "elderly" label as a general target is more negatively evaluated than is a specific target (Luszcz, 1985-86). In the case of this study, target groups were described using a gender as well as a specific age. It may be the case that this target was perceived as a more specific target and that adding gender made participants think of more specific elderly adults.

The Role of Gender in Evaluating Others

Contrary to previous research (Knox, Gekoski & Kelly,1995; Hawkins, 1996), the results of this study suggest that older male and female targets are evaluated similarly. Although past research has not consistently supported this findings, research by Kite, Deux and Miele (1991) suggests that a double standard in how the two genders

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are evaluated is not always evident. One possible explanation for this finding is that past research, which identified a significant difference, included contextual factors such as a work-related setting (Locke-Connor & Walsh, 1980). Therefore, the double standard revealed in their study may have been a result of the context in which the genders were being evaluated rather than upon gender alone. Alternatively, Kite et al. (1991) have also noted that different, but not necessarily more negative attributes, are used to describe males as compared to females. The results of the present study support these findings. Although the most commonly used adjectives to describe males and females were similar (i.e., intelligent and friendly), other commonly used descriptors differed depending upon the gender of the target being evaluated. For example, males were often described as quiet and enjoying life whereas females were often described as nice and honest.

The results of this study also failed to support the finding of both Katz (1990) and Hawkins (1996) which suggested that younger females would evaluate elderly targets more positively than would younger males. Instead, the results support the findings of Ivester and King (1977) who found that this difference was not significant. An unexpected finding in this study was the interaction between age of participant, age of target and gender of participant. An analysis of simple effects revealed that young female participants evaluated 18-25 year-old targets significantly more negatively than did young male participants. This suggests that young females have a more negative

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view toward their own target age group than do males of the same group. This finding was surprising given that past research shows that females rated both young and elderly targets more positively than did males (Knox, Gekoski & Kelley, 1995).

The Effect of Contact on Attitudes Toward Others

Based on research by Knox, et.al. (1986) it was hypothesized that increased contact with the elderly would be related to more positive attitudes toward that group. The results of this study did not support this hypothesis. Contact with older males and females did not correlate with the attitude scores, stereotype scores or symbolic belief scores given for these targets. Nevertheless, a relationship was found between contact with younger males and emotional response scores where increased contact with younger male adults was associated with increased emotional response scores toward this group.

There are two reasons that may explain why this study failed to find the hypothesized relationship between contact with the elderly and attitudes toward this group. These are: 1) the dimension of contact measured and 2) the definition used to describe the target group . First, as suggested by the findings of Knox, Gekoski and Johnson (1986) quality of contact rather than the quantity of contact may be the mediating factor in attitudes toward the elderly. However, in the present study contact was assessed using a single measure that did not include a measure of quality.

Therefore, the absence of a relationship between contact and attitudes may be due to the dimension of contact measured.

Finally, the absence of a relationship between contact and attitudes may be due to the definition of contact employed in this study. While in the present study participants were asked to indicate how often they have contact with 65-74 year-old adults, past research has focused on contact with grandparents or other elderly family members (Kahana et al., 1996). According to the findings of Slotterback (1996) it is quantity of contact with grandparents rather than general elderly targets which correlates with attitudes toward this group.

Predicting Attitudes Toward Others

According to the research of Esses et al. (1993) and Maio et al. (1994), attitudes toward social groups are based on both the beliefs (stereotypes and symbolic beliefs) and the emotions that people hold toward group members. The results of the present study only partially support this tripartite model of attitudes. When stereotypes, emotional responses, symbolic beliefs, age of participant, and gender of participant and target were used to predict attitudes toward 65-74 year-olds, the results of a multiple regression analysis suggested that only emotional responses were a significant predictor of attitudes toward this group. Emotional responses were found to both correlate with attitudes toward the elderly and to be a significant predictor of attitudes toward this group.

Although Maio et al. suggested that both beliefs and affect are important in determining attitudes, the finding of Stanger, Sullivan and Ford (1991) support the present results. These researchers determined that although cognitive beliefs were somewhat predictive of attitudes, emotional responses to ethnic and religious groups were stronger predictors of attitudes than were either stereotypes or symbolic beliefs.

The implications of this finding are twofold. First, the strength of the relationship between emotional responses and attitudes toward the elderly suggests that changing group attitudes will necessarily require changing affect. If attitudes toward the elderly are determined by affective responses, then those wishing to change attitudes toward this group should focus on emotional appeals (Zanna & Rempel, 1988).

The second implication from this finding relates to the relative role of cognition and affect in determining attitudes. Past research by Esses et al. (1993), has suggested that symbolic beliefs are more likely to play a greater role than affect or stereotypes when predicting unfavourable attitudes. Based on this, symbolic beliefs would not be expected to be significantly predictive of the positive attitudes toward the elderly found in this study. Esses et al. (1993) also provide an explanation for the absence of a relationship between attitudes and stereotypes found in this study. They suggest that when stereotypes and emotions are highly correlated, as they were in the present study, stereotypes may partially determine emotional reactions. In the present case, although

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the order of the stereotype, affect and symbolic belief measures were varied, the attitude measure was always presented first. It may be that the stereotypes used to describe elderly adults indirectly influenced how participants felt about the elderly, and through this means, effected attitudes.

Results of a multiple regression analysis also revealed that stereotypes, emotional responses, symbolic beliefs, gender of target and gender of participant were not significant predictors of attitudes toward 18-25 year-olds. Nevertheless, age of participant was found to significantly predict attitudes toward this group. As previously reported, older adults were found to hold more positive attitudes toward 18-25 year-old targets than were younger adults. This finding is interesting in that it differs from the relationship found for the 65-74 year-old target group. The absence of a relationship between emotional responses and attitudes in predicting attitudes toward younger adults suggests that different processes may be active when attitudes are formed toward different age groups. More research is needed to identify and compare predictors of attitudes toward younger and older adults and to explore why these differences exist.

Another interesting finding from this study was that, although the predictor variables used in this study accounted for a significant amount of variance in attitudes toward others overall, they did not account for a significant amount of the variance in attitudes toward younger and older adults. One explanation for the low correlation

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between the predictor variables and attitudes is that other relevant dimensions beyond cognition, affect, gender and age have been overlooked in this study.

Symbolic Belief Scores

Although stereotype and emotional response scores were not found to be dependent upon individual characteristics such as age and gender, the results of this study demonstrated that symbolic belief scores are dependent upon the age of the target being evaluated. Specifically, those who evaluated older adults had more positive symbolic belief scores than those who evaluated younger adults. Given that symbolic beliefs are defined as "the belief that social groups facilitate the attainment of cherished values, customs or traditions" (Haddock, Zanna & Esses, 1993), this finding is not unexpected. According to Kite, Deaux and Miele (1991), elderly adults are more likely than young adults to be described as family oriented and generous to others.

Differences in how Adults are Evaluated

Past research using the method employed in this study has not discussed differences or similarities in the number of characteristics, emotions and values listed by respondents. In the present study, analysis of variance results suggest that each of these variables may be influenced by the age and gender of both the target and the respondent. In fact, results revealed that younger adults listed a greater number of characteristics and

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emotions when describing females than did older adults and that older male participants listed fewer values than did older females when describing others. In addition, younger adults listed more characteristics when asked to describe female targets than when asked to describe male targets

One possible explanation for the finding that younger adults listed more characteristics to describe others than did older adults may be that young people are more familiar and comfortable with the type of task required in this study. Since the younger adults were recruited through an educational institution, it follows that they would be used to having to recall information in a testing situation. Similarly, it is possible that younger adults were better educated than older adults and therefore better able to generate descriptors to characterize other groups.

There are two explanations to account for differences in the number of characteristics and emotions younger adults used to describe males and females. Because the role of women in today's society is becoming increasing diverse, young adults may find it necessary to use a greater number of descriptors to characterize females than to characterize males. In addition, younger adults may have a greater number of peers who are female and would therefore have more experience in describing the characteristics of this group and the emotions felt for this group. A similar explanation may be used to explain why elderly women generated a greater number of values to describe others than did elderly men. It may be possible that elderly women

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have a wider peer group than do elderly men and therefore have less trouble identifying and describing the values held by other adults.

Limitations of the Study and Suggestions for Future Research

The first limitation of this study relates to the order in which measures were presented to participants. As previously noted, the order of measures of stereotypes, affect and symbolic beliefs was counter-balanced across participants. However, the evaluation thermometer was always presented first. It could be argued that participants' responses were given in response to the attitude measure. However, Jackson et al. (1996), have suggested two reasons why this may not be the case. First, the evaluation thermometer uses a different rating scale than that used in the other measures. Second, past research using the measures employed here, has reported no order effects.

The second limitation of this study relates to sample selection. The sample studied was not randomly selected from the population which means that generalizations about the population must be made with caution. This is especially true for the sample of older adults where a majority of the sample were recruited through special groups. Also, although the sample size used in this study yielded a power of .75 (d= .50 and ∝= .05), future research should use a more representative sample of respondents.

In addition, as suggested by Green (1981), future research should strive to be more precise in defining variables and should include additional variables. For example,

future research which attempts to measure the relationship between contact and attitudes should more precisely define the dimensions of contact being measured and could include contact with the elderly as well as contact with grandparents. In addition, future research should further examine the role of both quantity and quality of contact in predicting attitudes toward the elderly.

Also, the method used in this study has been used to predict attitudes toward a number of groups including homosexuals, immigrants and Native Americans. However, this is the first instance where this method was tested using a between-groups design. Future research should attempt to replicate this study using a within-groups design. This would help to determine the potential impact of demand characteristics in the study. In addition, unlike past research, this study provided respondents with a list of possible values from which to choose when describing younger and older adults. Respondents were told that they could select values from this list and/or from memory. Future research is need to determine how including this list of values influenced overall symbolic belief scores and their relationship in predicting attitudes toward the elderly.

Finally, this study focused on two components of attitudes, the cognitive component (stereotypes and symbolic beliefs) and the affective component. However, with the exception of contact, information concerning past behaviour, was not studied. At present, Esses et al. (1993) are working on the development of a instrument that would measure past behaviour with a group. Future research needs to explore the

relationship between attitudes toward the elderly and information regarding the
relationship between past behaviour and attitudes.

Notes

1. On average participants perceived younger adults to be 21.9 years-old (SD=3.92; range= 15-35), middle-aged adults to be 41.4 years-old (SD=5.7; range=30-55), and older adults to be 66.2 years-old (SD=6.8; range=50-80).

References

Bailey, W. (1991). Knowledge, attitude, and psychosocial development of young and old adults. *Educational Gerontology, 17,* 269-274.

Baiyewu, O., Bella, A., Adeyemi, J., Ikuesan, B., Bamgboye, E., & Jegede, R. (1997). Attitude to ageing among different groups in Nigeria. *International Journal of Ageing and Human Development, 44 (4),* 283-292.

Braithwaite, V. (1986). Old age stereotypes: Reconciling contradictions. *Journal of Gerontology, 41,* 353-360.

Braithwaite, V., Gibson, D., & Holman, J. (1985-86). Age stereotyping: Are we oversimplifying the phenomenon? *International Journal of Ageing and Human Development, 22 (4),* 315-325.

Brewer, M. (1979). In-group bias in the minimal intergroup situation: A cognitive- motivational analysis. *Psychological Bulletin, 86,* 307-324.

Brewer, M., & Lui, L. (1984). Categorisation of the elderly by the elderly: Effects of perceiver's category of membership. *Personality and Social Psychology Bulletin, 10,* 585-595.

Doka, K. (1985-86). Adolescent attitudes and beliefs toward ageing and the elderly. *International Journal of Ageing and Human Development, 22 (3),* 173-187.

Donakowski, D.W., & Esses, V. (1996). Native Canadians, First Nations, or Aboriginals: The effect of labels on attitudes toward native peoples. *Canadian Journal of Behavioural Science, 28 (2),* 86-91.

Eagly, A., & Chaiken, S. (1993). *The Psychology of Attitudes.* Toronto: Harcourt Brace Jovanovich College Publishers.

Esses, V. M., Haddock, G., & Zanna, M. (1993). Values, stereotypes and emotions as determinants of intergroup attitudes. In D.M. Mackie & D.L. Hamilton (Eds.), *Affect, cognition and stereotyping: Interactive processes in group processes* (pp.137-166). San Diego, CA: Academic Press.

Esses, V. M., & Zanna, M. (1995). Mood and the expression of ethnic stereotypes. *Journal of Personality and Social Psychology, 69 (6)*, 1052-1068.

Ferraro, K. (1992). Cohort change in images of older adults 1973-1981. *The Gerontologist, 32*, 296-304.

Festinger, L. (1964). Cognitive Dissonance. In E.E. Sampson (Ed.). *Approaches contexts and problems of social psychology*. NJ: Prentice-Hall.

Green, S. (1981). Attitudes and perceptions about the elderly: Current and future perspectives. *International Journal Aging and Human Development, 13 (2)*, 99-119.

Haddock, G., & Zanna, M. (1994). Preferring "housewives" to "feminists". *Psychology of Women Quarterly, 18*, 25-52.

Haddock, G., Zanna, M., & Esses, V. (1993). Assessing the structure of prejudicial attitudes. The case of attitudes toward homosexuals. *Journal of Personality and Social Psychology, 65*, 1105-1108.

Haddock, G., Zanna, M., & Esses, V. (1994). Mood and the expression of intergroup attitudes: The moderating role of affect intensity. *European Journal of Social Psychology, 24*, 189-205.

Hawkins, M. (1996). College students' attitudes toward elderly persons. *Educational Gerontology, 22*, 271-279.

Hilt, M. (1997). The Kogan attitudes toward old people scale: Is it time for a revision? *Psychological Reports, 80*, 1372-1374.

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

Ivestor, C., & King, K. (1977). Attitudes of adolescents toward the aged. *The Gerontologist, 17*, 85-89.

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Jackson, L., Hodge, C., Gerard, D., Ingram, J., Ervin, & Sheppard, L. (1996). Cognition, affect, and behaviour in the prediction of group attitudes. *Personality and Social Psychology Bulletin, 22 (3),* 306-316.

Kahana, E., Kinney, J., Kercher, K., Kahana, B., Tinsley, V., King, C., Stuckley, J., & Ishler, K. (1996). Predictors of attitudes toward three target groups of elderly persons. *Journal of Ageing and Health, 8 (1),* 27-53.

Katz, R. (1990). Personality trait correlates of attitudes toward older people. *International Journal of Ageing and Human Development, 31 (2),* 147-159.

Kidwell, J., & Booth, A. (1977). Social distance and intergenerational relations. *The Gerontologist, 17,* 412-420.

Kite, M., Deaux, K., & Miele, M. (1991). Stereotypes of young and old: Does age outweigh gender? *Psychology and Ageing, 6 (1),* 19-27.

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

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

Knox, J., Gekoski, W., & Kelly, L. (1995). The age group evaluation and description (AGED) inventory: A new instrument for assessing stereotypes of and attitudes toward age groups. *International Journal of Aging and Human Development, 40 (1),* 31-55.

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.

Kogan, N. (1979a). A study of age categorisation. *Journal of Gerontology, 34 (3),* 358-367.

Kogan, N. (1979b). Beliefs, attitudes and stereotypes about old people. *Research on Aging, 1 (1),* 11-36.

Kogan, N., & Shelton, F. (1962). Beliefs about old people: A comparative study of older and younger samples. *The Journal of Genetic Psychology, 100*, 93-111.

Locke-Connor, C., & Walsh, P. (1980). Attitudes toward the older job applicant: Just as competent, but more likely to fail. *Journal of Gerontology, 35 (6)*, 920-927.

Luszcz, M. (1986). Characterising adolescents, middle-aged, and elderly adults: Putting the elderly into perspective. *International Journal of Ageing and Human Development, 22 (2)*, 105-121.

Maio, G. Esses, V., & Bell, D. (1994). The formation of attitudes toward new immigrant groups. *Journal of Applied Social Psychology, 24 (19)*, 1762-1776.

Naus, P. (1973). Some correlates of attitudes toward old people. *International Journal of Ageing and Human Development, 4 (3)*, 229-243.

Netz, Y. & Ben-Sira, D. (1993). Attitudes of young people, adults, and older adults from three-generation families toward the concepts ideal person, youth, adult, and old person. *Educational Gerontology, 19*, 607-621.

Neussel, F. (1982). The language of agism. *The Gerontologist, 22 (3)*, 273-276.

O' Connell, A., & Rotter, N. (1979). The influence of stimulus age and sex on person perception. *Journal of Gerontology, 34 (2)*, 220-228.

O' Hanlon, A., Camp, C. & Osofsky (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*, 753-766.

Olson, J., & Zanna, M. (1993). Attitudes and attitude change. *Annual review of Psychology, 44*, 1117-1154.

Rosencratz, H., & McNevin, T. (1969). A factor analysis of attitudes toward the aged. *The Gerontologist, 9*, 55-59.

Schaie, K. (1993). Ageist language in psychological research. *American Psychologist, 48*, 49-51.

Schonfield, D. (1982). Who is stereotyping who and why. *The Gerontologist, 22*, 267-272.

Schwartz, S. H.. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, *25*, 1-61.

Silverman, D. (1993). *Interpreting Qualitative Data: Methods for Analyzing Talk, Text and Interaction*. California: Sage Publications Ltd. attribute categories. *Psychology and Ageing*, *11* (4), 563-571.

Stanger, C., Sullivan, L., & Ford, T. (1991). Affective and Cognitive Determinants of Prejudice. *Social Cognition*, *9*, 359-380.

Tuckman, J., & Lorge, I. (1958). Attitude toward ageing of individuals with experience with the elderly. *The Journal of Genetic Psychology*, *92*, 199-204.

Zanna, M. & Rempel, J. (1988). Attitudes: A new look at an old concept. In Bar-Tal & Kruglanski (Eds.) *The Social Psychology of Knowledge*. Cambridge: Cambridge University Press.

APPENDIX A

Values

EQUALITY (equal opportunity for all)
INNER HARMONY (at peace with myself)
SOCIAL POWER (control over others, dominance)
PLEASURE (gratification of desires)
FREEDOM (freedom of action and thought)
A SPIRITUAL LIFE (emphasis on spiritual not material matters)
SENSE OF BELONGING (feelings that others care about me)
SOCIAL ORDER (stability of society)
AN EXCITING LIFE (stimulating experience)
MEANING IN LIFE (a purpose in life)
POLITENESS (courtesy, good manners)
WEALTH (material possessions, money)
NATIONAL SECURITY (protection of my nation from enemies)
SELF-RESPECT (belief in one's own worth)
RECIPROCATION OF FAVOURS (avoidance of indebtedness)
CREATIVITY (uniqueness, imagination)
A WORLD AT PEACE (free of war and conflict)
RESPECT FOR TRADITION (preservation of time honoured customs)
MATURE LOVE (deep emotional and spiritual intimacy)
SELF DISCIPLINE (self-restraint, resistance to temptation)
DETACHMENT (from worldly concerns)
FAMILY SECURITY (safety for loved ones)
SOCIAL RECOGNITION (respect, approval by others)
UNITY WITH NATURE (fitting into nature)
A VARIED LIFE (a varied life)
WISDOM (wisdom)
AUTHORITY (the right to lead or command)
TRUE FRIENDSHIP (close, supportive friends)
A WORLD OF BEAUTY (beauty of nature and the arts)
SOCIAL JUSTICE (correcting injustice, care for the weak)
INDEPENDENT (self-reliant, self-sufficient)
MODERATE (avoiding extremes of feelings and actions)
LOYAL (faithful to my friends, group)
AMBITIOUS (hardworking, aspiring)
BROAD-MINDED (tolerant of different ideas and beliefs)
HUMBLE (modest, self-effacing)
DARING (seeking adventure, risk)
PROTECTING THE ENVIRONMENT (preserving nature)
INFLUENTIAL (having an impact on people and events)
HONOURING OF PARENTS AND ELDERS (showing respect)

CHOOSING OWN GOALS (selecting own purposes)
HEALTHY (not being sick physically or mentally)
CAPABLE (competent, effective, efficient)
ACCEPTING MY PORTION IN LIFE (submitting to ones life's circumstances)
HONEST (genuine, sincere)
PRESERVING MY PUBLIC IMAGE (protecting my "face")
OBEDIENT (dutiful, meeting obligations)
INTELLIGENT (logical, thinking)
HELPFUL (working for the welfare of others)
ENJOYING LIFE (enjoying food, sex, leisure, etc.)
DEVOUT (holding to religious faith and belief)
RESPONSIBLE (dependable, reliable)
CURIOUS (interested in everything)
FORGIVING (willing to pardon others)
SUCCESSFUL (achieving goals)
CLEAN (neat, tidy)

APPENDIX B

Informed Consent Form

Informed Consent Form:
Evaluation of Age Groups

The nature of this study has been explained to me. I understand that participation in this study is voluntary, and that I am free to withdraw from the study at any time.

I, _____ , the undersigned agree to my participation in the research study described.

_____   _____
(Signature of Participant)   (Date)

_____

To be signed by Investigator

To the best of my ability I have fully explained to the participant the nature of this research study. I have invited questions and provided answers. I believe that the participant fully understands the implications and voluntary nature of the study.

_____   _____
(Signature of Investigator)   (Date)

_____
(Telephone Number)

APPENDIX C

Sign-up Sheet (Young Adults)

Sex: □ Male   □ Female

Age:
□ 17 - 21
□ 22 - 26
□ 27 - 31

APPENDIX D

Sign-up Sheet (Older Adults)

Name: _____

Phone Number: _____

Sex: ☐ Male ☐ Female

Age:
- ☐ 50 - 54
- ☐ 55 - 59
- ☐ 60 - 64
- ☐ 65 - 69
- ☐ 70 - 74
- ☐ 75 - 79
- ☐ 80 - 84
- ☐ Older than 84

Note: When questionnaires were distributed and collected during group meetings, the names and phone numbers of respondents were not included on the sign-up form.

APPENDIX E

Evaluation Thermometer

Evaluation Thermometer

Please provide a number between 0° and 100° to indicate your overall evaluation of:

Typical women between the ages of 18 and 25.

Positive 100° Extremely favourable
-
90° Very favourable
-
80° Quite favourable
-
70° Fairly favourable
-
60° Slightly favourable
-
50° Neither favourable nor unfavourable
-
40° Slightly unfavourable
-
30° Fairly unfavourable
-
20° Quite unfavourable
-
10° Very unfavourable
-
Negative 0° Extremely unfavourable

Response _____.

Note: For target group 2 and 4, instructions will be changed so that "women" will be replaced with "men". For target groups 3 and 4, "18 and 25" will be replaced with "65 and 74".

APPENDIX F

Stereotypic Beliefs, Affect and Symbolic Beliefs Eliciting Instructions

Stereotypic Belief-Eliciting Instructions

I am interested in the characteristics that people use in describing women between the ages of 18 and 25. I would like you to provide a description of typical members of this group. Your description should consist of a list of characteristics or, if necessary, short phrases, which you could use to describe women who are between 18 and 25 years-old (e.g. "they are intelligent", "they are timid"). Provide as many characteristics or short phrases as you think are necessary to convey your impression of this group and to describe this group adequately. *Please be honest.* Almost everyone has positive and negative things to say about most groups. Your responses will be kept strictly confidential.

Now that you have provided a description of the typical women between the ages of 18 and 25 years- old, I would like you to go back and rate the valence of each characteristic on a five point scale which will range from "very negative" (-2) to "very positive" (+2).

I would like you to now go back and indicate the percentage of typical group members who possess each characteristic. Your rating may range from 0% to 100%.

> Note: For target group 2 and 4, instructions will be changed so that "women" will be replaced with "men". For target groups 3 and 4, "18 and 25" will be replaced with "65 and 74".

Affect-Eliciting Instructions

I am interested in examining how members of various groups make you feel, that is the emotions you experience when you see, meet or even think about women between the ages of 18 and 25. Please provide a list of the feelings you experience (proud, angry, happy, disgusted) when you think about typical members of this group. Provide as many feelings or emotions you believe are necessary to convey your impression of women between 18 and 25 years-old and to describe this group adequately. *Please be honest.* Almost everyone has positive and negative things to say about most groups. Your responses will be kept strictly confidential.

Now that you have provided a description of the emotions that you experience when you think about women between 18 and 25 years-old, I would like you to go back and rate the valence of each emotion on a five point scale which will range from "very negative" (-2) to "very positive" (+2).

I would like you to now go back and indicate the percentage of typical group members who make you feel this way. Your rating may range from 0% to 100%.

Note: For target group 2 and 4, instructions will be changed so that "women" will be replaced with "men". For target groups 3 and 4, "18 and 25" will be replaced with "65 and 74".

Symbolic Belief-Eliciting Instructions

I am interested in looking at the extent to which you believe that different groups facilitate or block the attainment of values (freedom, world peace), customs or traditions (respect for law and order, freedom of speech) that you cherish. Please indicate the values, customs and traditions whose attainment is either facilitated or blocked by women between the ages of 18 and 25. Provide as many values, customs or traditions that you feel are necessary to convey your impression of this group and to describe this group adequately. *Please be honest.* Almost everyone has positive and negative things to say about most groups. Your responses will be kept strictly confidential.

Now that you have listed the values, customs and traditions that are blocked or facilitated by women between 18 and 25 years-old, I would like you to go back and indicate the extent to which each value is blocked or promoted by group members on a five point scale which will range from "almost always blocked" (-2) to "almost always facilitated" (+2).

I would like you to now go back and indicate the percentage of typical group members whom you believe blocks or promote each value. Your rating may range from 0% to 100%.

Note: For target group 2 and 4, instructions will be changed so that "women" will be replaced with "men". For target groups 3 and 4, "18 and 25" will be replaced with "65 and 74".

APPENDIX G

Contact Measure

I would now like you to indicate how frequently you have contact with individuals in each of the following groups.

Males between the ages of 18 and 25
- ☐ once a day
- ☐ once a week
- ☐ once a month
- ☐ once every three months
- ☐ once every six months
- ☐ less than once every six months

Females between the ages of 18 and 25
- ☐ once a day
- ☐ once a week
- ☐ once a month
- ☐ once every three months
- ☐ once every six months
- ☐ less than once every six months

Males between the ages of 65 and 74
- ☐ once a day
- ☐ once a week
- ☐ once a month
- ☐ once every three months
- ☐ once every six months
- ☐ less than once every six months

Females between the ages of 65 and 74
- ☐ once a day
- ☐ once a week
- ☐ once a month
- ☐ once every three months
- ☐ once every six months
- ☐ less than once every six months

APPENDIX H

Data Tables

Table H1

Attitudes toward individuals by age of participant, gender of participant, age of target, and gender of target.

Source of Variation	SS	DFt	MS	F	Sig.
Corrected Model	4680.28	15	312.02	1.81	0
Intercept	682500	1	682500	3965	0
Age of Target	390.01	1	390.01	2.26	0.14
Age of Participant	819.72	1	819.72	4.76	.03*
Gender of Participant	332.58	1	332.58	1.93	0.17
Gender of Target	367.94	1	367.94	2.14	0.15
Age of Target by Age of Participant	318.94	1	318.94	1.85	0.18
Age of Target by Gender of Participant	353.58	1	353.58	2.05	0.16
Age of Target by Gender of Target	45.01	1	45.01	0.26	0.61
Age of Participant by Gender of Participant	544.72	1	544.72	3.16	0.1
Age of Participant by Gender of Target	0.08	1	0.08	0	0.98
Gender of Participant by Gender of Target	332.58	1	332.58	1.93	0.17
Age of Target by Subject Age by Gender of Participant	1038.22	1	1038.2	6.03	.02*
Age of Target by Age of Participant by Gender of Target	7.51	1	7.51	0.04	0.84
Age of Target by Gender of Participant by Gender of Target	3.22	1	3.22	0.02	0.89
Age of Participant by Gender of Participant by Gender of Target	67.58	1	67.58	0.39	0.53
Age of Participant by Gender of Participant by Age of Target by Gender of Target	58.58	1	58.58	0.34	0.56
Error	165324	96	172.13		
Total	703705	112			
Corrected Total	21204.6	111			

* significant at .05 level; R^2 = .22; for table of means see Table H2.

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Table H2

Mean attitude toward 18-25 year-old and 65-74 year-old targets as a function of gender of target, age of participant and gender of participant.

| Age of Participant | | Age of Target | | | | |
| | | 18-25 year-old Target (n=56) | | 65-74 year-old target (n=56) | | |
		Male (sd)	Female (sd)	Male (sd)	Female (sd)	Total (sd)
Younger Participants	Male	80.00 (18.26)	88.57 (9.00)	70.00 (15.28)	78.57 (9.00)	79.29 (14.38)
	Female	69.29 (13.05)	64.29 (22.99)	75.00 (9.57)	77.14 (13.80)	71.43 (15.63)
Older Participants	Male	80.71 (4.50)	84.43 (9.86)	74.29 (16.18)	81.71 (10.67)	80.29 (11.14)
	Female	85.00 (10.41)	87.14 (7.56)	75.71 (15.12)	77.14 (12.54)	81.25 (12.14)
	Total	78.75 (13.24)	81.11 (16.43)	73.75 (13.65)	78.64 (11.14)	78.06 (13.82)

Note: Range for this scale is from 0 (Extremely unfavorable) to 100 (Extremely favorable).

Table H3

Stereotype scores by participants by age of participant, gender of participant, age of target, and gender of target.

Source of Variation	SS	DF	MS	F	Sig.
Corrected Model	7.08[b]	15	0.47	1.12	0.35
Intercept	97.15	1	97.15	230.21	0
Age of Target	1.33	1	1.33	3.14	0.1
Age of Participant	1.41	1	1.41	3.33	0.1
Gender of Participant	0.18	1	0.18	0.42	0.52
Gender of Target	0.007	1	0.007	0.017	0.9
Age of Target by Age of Participant	0.0048	1	0.005	0.01	0.92
Age of Target by Gender of Participant	0.99	1	0.99	2.34	0.13
Age of Target by Gender of Target	0.042	1	0.042	0.1	0.75
Age of Participant by Gender of	0.038	1	0.038	0.09	0.76
Age of Participant by Gender of Target	0.11	1	0.11	0.26	0.61
Gender of Participant by Gender of Target	0.46	1	0.46	1.09	0.3
Age of Target by Age of Participant by Gender of Participant	1.05	1	1.05	2.5	0.12
Age of Target by Age of Participant by Gender of Target	0.99	1	0.99	2.34	0.13
Age of Target by Gender of Participant by Gender of Target	0.022	1	0.022	0.05	0.82
Age of Participant by Gender of Participant by Gender of Target	0.37	1	0.37	0.88	0.35
Age of Target by Age of Participant by Gender of Participant by Gender of Target	0.086	1	0.086	0.2	0.65
Model	40.51	96	0.42		
Total	144.74	112			
Corrected Total	47.59	111			

Note: For the stereotypes variable, possible range is -2 to +2, $R^2 = .15$ ns, for table of means see Table H4

Table H4

Mean stereotype scores toward 18-25 year-old and 65-74 year-old targets as a function of gender of target, age of participant and gender of participant.

Age of Participant		Age of Target				
		18-25 year-old Target (n=56)		65-74 year-old target (n=56)		
		Male (sd)	Female (sd)	Male (sd)	Female (sd)	Total (sd)
Younger Participants	Male	.95 (.55)	.51 (1.07)	1.05 (.43)	.85 (.47)	.84 (.68)
	Female	.69 (.30)	.67 (.48)	.75 (.96)	1.09 (.93)	.80 (.71)
Older Participants	Male	.72 (.56)	.90 (.55)	1.45 (.62)	1.34 (.42)	1.10 (.60)
	Female	.89 (.98)	1.26 (.43)	1.02 (.56)	.77 (.38)	.99 (.62)
	Total	.81 (.62)	.83 (.71)	1.07 (.68)	1.01 (.60)	.93 (.65)

Note: For the stereotypes variable, possible range is -2 to +2

Table H5

Emotional response scores of participants by age of participant, gender of participant, age of target, and gender of target.

Source of Variation	SS	DF	MS	F	Sig.
Corrected Model	18.94[b]	15	1.26	1.19	0.3
Intercept	93.5	1	93.5	88.3	0
Age of Target	2.63	1	2.63	2.5	0.1
Age of Participant	0.58	1	0.58	0.55	0.5
Gender of Participant	3.47	1	3.47	3.28	0
Gender of Target	1.08	1	1.08	1.02	0.3
Age of Target by Age of Participant	0.51	1	0.51	0.48	0.5
Age of Target by Gender of Participant	1.54	1	1.54	1.46	0.2
Age of Target by Gender of Target	0.033	1	0.033	0.031	0.9
Age of Participant by Gender of Participant	1.64	1	1.64	1.55	0.2
Age of Participant by Gender of Target	0.78	1	0.78	0.74	0.4
Gender of Participant by Gender of Target	1.51	1	1.51	1.43	0.2
Age of Target by Age of Participant by Gender of Participant	0.58	1	0.58	0.55	0.5
Age of Target by Age of Participant by Gender of Target	0.69	1	0.69	0.65	0.4
Age of Target by Gender of Participant by Gender of Target	3.18	1	3.18	3.01	0
Age of Participant by Gender of Participant by Gender of Target	0.41	1	0.41	0.38	0.6
Age of Target by Age of Participant by Gender of Participant by Gender of Target	0.3	1	0.3	0.28	0.6
Error	101.6	96	1.06		
Total	214.04	112			
Corrected Total	120.54	111			

Note: For the emotional response variable, possible range is -2 to +2, $R^2 = .16$ *ns*, for table of means see Table H6.

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Table H6

Mean emotional response scores toward 18-25 year-old and 65-74 year-old targets as a function of gender of target, age of participant and gender of participant.

		Age of Target				
		18-25 year-old Target (n=56)		65-74 year-old target (n=56)		
Age of Participant		Male (sd)	Female (sd)	Male (sd)	Female (sd)	Total (sd)
Younger Participants	Male	.64 (.67)	1.10 (.62)	1.02 (.53)	.84 (1.00)	.90 (.71)
	Female	.70 (.75)	.05 (.70)	.96 (.58)	1.44 (.61)	.79 (.81)
Older Participants	Male	.67 (.53)	1.81 (2.97)	1.18 (.49)	1.47 (1.05)	1.28 (1.58)
	Female	.57 (1.04)	.54 (.78)	.79 (.73)	.85 (.65)	.69 (.78)
	Total	.64 (.73)	.88 (1.65)	.99 (.57)	1.15 (.86)	.91 (1.04)

Note: For the emotional response variable, possible range is -2 to +2.

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Table H7

Symbolic belief scores of participants by age of participant, gender of participant, age of target, and gender of target.

Source of Variation	SS	Df	MS	F	Sig.
Corrected Model	14.74[b]	15	0.98	1.72	0.06
Intercept	111.4	1	111.4	195.1	0
Age of Target	5.13	1	5.13	9	0
Age of Participant	0.47	1	0.47	0.83	0.36
Gender of Participant	0.83	1	0.83	1.36	0.23
Gender of Target	0.99	1	0.99	1.73	0.19
Age of Target by Age of Participant	0.82	1	0.82	1.43	0.23
Age of Target by Gender of Participant	0.18	1	0.18	0.31	0.58
Age of Target by Gender of Target	1.08	1	1.08	1.89	0.17
Age of Participant by Gender of Participant	0.5	1	0.5	0.88	0.35
Age of Participant by Gender of Target	2.2	1	2.2	0.04	0.84
Gender of Participant by Gender of Target	0.39	1	0.39	0.68	0.41
Age of Target by Age of Participant by Gender of Participant	1.65	1	1.65	2.88	0.09
Age of Target by Age of Participant by Gender of Target	1.61	1	1.61	2.82	0.1
Age of Target by Gender of Participant by Gender of Target	0.74	1	0.74	1.29	0.26
Age of Participant by Gender of Participant by Gender of Target	0.17	1	0.17	0.3	0.58
Age of Target by Age of Participant by Gender of Participant by Gender of Target	0.16	1	0.16	0.28	0.6
Error	54.8	96	0.57		
Total	180.94	112			
Corrected Total	69.55	111			

Note: For the symbolic belief variable, possible range is -2 to +2, ** significant at .01 level R^2 =.21 ns, for table of means see Table H8.

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Table H8

Mean symbolic belief scores toward 18-25 year-old and 65-74 year-old targets as a function of gender of target, age of participant and gender of participant.

		Age of Target				
		18-25 year-old Target (n=56)		65-74 year-old target (n=56)		
Age of Participant		Male (sd)	Female (sd)	Male (sd)	Female (sd)	Total (sd)
Younger Participants	Male	.99 (.62)	1.25 (.69)	1.20 (.55)	.90 (.62)	1.09 (.60)
	Female	.79 (.88)	.19 (1.04)	1.18 (.57)	.96 (1.23)	.78 (.98)
Older Participants	Male	.94 (.58)	.47 (.71)	1.35 (.36)	1.58 (.69)	1.08 (.71)
	Female	1.19 (.40)	.46 (1.08)	1.10 (1.01)	1.42 (.29)	1.04 (.82)
	Total	.98 (.62)	.59 (.94)	1.21 (.64)	1.22 (.80)	1.00 (.79)

Note: For the symbolic belief variable, possible range is -2 to +2.

Table H9

Number of characteristic listed by participants by age of participant, gender of participant, age of target, and gender of target.

Source of Variation	SS	DF	MS	F	Sig.
Corrected Model	114.00ª	15	7.6	2.26	0
Intercept	1728.57	1	1728	513	0
Age of Target	4.32	1	4.32	1.28	0.26
Age of Participant	28	1	28	8.31	.00**
Gender of Participant	9.14	1	9.14	2.71	0.1
Gender of Target	17.29	1	17.2	5.13	.03*
Age of Target by Age of Participant	0.32	1	0.32	0.09	0.76
Age of Target by Gender of Participant	0.036	1	0.03	0.01	0.92
Age of Target by Gender of Target	2.89	1	2.89	0.86	0.36
Age of Participant by Gender of Participant	1.29	1	1.29	0.38	0.54
Age of Participant by Gender of Target	28	1	28	8.31	.01**
Gender of Participant by Gender of Target	5.14	1	5.14	1.53	0.22
Age of Target by Subject Age by Gender of Participant	6.04	1	6.04	1.79	0.19
Age of Target by Age of Participant by Gender of Target	4.32	1	4.32	1.28	0.26
Age of Target by Gender of Participant by Gender of Target	2.89	1	2.89	0.86	0.36
Age of Participant by Gender of Participant by Gender of Target	0	1	0	0	0.06
Age of Target by Age of Participant by Gender of Participant by Gender of Target	4.32	1	4.32	1.28	0.20
Error	323.429	96	3.37		
Total	2166	112			

**significant at .01 level; * significant at .05 level, R^2 =.26 *ns*, for table of means see Table H10.

Table H10

Mean number of characteristics listed when describing 18-25 year-old and 65-74 year-old targets as a function of gender of target, age of participant and gender of participant.

Age of Participant		Age of Target				
		18-25 year-old Target (n=56)		65-74 year-old target (n=56)		
		Male (sd)	Female (sd)	Male (sd)	Female (sd)	Total (sd)
Younger Participants	Male	2.86 (.69)	3.86 (.90)	4.57 (2.44)	4.00 (1.63)	3.04 (1.29)
	Female	3.00 (.82)	3.00 (1.15)	3.71 (2.06)	2.43 (.53)	3.82 (1.61)
Older Participants	Male	4.00 (1.63)	5.43 (2.37)	3.00 (1.53)	6.00 (2.94)	4.25 (2.19)
	Female	2.86 (1.57)	4.86 (1.95)	4.29 (3.25)	5.00 (1.15)	4.61 (2.39)
	Total	3.21 (2.41)	3.75 (2.85)	3.54 (3.82)	3.04 (1.82)	3.93 (1.99)

Table H11

Number of emotions listed by participants by age of participant, gender of participant, age of target, and gender of target.

Source of Variation	SS	DFf	MS	F	Sig.
Corrected Model	117.63[a]	15	7.84	1	0.46
Age of Target	1.08	1	1.08	0.14	0.71
Age of Participant	16.51	1	16.51	2.11	0.15
Gender of Participant	6.51	1	6.51	0.83	0.36
Gender of Target	0.009	1	0.009	0	0.97
Age of Target by Age of Participant	4.72	1	4.72	0.6	0.44
Age of Target by Gender of Participant	0.44	1	0.44	0.1	0.81
Age of Target by Gender of Target	7.51	1	7.51	0.96	0.33
Age of Participant by Gender of Participant	1.08	1	1.08	0.14	0.71
Age of Participant by Gender of Target	47.58	1	47.58	6.02	.02*
Gender of Participant by Gender of Target	2.01	1	2.01	2.56	0.61
Age of Target by Subject Age by Gender of Participant	10.94	1	10.94	1.4	0.24
Age of Target by Age of Participant by Gender of Target	0.44	1	0.44	0.1	0.81
Age of Target by Gender of Participant by Gender of Target	2.58	1	2.58	0.33	0.57
Age of Participant by Gender of Participant by Gender of Target	9.72	1	9.72	1.24	0.27
Age of Target by Age of Participant by Gender of Participant by Gender of Target	6.51	1	6.51	0.83	0.36
Error	750.86	96	7.82		
Total	2151	112			
Corrected Total	868.49	111			

* significant at .05 level, R^2=.13 ns, for table of means see Table H12.

Table H12

Mean number of emotions listed to describe 18-25 year-old and 65-74 year-old targets as a function of gender of target, age of participant and gender of participant.

Age of Participant		Age of Target				
		18-25 year-old Target (n=56)		65-74 year-old target (n=56)		
		Male (sd)	Female (sd)	Male (sd)	Female (sd)	Total (sd)
Younger Participants	Male	3.86 (4.18)	5.71 (4.54)	2.71 (.95)	4.14 (1.95)	4.11 (3.27)
	Female	2.57 (2.23)	4.14 (2.12)	3.29 (1.38)	3.71 (2.14)	3.43 (1.97)
Older Participants	Male	3.14 (1.07)	2.43 (1.27)	5.29 (7.59)	1.71 (.76)	3.14 (3.92)
	Female	3.29 (1.25)	2.71 (1.38)	2.86 (.69)	2.57 (1.27)	2.86 (1.15)
	Total	3.21 (2.41)	3.75 (2.85)	3.54 (3.82)	3.04 (1.82)	3.38 (2.80)

Table H13

Number of values listed by participants by age of participant, gender of participant, age of target, and gender of target.

Source of Variation	SS	DF	MS	F	Sig.
Corrected Model	114.10[b]	15	7.61	1.63	0.1
Intercept	1351.08	1	1351.08	289.7	0
Age of Target	13.58	1	13.58	2.91	0.1
Age of Participant	0.08	1	0.08	0.02	0.9
Gender of Participant	5.58	1	5.58	1.2	0.28
Gender of Target	9.72	1	9.72	2.09	0.15
Age of Target by Age of Participant	2.58	1	2.58	0.56	0.46
Age of Target by Gender of Participant	8.58	1	8.58	1.84	0.18
Age of Target by Gender of Target	0.08	1	0.08	0.02	0.9
Age of Participant by Gender of Participant	23.22	1	23.22	4.98	.03*
Age of Participant by Gender of Target	6.51	1	6.51	1.4	0.24
Gender of Participant by Gender of Target	.8.0E-02	1	0.08	0.02	0.9
Age of Target by Subject Age by Gender of Participant	12.22	1	12.22	2.62	0.11
Age of Target by Age of Participant by Gender of Target	5.58	1	5.58	1.2	0.28
Age of Target by Gender of Participant by Gender of Target	1.08	1	1.08	0.23	0.63
Age of Participant by Gender of Participant by Gender of Target	0.22	1	0.22	0.05	0.83
Age of Target by Age of Participant by Gender of Target by Gender of Participant	25.08	1	25.08	5.38	0.1
Error	477.71	96	4.66		
Total	1913	11			
Corrected Total	561.92	111			

* significant at .05 level, R^2 = .20 *ns*, for table of means see Table H14.

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Table H14

Mean number of values listed to describe 18-25 year-old and 65-74 year-old targets as a function of gender of target, age of participant and gender of participant.

Age of Participant		18-25 year-old Target (n=56)		65-74 year-old target (n=56)		Total (sd)
		Male (sd)	Female (sd)	Male (sd)	Female (sd)	
Younger Participants	Male	6.57 (3.55)	4.00 (.82)	3.29 (1.98)	3.57 (1.51)	3.68 (1.85)
	Female	3.00 (1.29)	2.43 (.79)	3.71 (1.38)	2.43 (1.27)	3.21 (2.57)
Older Participants	Male	2.86 (2.54)	3.86 (4.26)	3.86 (3.39)	2.00 (.58)	2.82 (1.91)
	Female	4.14 (2.61)	3.71 (1.38)	2.71 (.76)	3.43 (1.90)	4.18 (2.47)
	Total	4.14 (2.90)	3.50 (2.27)	3.39 (2.04)	2.86 (1.48)	3.47 (2.25)

Table H15

Reported frequency of contact with 18-25 year-old males and females and with 65-74 year-old males and females.

Time	Age of Participant	Gender of Participant	Contact with 18-25 year-olds		Contact with 65-74 year-olds	
			Male	Female	Male	Female
Once a day						
	Younger	Male	28	28	10	12
		Female	27	26	9	9
	Older	Male	12	14	13	16
		Female	4	4	6	12
Once a week						
	Younger Participant	Male	--	--	10	8
		Female	--	2	7	10
	Older Participant	Male	9	8	13	7
		Female	10	9	16	15
Once a month						
	Younger Participant	Male	--	--	4	5
		Female	1	--	4	6
	Older Participant	Male	4	4	1	2
		Female	7	8	4	1

Table H15 continued

Time	Age of Participant	Gender of Participant	Contact with 18-25 year-olds		Contact with 65-74 year-olds	
			Male	Female	Male	Female
Once every 3 months						
	Younger Participant	Male	--	--	2	1
		Female	--	--	4	--
	Older Participant	Male	--	2	1	1
		Female	2	3	4	--
Once every 6 months	Younger Participant	Male	--	--	2	2
		Female	--	--	4	2
	Older Participant	Male	--	--	--	1
		Female	--	--	--	--
Less than once every 6 months						
	Younger Participant	Male	--	--	--	--
		Female	--	--	--	1
	Older Participant	Male	3	--	--	1
		Female	5	4	1	--

APPENDIX I

Open-ended Responses

Table 11
Stereotypes listed to describe 18-25 year-old females.

Stereotype	Number of Stereotypes Listed (n=121)	Percentage
intelligent	14	50.00
honest	5	17.86
confident	5	17.86
responsible	4	14.29
irresponsible	4	14.29
outgoing	4	14.29
hard to deal with	3	10.71
self respect	3	10.71
ambitious	3	10.71
educated	3	10.71
timid	2	7.14
helpful	2	7.14
caring	2	7.14
loyal	2	7.14
independent	2	7.14
friendship	2	7.14
considerate	2	7.14
lack confidence	2	7.14
happy	2	7.14
nice/kind	2	7.14
gutsy	2	7.14
curious	1	3.57
religious	1	3.57
not broad minded	1	3.57
healthy	1	3.57
humble	1	3.57
clean	1	3.57
shy	1	3.57
courageous	1	3.57
daring	1	3.57
choosing goals	1	3.57
creativity	1	3.57
childish	1	3.57
dependable	1	3.57

Table 11 continued

Stereotype	Number of Stereotypes Listed	Percentage
meaning in life	1	3.57
authority	1	3.57
successful	1	3.57
influential	1	3.57
fake	1	3.57
silly	1	3.57
immature	1	3.57
rude	1	3.57
boastful	1	3.57
moral	1	3.57
determined	1	3.57
confused	1	3.57
not respectful	1	3.57
brave	1	3.57
broad-minded	1	3.57
outspoken	1	3.57
open-minded	1	3.57
sentimental	1	3.57
physically absorbed	1	3.57
obedient	1	3.57
gullible	1	3.57
materialistic	1	3.57
arrogant	1	3.57
active	1	3.57
carefree	1	3.57
adventurous	1	3.57
fine people	1	3.57
better crowd	1	3.57
smokers	1	3.57
everything going for them	1	3.57
lots of opportunity	1	3.57
sexy	1	3.57
upbeat	1	3.57
polite	1	3.57
energetic	1	3.57
assertive	1	3.57

Table I1 continued

Stereotype	Number of Stereotypes Listed	Percentage
well groomed	1	3.57
interesting	1	3.57

Table I2
Stereotypes listed to describe 18-25 year-old males.

Stereotype	Number of Stereotypes Listed (n=104)	Percentage
intelligent	17	62.96
enjoy life	5	18.52
helpful	4	14.81
friendship	4	14.81
responsible	3	11.11
ambitious	3	11.11
broad-minded	3	11.11
polite	3	11.11
curious	2	7.41
healthy	2	7.41
caring	2	7.41
loyal	2	7.41
honest	2	7.41
respect	2	7.41
moderate	2	7.41
dependable	2	7.41
outgoing	2	7.41
educated	2	7.41
humorous	1	3.70
slow walkers	1	3.70
sense of community	1	3.70
cranky/crooked	1	3.70
forgiving	1	3.70
exciting	1	3.70
freedom	1	3.70
varied life	1	3.70
daring	1	3.70
choosing goals	1	3.70
wealth	1	3.7

Stereotype	Number of Stereotypes Listed	Percentage
creativity	1	3.70
childish	1	3.70
considerate	1	3.70
favorable	1	3.70
meaning in life	1	3.70
self respect	1	3.70
rude	1	3.70
irresponsible	1	3.70
not respectful	1	3.70
brave	1	3.70
trustworthy	1	3.70
sincere	1	3.70
nice/kind	1	3.70
fun	1	3.70
good character	1	3.70
family security	1	3.70
self discipline	1	3.70
sense of belonging	1	3.70
sensitive	1	3.70
low self esteem	1	3.70
appreciative	1	3.70
fat	1	3.70
drink/smoke	1	3.70
pleasant	1	3.70
capable	1	3.70
untidy	1	3.70
disorganized	1	3.70
aloof	1	3.70
uncertain of future	1	3.70
conforming	1	3.70
loud	1	3.7

Table I3

Stereotypes listed to describe 65-74 year-old females.

Stereotype	Number of Stereotypes Listed (n=120)	Percentage
intelligent	14	50
helpful	6	21.43
friendship	6	21.43
nice/kind	6	21.43
giving/generous	4	14.29
pleasant	4	14.29
timid	3	10.71
loyal	3	10.71
cranky/crooked	3	10.71
quiet	2	7.14
healthy	2	7.14
caring	2	7.14
enjoy life	2	7.14
honest	2	7.14
independent	2	7.14
cheerful	2	7.14
experienced	2	7.14
full of love	2	7.14
old fashioned	2	7.14
courageous	2	7.14
outgoing	2	7.14
confident	2	7.14
educated	2	7.14
fun	2	7.14
curious	1	3.57
religious	1	3.57
careful	1	3.57
not broad minded	1	3.57
slow walkers	1	3.57
responsible	1	3.57
soft spoken	1	3.57

Stereotype	Number of Stereotypes Listed	Percentage
sense of community	1	3.57
close to family	1	3.57
hard to deal with	1	3.57
respect	1	3.57
boring	1	3.57
forgiving	1	3.57
humble	1	3.57
clean	1	3.57
fragile	1	3.57
lovable	1	3.57
shy	1	3.57
exciting	1	3.57
useful	1	3.57
wealth	1	3.57
irresponsible	1	3.57
tolerant	1	3.57
controlling	1	3.57
unsure of finances	1	3.57
difficulty accepting	1	3.57
dependent	1	3.57
active	1	3.57
opinionated	1	3.57
good relationships	1	3.57
good character	1	3.57
in debt	1	3.57
polite	1	3.57
warmth	1	3.57
unfulfilled potential	1	3.57
relaxed	1	3.57
talkative	1	3.57
interesting	1	3.57
motherly	1	3.57
courteous	1	3.57

Table I3 continued

Stereotype	Number of Stereotypes Listed	Percentage
loud	1	3.57

Table I4
Stereotypes listed to describe 65-74 year-old males.

Stereotype	Number of Stereotypes Listed (N=88)	Percentage
intelligent	12	42.86
cranky	6	21.43
friendship	4	14.29
helpful	3	10.71
forgiving	3	10.71
nice/kind	3	10.71
quiet	2	7.14
giving/generous	2	7.14
religious	2	7.14
caring	2	7.14
enjoy life	2	7.14
honest	2	7.14
active	2	7.14
good character	2	7.14
pleasant	2	7.14
relaxed	2	7.14
timid	1	3.57
humorous	1	3.57
responsible	1	3.57
hard to deal with	1	3.57
sensible	1	3.57
respect	1	3.57
boring	1	3.57
independent	1	3.57
equality	1	3.57
patient	1	3.57
humble	1	3.57
cheerful	1	3.57
old fashioned	1	3.57
shy	1	3.57
dependable	1	3.57

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Stereotype	Number of Stereotypes Listed	Percentage
considerate	1	3.57
successful	1	3.57
outgoing	1	3.57
educated	1	3.57
broad-minded	1	3.57
proud	1	3.57
happy	1	3.57
content	1	3.57
outspoken	1	3.57
nasty	1	3.57
serious	1	3.57
frivolous	1	3.57
introverted	1	3.57
sympathetic	1	3.57
warmth	1	3.57
crippled	1	3.57
less active	1	3.57
enjoy hobbies	1	3.57
appreciate good music	1	3.57
easy going	1	3.57
enthusiastic	1	3.57
not physically well	1	3.57

Table I5

Stereotypes listed to describe 18-25 year-old adults.

Stereotype	Number of Stereotypes Listed (n=225)	Percentage
intelligent	31	56.36
responsible	7	12.73
honest	7	12.73
helpful	6	10.91
friendly	6	10.91
ambitious	6	10.91
outgoing	6	10.91
enjoy life	5	9.09
irresponsible	5	9.09
confident	5	9.09
educated	5	9.09
caring	4	7.27
loyal	4	7.27
self respect	4	7.27
broad-minded	4	7.27
polite	4	7.27
curious	3	5.45
healthy	3	5.45
hard to deal with	3	5.45
dependable	3	5.45
considerate	3	5.45
nice/kind	3	5.45
timid	2	3.64
respect	2	3.64
independent	2	3.64
moderate	2	3.64
daring	2	3.64
choosing goals	2	3.64
creativity	2	3.64
childish	2	3.64
meaning in life	2	3.64
rude	2	3.64
lack confidence	2	3.64
not respectful	2	3.64
brave	2	3.64

Table 15 continued

Stereotype	Number of Stereotypes Listed	Percentage
happy	2	3.64
gutsy	2	3.64
humorous	1	1.82
religious	1	1.82
not broad minded	1	1.82
slow walkers	1	1.82
sense of community	1	1.82
cranky/crooked	1	1.82
forgiving	1	1.82
humble	1	1.82
clean	1	1.82
shy	1	1.82
exciting	1	1.82
courageous	1	1.82
freedom	1	1.82
varied life	1	1.82
wealth	1	1.82
favorable	1	1.82
authority	1	1.82
successful	1	1.82
influential	1	1.82
fake	1	1.82
silly	1	1.82
immature	1	1.82
boastful	1	1.82
moral	1	1.82
determined	1	1.82
confused	1	1.82
trustworthy	1	1.82
sincere	1	1.82
outspoken	1	1.82
open-minded	1	1.82
sentimental	1	1.82
physically absorbed	1	1.82

Stereotype	Number of Stereotypes Listed	Percentage
obedient	1	1.82
gullible	1	1.82
materialistic	1	1.82
arrogant	1	1.82
fun	1	1.82
active	1	1.82
good character	1	1.82
carefree	1	1.82
adventurous	1	1.82
fine people	1	1.82
better crowd	1	1.82
smokers	1	1.82
everything going for them	1	1.82
lots of opportunity	1	1.82
sexy	1	1.82
upbeat	1	1.82
family security	1	1.82
self discipline	1	1.82
sense of belonging	1	1.82
sensitive	1	1.82
low self esteem	1	1.82
appreciative	1	1.82
fat	1	1.82
drink/smoke	1	1.82
pleasant	1	1.82
energetic	1	1.82
assertive	1	1.82
well groomed	1	1.82
interesting	1	1.82
capable	1	1.82
untidy	1	1.82
disorganized	1	1.82
aloof	1	1.82
uncertain of future	1	1.82
conforming	1	1.82
loud	1	1.82

Table I6

Stereotypes listed to describe 65-74 year-old adults.

Stereotype	Number of Stereotypes Listed (n=208)	Percentage
intelligent	26	46.43
friendly	10	17.86
helpful	9	16.07
cranky/crooked	9	16.07
nice/kind	9	16.07
giving/generous	6	10.71
pleasant	6	10.71
timid	4	7.14
quiet	4	7.14
caring	4	7.14
enjoy life	4	7.14
honest	4	7.14
forgiving	4	7.14
religious	3	5.36
loyal	3	5.36
independent	3	5.36
cheerful	3	5.36
old fashioned	3	5.36
outgoing	3	5.36
educated	3	5.36
active	3	5.36
good character	3	5.36
relaxed	3	5.36
healthy	2	3.57
responsible	2	3.57
hard to deal with	2	3.57
respect	2	3.57
boring	2	3.57
humble	2	3.57
experienced	2	3.57
full of love	2	3.57
shy	2	3.57
courageous	2	3.57
confident	2	3.57
fun	2	3.57

Table I6 continued

Stereotype	Number of Stereotypes Listed	Percentage
warmth	2	3.57
curious	1	1.79
humorous	1	1.79
careful	1	1.79
not broad minded	1	1.79
slow walkers	1	1.79
soft spoken	1	1.79
sense of community	1	1.79
close to family	1	1.79
sensible	1	1.79
equality	1	1.79
patient	1	1.79
clean	1	1.79
fragile	1	1.79
lovable	1	1.79
exciting	1	1.79
useful	1	1.79
wealth	1	1.79
dependable	1	1.79
considerate	1	1.79
successful	1	1.79
irresponsible	1	1.79
broad-minded	1	1.79
proud	1	1.79
happy	1	1.79
content	1	1.79
outspoken	1	1.79
nasty	1	1.79
tolerant	1	1.79
controlling	1	1.79
unsure of finances	1	1.79
difficulty accepting situation	1	1.79
dependent	1	1.79
opinionated	1	1.79
good relationships	1	1.79

Stereotype	Number of Stereotypes Listed	Percentage
in debt	1	1.79
polite	1	1.79
serious	1	1.79
frivolous	1	1.79
introverted	1	1.79
sympathetic	1	1.79
crippled	1	1.79
less active	1	1.79
enjoy hobbies	1	1.79
appreciate good music	1	1.79
easy going	1	1.79
enthusiastic	1	1.79
not physically well	1	1.79
unfulfilled potential	1	1.79
talkative	1	1.79
interesting	1	1.79
motherly	1	1.79
courteous	1	1.79
loud	1	1.79

Table 17
Stereotypes listed to describe female targets.

Stereotype	Number of Stereotypes Listed (n=241)	Percentage
intelligent	28	50
helpful	8	14.29
friendly	8	14.29
nice/kind	8	14.29
honest	7	12.50
confident	7	12.50
outgoing	6	10.71
timid	5	8.93
responsible	5	8.93
loyal	5	8.93
irresponsible	5	8.93
educated	5	8.93
giving/generous	4	7.14
caring	4	7.14
hard to deal with	4	7.14
independent	4	7.14
pleasant	4	7.14
healthy	3	5.36
cranky/crooked	3	5.36
courageous	3	5.36
self respect	3	5.36
ambitious	3	5.36
curious	2	3.57
quiet	2	3.57
religious	2	3.57
not broad minded	2	3.57
enjoy life	2	3.57
humble	2	3.57
cheerful	2	3.57
clean	2	3.57
experienced	2	3.57
full of love	2	3.57
old fashioned	2	3.57
shy	2	3.57

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Table 17 continued

Stereotype	Number of Stereotypes Listed	Percentage
considerate	2	3.57
lack confidence	2	3.57
happy	2	3.57
fun	2	3.57
active	2	3.57
gutsy	2	3.57
polite	2	3.57
interesting	2	3.57
careful	1	1.79
slow walkers	1	1.79
soft spoken	1	1.79
sense of community	1	1.79
close to family	1	1.79
respect	1	1.79
boring	1	1.79
forgiving	1	1.79
fragile	1	1.79
lovable	1	1.79
exciting	1	1.79
useful	1	1.79
daring	1	1.79
choosing goals	1	1.79
wealth	1	1.79
creativity	1	1.79
childish	1	1.79
dependable	1	1.79
meaning in life	1	1.79
authority	1	1.79
successful	1	1.79
influential	1	1.79
fake	1	1.79
silly	1	1.79
immature	1	1.79
rude	1	1.79
boastful	1	1.79
moral	1	1.79

Table 17 continued

Stereotype	Number of Stereotypes Listed	Percentage
determined	1	1.79
confused	1	1.79
not respectful	1	1.79
brave	1	1.79
broad-minded	1	1.79
outspoken	1	1.79
open-minded	1	1.79
sentimental	1	1.79
physically absorbed	1	1.79
obedient	1	1.79
gullible	1	1.79
materialistic	1	1.79
arrogant	1	1.79
tolerant	1	1.79
controlling	1	1.79
unsure of finances	1	1.79
difficulty accepting situation	1	1.79
dependent	1	1.79
opinionated	1	1.79
good relationships	1	1.79
good character	1	1.79
in debt	1	1.79
carefree	1	1.79
adventurous	1	1.79
fine people	1	1.79
better crowd	1	1.79
smokers	1	1.79
everything going for them	1	1.79
lots of opportunity	1	1.79
sexy	1	1.79
upbeat	1	1.79
warmth	1	1.79
energetic	1	1.79
assertive	1	1.79
well groomed	1	1.79

Table I7 continued

Stereotype	Number of Stereotypes Listed	Percentage
unfulfilled potential	1	1.79
relaxed	1	1.79
talkative	1	1.79
motherly	1	1.79
courteous	1	1.79
loud	1	1.79

Table I8
Stereotypes listed to describe male targets.

Stereotype	Number of Stereotypes Listed (n=192)	Percentage
intelligent	29	52.72
friendly	8	14.55
helpful	7	12.73
enjoy life	7	12.73
cranky/crooked	7	12.73
caring	4	7.27
responsible	4	7.27
honest	4	7.27
forgiving	4	7.27
broad-minded	4	7.27
nice/kind	4	7.27
respect	3	5.45
dependable	3	5.45
ambitious	3	5.45
outgoing	3	5.45
educated	3	5.45
good character	3	5.45
polite	3	5.45
pleasant	3	5.45
curious	2	3.64
humorous	2	3.64
quiet	2	3.64
giving/generous	2	3.64
religious	2	3.64
healthy	2	3.64
loyal	2	3.64
moderate	2	3.64
considerate	2	3.64
active	2	3.64
relaxed	2	3.64
timid	1	1.82
slow walkers	1	1.82
sense of community	1	1.82
hard to deal with	1	1.82

Table 18 continued

Stereotype	Number of Stereotypes Listed	Percentage
sensible	1	1.82
boring	1	1.82
independent	1	1.82
equality	1	1.82
patient	1	1.82
humble	1	1.82
cheerful	1	1.82
old fashioned	1	1.82
shy	1	1.82
exciting	1	1.82
freedom	1	1.82
varied life	1	1.82
daring	1	1.82
choosing goals	1	1.82
wealth	1	1.82
creativity	1	1.82
childish	1	1.82
favorable	1	1.82
meaning in life	1	1.82
successful	1	1.82
self respect	1	1.82
rude	1	1.82
irresponsible	1	1.82
not respectful	1	1.82
brave	1	1.82
trustworthy	1	1.82
sincere	1	1.82
proud	1	1.82
happy	1	1.82
content	1	1.82
outspoken	1	1.82
nasty	1	1.82
fun	1	1.82
family security	1	1.82
self discipline	1	1.82
sense of belonging	1	1.82

Stereotype	Number of Stereotypes Listed	Percentage
sensitive	1	1.82
low self esteem	1	1.82
appreciative	1	1.82
fat	1	1.82
drink/smoke	1	1.82
serious	1	1.82
frivolous	1	1.82
introverted	1	1.82
sympathetic	1	1.82
warmth	1	1.82
crippled	1	1.82
less active	1	1.82
enjoy hobbies	1	1.82
appreciate good music	1	1.82
easy going	1	1.82
enthusiastic	1	1.82
not physically well	1	1.82
capable	1	1.82
untidy	1	1.82
disorganized	1	1.82
aloof	1	1.82
uncertain of future	1	1.82
conforming	1	1.82
loud	1	1.82

Table I9
Emotional responses listed to describe 18-25 year-old female adults.

Stereotype	Number of Stereotypes Listed (n=105)	Percentage
happy	15	53.57
proud	7	25.00
disgusted	6	21.43
sad	5	17.86
angry	3	10.71
joyful	3	10.71
respectful	2	7.14
honest	2	7.14
polite	2	7.14
unhappy	2	7.14
despise	2	7.14
confused	2	7.14
enjoyable	2	7.14
pleased	2	7.14
sympathy	2	7.14
pity	2	7.14
confident	2	7.14
hopeful	2	7.14
fun	1	3.57
intelligent	1	3.57
loyal	1	3.57
disappointed	1	3.57
helpful	1	3.57
curious	1	3.57
humble	1	3.57
pleasure	1	3.57
friendly	1	3.57
freedom	1	3.57
social power	1	3.57
exciting life	1	3.57

Stereotype	Number of Stereotypes Listed	Percentage
healthy	1	3.57
independent	1	3.57
true friendship	1	3.57
concerned	1	3.57
wishful for confidence	1	3.57
broad-minded	1	3.57
rude	1	3.57
immature	1	3.57
admiration	1	3.57
responsible	1	3.57
emotional	1	3.57
snobbish	1	3.57
distant	1	3.57
creative	1	3.57
clean	1	3.57
ambitious	1	3.57
self-disciplined	1	3.57
daring	1	3.57
thankful	1	3.57
terrible	1	3.57
glad	1	3.57
caring	1	3.57
worried	1	3.57
ambivalent	1	3.57
lazy	1	3.57
not ambitious	1	3.57
dependant	1	3.57
well groomed	1	3.57
uncertain	1	3.57
peaceful	1	3.57

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Table I10
Emotional responses listed to describe 18-25 year-old male adults.

Emotional Response	Number of Emotional Responses Listed (n=90)	Percentage
happy	13	52
angry	8	32
proud	6	24
disappointed	3	12
curious	3	12
loving	3	12
disgusted	3	12
sad	2	8.00
joyful	2	8.00
social power	2	8.00
concerned	2	8.00
caring	2	8.00
worried	2	8.00
ambivalent	2	8.00
thoughtful	2	8.00
tormented	2	8.00
respectful	1	4.00
intelligent	1	4.00
loyal	1	4.00
honor	1	4.00
helpful	1	4.00
meaning in life	1	4.00
talkative	1	4.00
polite	1	4.00
moderate	1	4.00
equality	1	4.00
freedom	1	4.00
exciting life	1	4.00
wealth	1	4

Stereotype	Number of Stereotypes Listed	Percentage
healthy	1	4
independent	1	4.00
remorse	1	4.00
true friendship	1	4.00
immature	1	4.00
insecure	1	4.00
uplifting	1	4.00
paternal	1	4.00
clean	1	4.00
ambitious	1	4.00
pleased	1	4.00
empathy	1	4.00
lazy	1	4.00
not thoughtful	1	4.00
sense of humor	1	4.00
frustrated	1	4
drinking	1	4.00
impressed	1	4.00
surprised	1	4.00
satisfied	1	4

Table II 1

Emotional responses listed to describe 65-74 year-old female adults.

Emotional Response	Number of Emotional Responses Listed (n=85)	Percentage
happy	13	46.43
respectful	6	21.43
proud	5	17.86
angry	4	14.29
wisdom	3	10.71
sad	3	10.71
empathy	3	10.71
honest	2	7.14
forgiving	2	7.14
bored	2	7.14
disgusted	2	7.14
lonely	2	7.14
motherly	2	7.14
spiritual life	1	3.57
detachment	1	3.57
devout	1	3.57
fun	1	3.57
trustworthy	1	3.57
intelligent	1	3.57
loyal	1	3.57
impatience	1	3.57
welcome	1	3.57
comfortable	1	3.57
hospitable	1	3.57
honor	1	3.57
joyful	1	3.57
disappointed	1	3.57
helpful	1	3.57
pleasure	1	3.57
meaning in life	1	3.57

Emotional Response	Number of Emotional Responses Listed	Percentage
loving	1	3.57
warm	1	3.57
talkative	1	3.57
friendly	1	3.57
polite	1	3.57
old	1	3.57
old fashioned	1	3.57
strong	1	3.57
equality	1	3.57
broad-minded	1	3.57
influential	1	3.57
enjoyable	1	3.57
disillusioned	1	3.57
burdened	1	3.57
caring	1	3.57
pity	1	3.57
interesting	1	3.57
conservative	1	3.57
pleasant	1	3.57

Table I12
Emotional responses listed to describe 65-74 year-old male adults.

Emotional Response	Number of Emotional Responses Listed (n=78)	Percentage
happy	9	32.14
proud	8	28.57
angry	5	17.86
friendly	4	14.29
wisdom	3	10.71
honest	3	10.71
sad	3	10.71
trustworthy	2	7.14
disgusted	2	7.14
pleased	2	7.14
sympathy	2	7.14
thoughtful	2	7.14
kind	2	7.14
respectful	1	3.57
fun	1	3.57
intelligent	1	3.57
forgiving	1	3.57
loyal	1	3.57
comfortable	1	3.57
joyful	1	3.57
disappointed	1	3.57
helpful	1	3.57
curious	1	3.57
humble	1	3.57
warm	1	3.57
old	1	3.57
healthy	1	3.57
concerned	1	3.57
immature	1	3.57
insecure	1	3.57

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Table I12 continued

Emotional Response	Number of Emotional Responses Listed	Percentage
sweet	1	3.57
responsible	1	3.57
confident	1	3.57
understanding	1	3.57
depressed	1	3.57
don't fall in love	1	3.57
good husband material	1	3.57
hurried	1	3.57
anxious	1	3.57
motherly	1	3.57
interesting	1	3.57
drinking	1	3.57
easy going	1	3.57
impressed	1	3.57

Table I13
Emotional responses listed to describe 18-25 year-old adults.

Emotional Response	Number of Emotional Responses Listed (n=195)	Percentage
happy	28	52.83
proud	13	24.53
angry	11	20.75
disgusted	9	16.98
sad	7	13.21
joyful	5	9.43
disappointed	4	7.55
curious	4	7.55
respectful	3	5.66
loving	3	5.66
polite	3	5.66
social power	3	5.66
concerned	3	5.66
pleased	3	5.66
caring	3	5.66
worried	3	5.66
ambivalent	3	5.66
intelligent	2	3.77
hones	2	3.77
loyal	2	3.77
helpful	2	3.77
freedom	2	3.77
exciting life	2	3.77
healthy	2	3.77
independent	2	3.77
true friendship	2	3.77
immature	2	3.77
unhappy	2	3.77
despise	2	3.77
confused	2	3.77
enjoyable	2	3.77
clean	2	3.77
ambitious	2	3.77

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Emotional Response	Number of Emotional Responses Listed	Percentage
sympathy	2	3.77
pity	2	3.77
confident	2	3.77
lazy	2	3.77
thoughtful	2	3.77
tormented	2	3.77
hopeful	2	3.77
fun	1	1.89
honor	1	1.89
humble	1	1.89
pleasure	1	1.89
meaning in life	1	1.89
talkative	1	1.89
friendly	1	1.89
moderate	1	1.89
equality	1	1.89
wealth	1	1.89
remorse	1	1.89
wishful for confidence	1	1.89
broad-minded	1	1.89
rude	1	1.89
admiration	1	1.89
insecure	1	1.89
uplifting	1	1.89
paternal	1	1.89
responsible	1	1.89
emotional	1	1.89
snobbish	1	1.89
distant	1	1.89
creative	1	1.89
self-disciplined	1	1.89
daring	1	1.89
thankful	1	1.89
terrible	1	1.89
glad	1	1.89

Emotional Responses	Number of Emotional Responses Listed	Percentage
empathy	1	1.89
not ambitious	1	1.89
dependant	1	1.89
not thoughtful	1	1.89
sense of humor	1	1.89
frustrated	1	1.89
drinking	1	1.89
well groomed	1	1.89
uncertain	1	1.89
peaceful	1	1.89
impressed	1	1.89
surprised	1	1.89
satisfied	1	1.89

Table I14

Emotional responses listed to describe 65-74 year-old adults.

Emotional Response	Number of Emotional Responses Listed (n=163)	Percentage
happy	22	39.29
proud	13	23.21
angry	9	16.07
respectful	7	12.50
wisdom	6	10.71
sad	6	10.71
honest	5	8.93
friendly	5	8.93
disgusted	4	7.14
trustworthy	3	5.36
forgiving	3	5.36
empathy	3	5.36
motherly	3	5.36
fun	2	3.57
intelligent	2	3.57
loyal	2	3.57
comfortable	2	3.57
joyful	2	3.57
disappointed	2	3.57
helpful	2	3.57
bored	2	3.57
warm	2	3.57
old	2	3.57
pleased	2	3.57
lonely	2	3.57
sympathy	2	3.57
thoughtful	2	3.57
interesting	2	3.57
kind	2	3.57
spiritual life	1	1.79
detachment	1	1.79
devout	1	1.79
impatience	1	1.79

Emotional Responses	Number of Emotional Responses Listed	Percentage
welcome	1	1.79
hospitable	1	1.79
honor	1	1.79
curious	1	1.79
humble	1	1.79
pleasure	1	1.79
meaning in life	1	1.79
loving	1	1.79
talkative	1	1.79
polite	1	1.79
old fashioned	1	1.79
strong	1	1.79
equality	1	1.79
healthy	1	1.79
concerned	1	1.79
broad-minded	1	1.79
immature	1	1.79
insecure	1	1.79
sweet	1	1.79
responsible	1	1.79
influential	1	1.79
enjoyable	1	1.79
disillusioned	1	1.79
burdened	1	1.79
caring	1	1.79
pity	1	1.79
confident	1	1.79
understanding	1	1.79
depressed	1	1.79
don't fall in love	1	1.79
good husband material	1	1.79
hurried	1	1.79
anxious	1	1.79
drinking	1	1.79
easy going	1	1.79

Emotional Responses	Number of Emotional Responses Listed	Percentage
conservative	1	1.79
pleasant	1	1.79
impressed	1	1.79

Table I15
Emotional responses listed to describe female targets.

Emotional Responses	Number of Emotional Responses Listed (n=190)	Percentage
happy	28	50
proud	12	21.43
respectful	8	14.29
sad	8	14.29
disgusted	8	14.29
angry	7	12.50
honest	4	7.14
joyful	4	7.14
wisdom	3	5.36
polite	3	5.36
enjoyable	3	5.36
empathy	3	5.36
pity	3	5.36
fun	2	3.57
intelligent	2	3.57
forgiving	2	3.57
loyal	2	3.57
disappointed	2	3.57
helpful	2	3.57
pleasure	2	3.57
bored	2	3.57
friendly	2	3.57
broad-minded	2	3.57
unhappy	2	3.57
despise	2	3.57
confused	2	3.57
pleased	2	3.57
lonely	2	3.57
sympathy	2	3.57
caring	2	3.57
confident	2	3.57
motherly	2	3.57
hopeful	2	3.57

Emotional Responses	Number of Emotional Responses Listed	Percentage
spiritual life	1	1.79
detachment	1	1.79
devout	1	1.79
trustworthy	1	1.79
impatience	1	1.79
welcome	1	1.79
comfortable	1	1.79
hospitable	1	1.79
honor	1	1.79
curious	1	1.79
humble	1	1.79
meaning in life	1	1.79
loving	1	1.79
warm	1	1.79
talkative	1	1.79
old	1	1.79
old fashioned	1	1.79
strong	1	1.79
equality	1	1.79
freedom	1	1.79
social power	1	1.79
exciting life	1	1.79
healthy	1	1.79
independent	1	1.79
true friendship	1	1.79
concerned	1	1.79
wishful for confidence	1	1.79
rude	1	1.79
immature	1	1.79
admiration	1	1.79
responsible	1	1.79
influential	1	1.79
emotional	1	1.79
snobbish	1	1.79
distant	1	1.79

Emotional Responses	Number of Emotional Responses Listed	Percentage
creative	1	1.79
clean	1	1.79
ambitious	1	1.79
self-disciplined	1	1.79
daring	1	1.79
thankful	1	1.79
terrible	1	1.79
glad	1	1.79
disillusioned	1	1.79
burdened	1	1.79
worried	1	1.79
ambivalent	1	1.79
lazy	1	1.79
not ambitious	1	1.79
dependant	1	1.79
interesting	1	1.79
well groomed	1	1.79
uncertain	1	1.79
peaceful	1	1.79
conservative	1	1.79
pleasant	1	1.79

Table I16
Emotional responses listed to describe male targets.

Emotional Responses	Number of Emotional Responses Listed (n=168)	Percentage
happy	22	41.51
proud	14	26.42
angry	13	24.53
sad	5	9.43
disgusted	5	9.43
disappointed	4	7.55
curious	4	7.55
friendly	4	7.55
thoughtful	4	7.55
wisdom	3	5.66
hones	3	5.66
joyful	3	5.66
loving	3	5.66
concerned	3	5.66
pleased	3	5.66
respectful	2	3.77
trustworthy	2	3.77
intelligent	2	3.77
loyal	2	3.77
helpful	2	3.77
social power	2	3.77
healthy	2	3.77
immature	2	3.77
insecure	2	3.77
sympathy	2	3.77
caring	2	3.77
worried	2	3.77
ambivalent	2	3.77
tormented	2	3.77
drinking	2	3.77
kind	2	3.77
impressed	2	3.77
fun	1	1.89

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Emotional Responses	Number of Emotional Responses Listed	Percentage
forgiving	1	1.89
comfortable	1	1.89
honor	1	1.89
humble	1	1.89
meaning in life	1	1.89
warm	1	1.89
talkative	1	1.89
polite	1	1.89
old	1	1.89
moderate	1	1.89
equality	1	1.89
freedom	1	1.89
exciting life	1	1.89
wealth	1	1.89
independent	1	1.89
remorse	1	1.89
true friendship	1	1.89
uplifting	1	1.89
paternal	1	1.89
sweet	1	1.89
responsible	1	1.89
clean	1	1.89
ambitious	1	1.89
empathy	1	1.89
confident	1	1.89
lazy	1	1.89
not thoughtful	1	1.89
sense of humor	1	1.89
frustrated	1	1.89
understanding	1	1.89
depressed	1	1.89
don't fall in love	1	1.89
good husband material	1	1.89
hurried	1	1.89
anxious	1	1.89

Emotional Responses	Number of Emotional Responses Listed	Percentage
motherly	1	1.89
interesting	1	1.89
easy going	1	1.89
surprised	1	1.89
satisfied	1	1.89

Table I17
Symbolic beliefs listed to describe 18-25 year-old female adults.

Symbolic Belief	Number of Symbolic Beliefs Listed (n=94)	Percentage
equality	5	19.23
religious	5	19.23
freedom of speech	4	15.38
independence	4	15.38
family security	4	15.38
politeness	4	15.38
world at peace	3	11.54
freedom	3	11.54
law and order	3	11.54
self respect	2	7.69
intelligent	2	7.69
enjoy life	2	7.69
helpful	2	7.69
criminals	2	7.69
sense of belonging	2	7.69
wealth	2	7.69
protective of environment	2	7.69
unity with nature	2	7.69
creative	2	7.69
respect for tradition	1	3.85
respect human rights	1	3.85
belief in family	1	3.85
wisdom	1	3.85
respect elders	1	3.85
honest	1	3.85
clean	1	3.85
loyal	1	3.85
daring	1	3.85
social power	1	3.85
true friendship	1	3.85

Symbolic Beliefs	Number of Symbolic Beliefs Listed	Percentage
capable	1	3.85
exciting life	1	3.85
block equality	1	3.85
broad-minded	1	3.85
healthy	1	3.85
obedient	1	3.85
peace of mind	1	3.85
curious	1	3.85
outspoken	1	3.85
animal rights	1	3.85
physical appearance	1	3.85
forgiving	1	3.85
express values	1	3.85
do not follow world events	1	3.85
dependent	1	3.85
smoke/drink	1	3.85
different morals	1	3.85
respectful	1	3.85
not as family oriented	1	3.85
less religious	1	3.85
less respect for tradition	1	3.85
irresponsible	1	3.85
not hard working	1	3.85
sexually promiscuous	1	3.85
challenge standards	1	3.85
eager to further lives	1	3.85
care for others	1	3.85
self discipline	1	3.85
no respect for elders	1	3.85
poor communication	1	3.85
coral decline	1	3.85
good work ethic	1	3.85

Table I18
Symbolic beliefs listed to describe 18-25 year-old male adults.

Symbolic Belief	Number of Symbolic Beliefs Listed (n=116)	Percentage
freedom	9	32.14
exciting life	8	28.57
equality	6	21.43
world at peace	4	14.29
respect for tradition	4	14.29
pleasure	4	14.29
family security	4	14.29
politeness	4	14.29
honest	3	10.71
enjoy life	3	10.71
loyal	3	10.71
social justice	3	10.71
social power	3	10.71
sense of belonging	3	10.71
respectful	3	10.71
self discipline	3	10.71
self respect	2	7.14
respect elders	2	7.14
daring	2	7.14
ambitious	2	7.14
childish	2	7.14
true friendship	2	7.14
inner harmony	2	7.14
protective of environment	2	7.14
care for others	2	7.14
wisdom	1	3.57
intelligent	1	3.57
clean	1	3.57
national security	1	3.57

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Table I18 continued

Symbolic Beliefs	Number of Symbolic Beliefs Listed	Percentage
proud	1	3.57
helpful	1	3.57
social recognition	1	3.57
law and order	1	3.57
mature love	1	3.57
capable	1	3.57
independence	1	3.57
broad-minded	1	3.57
respect law and order	1	3.57
sincerity	1	3.57
curious	1	3.57
different morals	1	3.57
less religious	1	3.57
not hard working	1	3.57
fair	1	3.57
purpose in life	1	3.57
courteous	1	3.57
well-liked	1	3.57
traditional	1	3.57
self absorbed	1	3.57
ignore elders	1	3.57
no respect for elders	1	3.57
bad work ethic	1	3.57
political views	1	3.57
lazy	1	3.57
studious	1	3.57
democracy	1	3.57

Table I19
Symbolic beliefs listed to describe 65-74 year-old female adults.

Symbolic Belief	Number of Symbolic Beliefs Listed (n=80)	Percentage
wisdom	5	17.86
law and order	4	14.29
family security	4	14.29
self respect	3	10.71
freedom of speech	3	10.71
respect for tradition	3	10.71
enjoy life	3	10.71
religious	3	10.71
true friendship	3	10.71
independence	3	10.71
world at peace	2	7.14
equality	2	7.14
freedom	2	7.14
respect elders	2	7.14
honest	2	7.14
strong values	2	7.14
peace of mind	2	7.14
different morals	2	7.14
respectful	2	7.14
nurturing	2	7.14
freedom of choice	1	3.57
confused	1	3.57
raising children	1	3.57
slow	1	3.57
respect human rights	1	3.57
belief in family	1	3.57
intelligent	1	3.57
clean	1	3.57
national security	1	3.57
loyal	1	3.57

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Symbolic Beliefs	Number of Symbolic Beliefs Listed	Percentage
proud	1	3.57
stubborn	1	3.57
loving	1	3.57
social recognition	1	3.57
authority	1	3.57
daring	1	3.57
kind	1	3.57
giving	1	3.57
considerate	1	3.57
put down	1	3.57
unwise	1	3.57
choose own goals	1	3.57
spiritual	1	3.57
dependent	1	3.57
smoke/drink	1	3.57
protective	1	3.57

Table I20
Symbolic beliefs listed to describe 65-74 year-old male adults.

Symbolic Belief	Number of Symbolic Beliefs Listed (n=94)	Percentage
wisdom	9	32.14
freedom	7	25.00
family security	5	17.86
world at peace	4	14.29
honest	4	14.29
law and order	4	14.29
religious	4	14.29
politeness	4	14.29
respect for tradition	3	10.71
intelligent	3	10.71
loyal	3	10.71
ambitious	3	10.71
freedom of speech	2	7.14
equality	2	7.14
helpful	2	7.14
faithful	2	7.14
pleasure	2	7.14
social recognition	2	7.14
true friendship	2	7.14
self respect	1	3.57
freedom of choice	1	3.57
confused	1	3.57
respect human rights	1	3.57
belief in family	1	3.57
enjoy life	1	3.57
clean	1	3.57
strong values	1	3.57
authority	1	3.57
daring	1	3.57
giving	1	3.57

Table 120 continued

Symbolic Beliefs	Number of Symbolic Beliefs Listed	Percentage
considerate	1	3.57
social power	1	3.57
inner harmony	1	3.57
independence	1	3.57
sense of belonging	1	3.57
broad-minded	1	3.57
healthy	1	3.57
respect law and order	1	3.57
protective of environment	1	3.57
outspoken	1	3.57
physical appearance	1	3.57
express values	1	3.57
respectful	1	3.57
care for others	1	3.57
less caring	1	3.57
bilingualism	1	3.57

Table I21
Symbolic beliefs listed to describe 18-25 year-old adults.

Symbolic Belief	Number of Symbolic Beliefs Listed (n=214)	Percentage
freedom	12	22.22
equality	11	20.37
exciting life	9	16.67
family security	8	14.81
politeness	8	14.81
world at peace	7	12.96
respect for tradition	5	9.26
enjoy life	5	9.26
religious	5	9.26
independence	5	9.26
sense of belonging	5	9.26
self respect	4	7.41
freedom of speech	4	7.41
honest	4	7.41
loyal	4	7.41
pleasure	4	7.41
law and order	4	7.41
social power	4	7.41
protective of environment	4	7.41
respectful	4	7.41
self discipline	4	7.41
intelligent	3	5.56
respect elders	3	5.56
helpful	3	5.56
daring	3	5.56
social justice	3	5.56
true friendship	3	5.56
care for others	3	5.56
wisdom	2	3.70
clean	2	3.70
ambitious	2	3.70
childish	2	3.70
inner harmony	2	3.70
capable	2	3.70

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Symbolic Beliefs	Number of Symbolic Beliefs Listed	Percentage
criminals	2	3.70
wealth	2	3.70
broad-minded	2	3.70
curious	2	3.70
unity with nature	2	3.70
different morals	2	3.70
less religious	2	3.70
not hard working	2	3.70
creative	2	3.70
no respect for elders	2	3.70
respect human rights	1	1.85
belief in family	1	1.85
national security	1	1.85
proud	1	1.85
social recognition	1	1.85
mature love	1	1.85
block equality	1	1.85
healthy	1	1.85
obedient	1	1.85
respect law and order	1	1.85
peace of mind	1	1.85
sincerity	1	1.85
outspoken	1	1.85
animal rights	1	1.85
physical appearance	1	1.85
forgiving	1	1.85
express values	1	1.85
do not follow world events	1	1.85
dependent	1	1.85
smoke/drink	1	1.85
not as family oriented	1	1.85
less respect for tradition	1	1.85
irresponsible	1	1.85
sexually promiscuous	1	1.85
challenge standards	1	1.85

Symbolic Beliefs	Number of Symbolic Beliefs Listed	Percentage
eager to further lives	1	1.85
fair	1	1.85
purpose in life	1	1.85
courteous	1	1.85
well-liked	1	1.85
traditional	1	1.85
self absorbed	1	1.85
ignore elders	1	1.85
poor communication	1	1.85
coral decline	1	1.85
good work ethic	1	1.85
bad work ethic	1	1.85
political views	1	1.85
lazy	1	1.85
studious	1	1.85
democracy	1	1.85

Table I22
Symbolic beliefs listed to describe 65-74 year-old adults.

Symbolic Beliefs	Number of Symbolic Beliefs Listed (n=174)	Percentage
wisdom	14	25.00
freedom	9	16.07
family security	9	16.07
law and order	8	14.29
religious	7	12.50
world at peace	6	10.71
respect for tradition	6	10.71
honest	6	10.71
freedom of speech	5	8.93
true friendship	5	8.93
self respect	4	7.14
equality	4	7.14
intelligent	4	7.14
enjoy life	4	7.14
loyal	4	7.14
independence	4	7.14
politeness	4	7.14
strong values	3	5.36
social recognition	3	5.36
ambitious	3	5.36
respectful	3	5.36
freedom of choice	2	3.57
confused	2	3.57
respect human rights	2	3.57
belief in family	2	3.57
respect elders	2	3.57
clean	2	3.57
helpful	2	3.57
faithful	2	3.57
pleasure	2	3.57
authority	2	3.57
daring	2	3.57
giving	2	3.57

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Symbolic Beliefs	Number of Symbolic Beliefs Listed	Percentage
considerate	2	3.57
peace of mind	2	3.57
different morals	2	3.57
nurturing	2	3.57
raising children	1	1.79
slow	1	1.79
national security	1	1.79
proud	1	1.79
stubborn	1	1.79
loving	1	1.79
kind	1	1.79
put down	1	1.79
unwise	1	1.79
social power	1	1.79
inner harmony	1	1.79
sense of belonging	1	1.79
broad-minded	1	1.79
healthy	1	1.79
respect law and order	1	1.79
protective of environment	1	1.79
outspoken	1	1.79
physical appearance	1	1.79
express values	1	1.79
choose own goals	1	1.79
spiritual	1	1.79
dependent	1	1.79
smoke/drink	1	1.79
care for others	1	1.79
less caring	1	1.79
bilingualism	1	1.79
protective	1	1.79

Table I23
Symbolic beliefs listed to describe female targets.

Symbolic Beliefs	Number of Symbolic Beliefs Listed (n=178)	Percentage
religious	8	14.81
family security	8	14.81
freedom of speech	7	12.96
equality	7	12.96
law and order	7	12.96
independence	7	12.96
wisdom	6	11.11
self respect	5	9.26
world at peace	5	9.26
freedom	5	9.26
enjoy life	5	9.26
respect for tradition	4	7.41
true friendship	4	7.41
politeness	4	7.41
intelligent	3	5.56
respect elders	3	5.56
honest	3	5.56
peace of mind	3	5.56
different morals	3	5.56
respectful	3	5.56
respect human rights	2	3.70
belief in family	2	3.70
clean	2	3.70
strong values	2	3.70
loyal	2	3.70
helpful	2	3.70
daring	2	3.70
criminals	2	3.70
sense of belonging	2	3.70
wealth	2	3.70
protective of environment	2	3.70
unity with nature	2	3.70
dependent	2	3.70

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Symbolic Beliefs	Number of Symbolic Beliefs Listed	Percentage
smoke/drink	2	3.70
creative	2	3.70
nurturing	2	3.70
freedom of choice	1	1.85
confused	1	1.85
raising children	1	1.85
slow	1	1.85
national security	1	1.85
proud	1	1.85
stubborn	1	1.85
loving	1	1.85
social recognition	1	1.85
authority	1	1.85
kind	1	1.85
giving	1	1.85
considerate	1	1.85
put down	1	1.85
unwise	1	1.85
social power	1	1.85
capable	1	1.85
exciting life	1	1.85
block equality	1	1.85
broad-minded	1	1.85
healthy	1	1.85
obedient	1	1.85
curious	1	1.85
outspoken	1	1.85
animal rights	1	1.85
physical appearance	1	1.85
forgiving	1	1.85
express values	1	1.85
do not follow world events	1	1.85
choose own goals	1	1.85
spiritual	1	1.85
not as family oriented	1	1.85

Table I23continued

Symbolic Beliefs	Number of Symbolic Beliefs Listed	Percentage
less religious	1	1.85
less respect for tradition	1	1.85
irresponsible	1	1.85
not hard working	1	1.85
sexually promiscuous	1	1.85
challenge standards	1	1.85
eager to further lives	1	1.85
care for others	1	1.85
self discipline	1	1.85
no respect for elders	1	1.85
poor communication	1	1.85
coral decline	1	1.85
good work ethic	1	1.85
protective	1	1.85

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Table I24
Symbolic beliefs listed to describe male targets.

Symbolic Beliefs	Number of Symbolic Beliefs Listed (n=210)	Percentage
freedom	16	28.57
wisdom	10	17.86
family security	9	16.07
world at peace	8	14.29
equality	8	14.29
exciting life	8	14.29
politeness	8	14.29
respect for tradition	7	12.50
honest	7	12.50
loyal	6	10.71
pleasure	6	10.71
ambitious	5	8.93
law and order	5	8.93
intelligent	4	7.14
enjoy life	4	7.14
religious	4	7.14
social power	4	7.14
true friendship	4	7.14
sense of belonging	4	7.14
respectful	4	7.14
self respect	3	5.36
helpful	3	5.36
social recognition	3	5.36
daring	3	5.36
social justice	3	5.36
inner harmony	3	5.36
protective of environment	3	5.36
care for others	3	5.36
self discipline	3	5.36
freedom of speech	2	3.57
respect elders	2	3.57
clean	2	3.57
faithful	2	3.57

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Table 124 continued

Symbolic Beliefs	Number of Symbolic Beliefs Listed	Percentage
childish	2	3.57
independence	2	3.57
broad-minded	2	3.57
respect law and order	2	3.57
freedom of choice	1	1.79
confused	1	1.79
respect human rights	1	1.79
belief in family	1	1.79
national security	1	1.79
strong values	1	1.79
proud	1	1.79
authority	1	1.79
giving	1	1.79
considerate	1	1.79
mature love	1	1.79
capable	1	1.79
healthy	1	1.79
sincerity	1	1.79
curious	1	1.79
outspoken	1	1.79
physical appearance	1	1.79
express values	1	1.79
different morals	1	1.79
less religious	1	1.79
not hard working	1	1.79
fair	1	1.79
purpose in life	1	1.79
courteous	1	1.79
well-liked	1	1.79
traditional	1	1.79
self absorbed	1	1.79
ignore elders	1	1.79
less caring	1	1.79
bilingualism	1	1.79
no respect for elders	1	1.79

Symbolic Beliefs	Number of Symbolic Beliefs Listed	Percentage
bad work ethic	1	1.79
political views	1	1.79
lazy	1	1.79
studious	1	1.79
democracy	1	1.79