# **Dating Preferences in Later Life**

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## Abstract

Proponents of evolutionary theory assert that mate selection preferences are affected by the biology of reproduction, and that sex differences in mate preferences reflect biological differences regarding reproduction. On the other hand, the life-span developmental model sees development as a dialectical process in which the individual changes in response to societal demands. The life-span developmental model pays attention to social context to explain differences in the time of onset, direction, and duration of developmental stages. The current study utilized personal advertisements to examine and explore differences in mate preference throughout the life span, and to determine which theory was most fitting to dating in later life. Overall, results indicated that both evolutionary theory and the life-span developmental model could be used to explain trends in dating preference

# Dating Preferences in Later Life

With the rise in the population of elderly people, the study of ageing will also increase in importance. The country's population will have a greater proportion of older people than ever before (Health Canada, 2002). These people will bring to old age new interests, new skills, and a new perspective on ageing. People, both young and old, will need to better understand the process of ageing.

While mate preferences and dating in the earlier stages of life have been well documented, dating in the later stages of life has been almost ignored. Little is known about the dating and courtship patterns of the elderly. It may be inappropriate to generalise mate selection theories to older people, given that they face distinct dating challenges and may have different preferences for a potential mate than younger individuals. Research is lacking in the area of dating and sexuality where individuals have lived to a more advanced age where reproducing is not an urgent issue, or in some cases is no longer physically possible.

The current study utilised personal advertisements to examine and explore differences in dating preferences across the life span and compared predictions from evolutionary perspective and the life span developmental model to determine which theory was most fitting to describe dating trends in later life. The following sections will discuss (a) evolutionary perspective, (b) life span developmental model, (c) the physiological changes in later life, and (d) the present research.

## **Evolutionary Perspective**

Supporters of evolutionary theory state that mate selection preferences are influenced by the biology of reproduction and that sex differences in mate preferences reflect biological differences with respect to reproduction (Buss, 1994a; Kenrick,

Sadallan, Groth, & Trost, 1990; Trivers, 1985). For example, women bear limited numbers of offspring; however men can impregnate large numbers of women (Trivers, 1972). According to evolutionary theory, men are said to be attracted to the opposite sex primarily by visual cues that signal the capacity to reproduce such as youth, physical attractiveness, and shiny hair (Symons, 1979, 1995). Women are said to seek non-appearance-related factors and rather focus on cues to resource acquisition that maximise the survival prospects of each of their offspring (Buss, 1989a; Symons, 1979). It is for these reasons that males and females have evolved different adaptive strategies when seeking a potential mate. In general, the common strategy for males is to acquire as many mates as possible, while for females the common strategy is to acquire a mate with the best available genotype who will invest in her offspring.

Trivers (1972) argues that the sex that invests greater resources in its offspring (often, but not always the female) will evolve to be more choosy or discriminating when selecting a mate. With humans, a woman's absolute minimum parental investment is internal fertilisation followed by a 9-month period of gestation. Historically, females would have generally benefited more from a selective mating strategy and therefore women are predicted to have evolved mechanisms that lead to greater selectivity when choosing a mate. For example, those females who selectively mated with males who were more committed to them and were more willing to provide resources were probably more reproductively successful than those females who mated indiscriminately. Research has shown that females are in fact more likely to be particular and discriminating because they are the ones to experience fertilisation, gestation, and lactation (Buss, 1994; Lampert & Friedman, 1992; Kenrick, Sadallan, Groth, & Trost, 1990; Symons, 1979). In contrast, the sex that invests less in offspring will evolve to be

less choosy and hence more competitive with members of its own sex for sexual access to the opposite sex. The fundamental tenets of Trivers' theory have been strongly supported by empirical evidence from a variety of species (Trivers, 1985).

Research relevant to aspects of evolutionary theory as it applies to ageing includes (a) facial symmetry, (b) waist-to-hip ratio, and (c) age.

Facial Symmetry as a Sign of Fitness

One line of research has shown that symmetrical faces are viewed as more attractive (Gangestad & Thornhill, 1997). A study was conducted examining the relationship between facial and bodily asymmetries and judgements of attractiveness (Gangestad, Thornhill, &Yeo, 1994). Environmental and physical insults producing asymmetries during development may provide a cue to poor health or to the prevalence of parasites that inhibit the human body. Because physical asymmetries can be caused by parasites, the degree of asymmetry can be used as a cue to the health status of the individual. The actual asymmetry in features such as foot breadth, handbreadth, ear length, and ear-breadth were measured. These people were then evaluated for attractiveness. It was found that less symmetrical people were considered less attractive. Further, older people's faces were far more asymmetrical than younger people's faces, indicating that symmetry also provides a cue to youth. Other research documented that facial symmetry was positively linked with psychological and physiological health indicators (Shackelford & Larsen, 1997). Evidence indicates that the degree of asymmetry has been used as a cue to the health status and as an indicator of attractiveness of an individual.

# Waist-to-Hip Ratio as a Sign of Fitness

Features of the entire body also provide cues to a woman's reproductive capacity. Whereas men's preferences for a particular body size may vary across cultures, the preference of a particular ratio between the size of a woman's waist and the size of her hips may be universal (Singh, 1993; Singh & Young, 1995). The waistto-hip ratio (WHR) is similar for the sexes before puberty. After puberty, women's hip fat deposits cause their WHRs to become significantly lower than that of men's. WHR is an accurate indication of a woman's reproductive status. Women with higher ratios have more difficulty becoming pregnant, and those who do get pregnant do so at a later age than do women with lower ratios. The WHR is also an accurate indication of longterm health status. The distribution of fat has been linked to diseases such as diabetes, hypertension, heart attack, stroke, and gallbladder disorders. Therefore, the link between the WHR, health, and reproductive status makes it a reliable cue for men's preferences in a mate.

# Age as a Predictor of Desirability

Given the very long period of dependency in human offspring, younger women are more likely to live long enough to raise a child. Older women become increasingly less likely to survive childbirth and more likely to have various reproductive complications. Age is a detectable factor that may be correlated with reproductive competence. In addition, older women and men are more likely to have reduced reproductive aptness due to a longer period of exposure to parasites, accidents, and other risks. Thus, ageing may modify the optimal mating strategy of women, making women increasingly concerned with their partner's parental ability and investment. As a woman ages, she is less likely to produce multiple numbers of offspring. In addition,

the conditions for successfully rearing children may become more challenging. Therefore, as women age, it is assumed that women should be more concerned with the parenting skills in a potential mate (Gangestad & Simpson, 2000).

Based on evolutionary theory, a male's preference for younger females should be minimal in the early years and should increase as he gets older, while a woman's preference for a somewhat older male should remain constant. Since few women are fertile beyond 45 years, the older a man becomes the younger his wife must be. Women have no such restrictions in choosing fertile males (Kenrick & Keefe, 1992).

At the time that the evolution of male and female preferences is likely to have occurred, women depended on the hunting and fighting skills of their husbands. Fertile women needed young men whether it was to provide meat and protection, or to live long enough to raise children. A man committing to a woman must seize as many of her breeding years as he can. The older he is, the less desirable a young woman may find him and the more he will be pushed toward choosing the marginally fertile and the improbably fertile female. Within an evolutionary context, choosing a younger wife only makes sense if a man increases his biological fitness and if a woman does not jeopardise hers.

Men of all ages value signs of fertility in women (Kenrick & Trost, 1996). Two hundred nine teenagers were interviewed regarding age limits they would view as acceptable, as well as the age of a dating partner they would find ideal. Teenage males were willing to date girls slightly younger than themselves, and reported that their ideally attractive partner would be several years older than themselves. Preferences of teenage females were similar in pattern to those of adult females, ranging on average from their own age to several years older. Although teenage males did not appear to

believe they had much chance of attracting woman in their early 20s, and had little experience dating older women, they nevertheless found these older women attractive (Kenrick et al., 1996).

Supporters of evolutionary theory would argue that during evolution, the older the individual, the less one will benefit from the genetic advantages associated with evolutionary selection. In other words, the benefits resulting from evolutionary selection display a negative age correlation (Finch, 1996; Jazwinski, 1996). This claim is in line with the idea that evolutionary selection is tied to the process of reproductive fitness and its place in the first half of the life course. Therefore, the older one becomes, the more one will need culture-based resources (i.e., material, social, economic, psychological) to generate and maintain high levels of functioning (Baltes & Kliegl, 1992; Dixon & Backman 1995).

# <u>Life-Span Developmental Perspective</u>

The "nature-nurture" issue identifies the most basic division in explanatory models that focus on human development. While most theories acknowledge that both heredity and environment affect behaviour, theories vary in the emphasis placed on each factor. There do appear to be universals in human development, such as the broadening of social awareness and understanding from the pre-school years through adolescence and the decline in the speed of mental processing later in life. Nevertheless, individual differences in the developmental path are great and at least some of these changes can be linked to variables such as gender, ethnicity, or culture. Some of these differences may be rooted in biological differences and some are likely to be socially conditioned.

One of the newer perspectives in the social psychology of ageing, the life-span developmental perspective, sees the individual as continually changing from birth to death (Balthes & Goulet, 1970). Unlike stage models, it does not describe an end point or goal of development. Instead, the life-span developmental model treats crisis and change as a constant part of life.

The life-span developmental model sees development as a dialectical process in which the individual changes in response to societal demands and society changes in response to individual action and adaptation (Riegel, 1975). Life-span developmental theorists find many patterns and stages in ageing. They say that people's personalities differ, as do their coping styles and the resources they use in coping with the world. People live in different social classes and come from different cohorts. All of this creates varied patterns of ageing. The life-span developmental model also turns the researcher's attention to the social context to explain the differences in the time of onset, direction, and duration of developmental stages (Novak, 1985).

A more complete view is offered by the life-span developmental approach, in which development is viewed pluralistically. According to this perspective, development and change are considered to result from multiple causes, and to be lifelong (Baltes, Resse, & Lipsitt, 1980). Some earlier studies can be said to have investigated biological age-related influences, but to have neglected the other important sources of influence on human development, being cohort characteristics, and personal or individual factors. According to life-span developmental approach, this increase in complexity is necessary to account for the complexity of human development (Baltes 1982). From a life span developmental perspective, one would predict that dating preferences would also change throughout the life span.

# Physiological Changes in Later Life

The marked increase in life expectancy over the past century has meant that individuals over the age of 65 years form an increasingly large proportion of our population. Yet, relatively little attention has been focused on the sexual problems and concerns of the elderly and it is difficult to obtain information with respect to sexuality in later life (Spence, 1992).

Cultural attitudes that honour fertility and youthfulness may contribute to the expectation that older people are, or ought to be, asexual (Deacon, Minichiello, & Plummer, 1995). Although sex roles have changed and there has been more freedom of sexual expression since the 1960s, the stereotypes that older people are physically unattractive, uninterested in sex, and incapable of achieving sexual arousal are still widely held (Hall, Selby, & Vanclay, 1982).

The media is an important influence on attitudes in the wider community. Social and cultural definitions of sexuality and ageing reflected in the mass media influence how older people might perceive themselves. Education in sexuality and ageing is essential for those responsible for portraying images of older people in all forms of the media (Vasil & Wass, 1993).

Unfortunately, a wide variety of negative attitudes exist within society concerning sexual behaviour and older people which has influenced the thinking of older people themselves, in addition to the helping professions and the general population (Spence, 1992). The constraints society imposes on older people's sexual freedom are particularly evident in elder care institutions (Deacon et al., 1995). A study of nursing staff in an extended care unit still identified much staff discomfort about sexual expression among the elderly. The only sexual behaviours viewed as being acceptable

by nursing staff were hugging and kissing on the cheek (Szasz, 1983). In contrast, graduate nursing students and freshmen medical students viewed older people more positively if they were believed to be sexually active (Damrosch, 1984; Damrosch & Fishman, 1985).

Older residents who display any form of sexual expression are often regarded by staff as having a behavioural problem (Brown, 1989). Staff attitudes toward masturbation or sexual activity between unmarried residents has been reported to be disapproving and repressive (Datan & Rodeheaver, 1983; Robinson, 1983).

Several studies have revealed the negative and ageism attitudes of staff, particularly in nursing homes. These studies highlight the need for education for caregivers to promote attitudinal changes and, therefore, more therapeutic and holistic care to ensure the rights of older residents to sexual expression (Deacon et al., 1995). Fortunately, societal attitudes towards sexual functioning for ageing adults are gradually changing.

There has been an increase in the number of elderly persons seeking treatment for sexual difficulties (Renshaw, 1983). Older adults may experience sexual problems and concerns that are not different from those of young people, however biological and psychological factors may need to be looked at more closely with an ageing population (Leiblum & Segraves, 1989). The ageing process brings with it certain changes in both male and female sexual reaction; however, the majority of healthy people remain sexually active on a regular basis until advanced old age (Johnson, 1995).

Older people who lack knowledge about the normal age related changes in sexual functioning and adopt uninformed societal attitudes about sexual activity in later life may experience anxiety regarding sexual expression (Deacon et al., 1995). Of

particular relevance to older people is the fear and anxiety that may result from negative interpretation of the age-related changes in genital structures and sexual responding (Spence, 1992). Despite the changes in sexuality with age, age itself does not result in a cessation of sexuality. Instead, sexuality changes in its expression.

# Male Sexuality in Later Life

The ageing of the male reproductive system occurs gradually over the later years of adulthood. Unlike women, men retain the ability to father children well into old age. As is true for women, there is a general slowing down associated with the ageing process that affects sexuality (Johnson, 1995).

For example, men tend to show increased time required to produce a full erection, an increase in the time that erections can be maintained prior to ejaculation, a decrease in force of ejaculation, and an increase in the duration of the refractory phase (Spence, 1992).

Although the incidence of sexual dysfunction increases in old age, this is primarily related to the increased rate of health problems, rather than old age (Spence, 1992). Numerous forms of endocrine, vascular, and neurological disorders in addition to medication and surgery may interfere in sexual function (Spence, 1992). Changes that occur in sexual physiology of an ageing male can affect both erectile function and ejaculation. These changes do not have any functional impact on the subjective enjoyment of the sexual encounter. However, knowledge that these changes are not dysfunctional and assistance with the adjustment of sexual practices may be crucial in preventing dysfunction due to performance anxiety (Deacon et al., 1995).

Erectile dysfunction (ED), sometimes called "impotence", is the repeated inability to get or keep an erection firm enough for sexual intercourse. In older men, ED usually

has a physical cause, such as disease, injury, or side effects of drugs. About five percent of 40-year-old men and between 15 and 25 percent of 65-year-old men experience ED. However, it is not an inevitable part of ageing. The most publicised advance in treating ED was the introduction of the oral drug sildenafil citrate (Viagra) in March 1998. Taken an hour before sexual activity, Viagra works by enhancing the effects of nitric oxide, a chemical that relaxes smooth muscles in the penis during sexual stimulation and allows increased blood flow (Hirsch & Melman, 2003).

Overall, a man's pattern of sexual activity in the earlier years of adulthood is the best predictor of his sexual activity in later age (George & Weiler, 1985). Female Sexuality in Later Life

In older women, the physiological effects of ageing on sexual function are primarily caused by decreased amounts of estrogen after menopause. The rate and amount of vaginal lubrication are decreased, and there is general atrophy of vaginal tissue (Deacon et al., 1995). Genital changes during this time include reduced size of clitoral, vulva, and labial tissue, decreased size of the cervix, uterus, and ovaries, and some loss of elasticity and thinning of the vaginal wall. Some women may experience inadequate lubrication and intercourse may be painful if the vaginal walls become excessively thin (Spence, 1992).

Masters and Johnson (1966) conducted a study where both pre- and postmenopausal women were compared in their sexual responses. The primary finding to emerge from this study was that although the phases of the sexual response cycle may progress at a slower rate, there is no physiological reason for a decrease in sexual enjoyment for older women in good health. As a whole, menopause does not affect

women's sexual desires or drives. Hormone therapy is simply initiated for the sake of the vaginal walls, and in fact, has no effect on a woman's sex drive.

Overall, the primary limitation or influence on a woman's sexual activity in later life is the presence of a willing and desirable partner (Marsiglio & Donnelly, 1991). Rationale for the Present Study

Healthy ageing can be described as a lifelong process of maximising opportunities for maintaining and preserving health, physical and mental well being, independence and quality of life. Multiple factors influence healthy ageing, including adequate income, education, appropriate housing, safe environments, and satisfying relationships (Health Canada, 2002). With the number of seniors increasing, one must recognise that there will also be an increase in single elderly who may be looking for a loving partner with whom to spend his or her time.

The elderly face a major dating challenge in later life with the unequal ratio of elderly men to women. For example, women form the majority of the Canadian senior population (56% in 2001) and their proportion increase with age. In 2001, women made up 60% of elderly aged 75 to 84 and 70% of elderly aged 85 or older. While the majority of seniors are married (56% in 1996), nearly one third are widowed and there are marked differences in marital status between the genders. In 1996, three quarters of senior men were married compared to 41.4% of women, while 46% of senior women were widowed compared to 12.7% of senior men. These differences become even more pronounced in older age groups (Health Canada, 2002).

Another fundamental difference between the young and elderly that date involves the function that dating serves at various stages of life (Bulcroft and Bulcroft, 1991). Most of the elderly couples studied by Bulcroft and O'Connor (1986) reported

that they were not dating for purposes of mate selection. In fact, several older females that were dating reported that they did not want to get "locked into" a traditional marital role and were not interested in marrying their dating partner. Rather than focusing on romantic love, sexuality, and the characteristics of a potential future spouse, the primary reason reported by elderly men and women for dating was for companionship (Bulcroft et al., 1991).

There are various methods utilized by those interested in meeting a potential mate. Although singles may still predominantly use a traditional method to look for a mate, there are currently many more options available. One particular method of finding a dating partner, placing a personal advertisement in newspapers, was investigated in this research. The examination of personal advertisements is thought to reflect theories of interpersonal attraction and social exchange (Koestner & Wheeler, 1988; Lunn & Shurgot, 1984). A typical classified advertisement contains information about the advertiser and a description of what he or she is looking for in a partner. This information is a useful medium for studying aspects of human mating behaviour.

Lynn and Bolig (1985) proposed three advantages for studying personal advertisements over laboratory based research. First, people who place an advertisement do so for worthwhile reasons, not intending to be subjects of research. Second, placing an advertisement is a "real-life" act with genuine consequences. Therefore, focusing on personal advertisements is more comparable to naturalistic observation than to artificial manipulations of laboratory research. Third, personal advertisements are thought to offer a broader range of age, socio-economic status, and geographical location than does the typical group of undergraduate subjects. Like all

self-reported data, whether by questionnaire, rating scale, interview etc., there is always the question of validity (Greenlees & McGrew, 1994).

From an evolutionary perspective men and women are ultimately seeking a partner with whom to mate and to reproduce healthy offspring. From a life-span developmental perspective, researchers would generally agree that mate selection is influenced by cultural and social structural factors. However, the current study explored the applicability of both these theories to dating preferences throughout the life span.

# Method

# Sample 5

The data were 500 heterosexual personal advertisements randomly selected from the Personal Columns of Canadian community newspapers in the months of February to March 2001. The newspapers were The Edmonton Examiner; the Ottawa Pennysaver; the Kitchener-Waterloo-Cambridge Pennysaver; the Windsor Pennysaver; and the Calgary Sun. These newspapers were either widely distributed for advertising purposes or had the highest circulation within their locality. Consequently, the advertisements have high exposure within the respective communities.

### Coding

Basic demographic information about the advertiser included sex and age. Although sex was a given in all cases, some age information was non-specific (e.g., "mid-forties") and considered missing data. A subsequent reclassification of age used categories of Pre-Boomer, Boomer, and Post-Boomer based on year of birth of the baby boomer cohort (1946-64).

Some advertisements provided information about desired age of respondents. Such information could include the lower and upper limits of an age range, or just the lower or upper boundary. The advertisements also included traits the advertiser proclaimed about him or herself, traits desired in the respondent, and the type of relationship desired. The traits and relationships examined were those studied in earlier research by Willis and Carlson (1993) and Wiederman (1993). The traits were body shape, attractiveness, health, resources, sincerity, smoking, drinking, religion, and the presence of children. The types of relationship included dating, friendship, and longterm commitment.

The coding of any trait or type of relationship depended on the presence of preselected keywords. If a keyword was present, the trait or relationship was coded as 1, but otherwise as 0. Each trait received two coded scores:

- The "self-trait" score refers to a trait the advertiser proclaimed about himself or herself:
- The "desired trait" score refers to a trait desired in the respondent.

The criteria used in coding were stringent: only specific reference to self-traits and desired traits resulted in positively coded scores. If an advertiser provided a selfdescription with a request for people with "similar" attributes to respond, the traits included in the self-description received positive scores only as self-traits. Similarly, if an advertiser described the type of respondent sought accompanied by a statement that the advertiser offered "the same", the traits received positive scores as desired traits but not as self-traits.

The keywords associated with the traits and types of relationship are as follows.

# Body Shape

This variable was coded 1 when a specific height and/or weight was referred to describe themselves or the potential mate. If there was no reference to body shape, the variable was coded 0.

#### **Attractiveness**

This variable was coded 1 when terms such as "attractive", "better than average looks", "beautiful", "cute", "good looking", "handsome", or "pretty" were used to describe themselves, or the potential mate. If there was no reference to attractiveness, the variable was coded 0.

## Health Status

This variable was coded 1 when terms such as "fit", "in good shape", "health conscious", "muscular", "petite", "slender" or "slim" were used to describe themselves or the potential mate. If there was no reference to health status, the variable was coded 0.

#### *Resources*

This variable was coded 1 when terms such as "employed", "financially secure", "secure job", "successful", or "wealthy" were used to describe themselves or the potential mate. If there was no reference to resources, the variable was coded 0.

## Sincerity

This variable was coded 1 when terms such as "sincere", "honest", "trustworthy", "considerate", "kind", or "gentle" were used to describe themselves or the potential mate. If there was no reference to sincerity, the variable was coded 0.

#### Children

This variable was coded 1 if the advertiser mentioned a preference for a partner with or without children or of being a parent themselves or not. If there was no reference to children or parenting, the variable was coded 0.

Smoker

This variable was coded 1 when reference to being a "smoker" or "non-smoker" was made. If there was no reference to smoking, the variable was coded 0.

Drinker

This variable was coded 1 when reference was made to being a "social-drinker" or "non-drinker". If there was no reference to drinking, the variable was coded 0.

Religion

This variable was coded 1 if there was reference to a religious affiliation. If there was no reference to religion, the variable was coded 0.

Friendship

This variable was coded 1 if terms such as "friend" or "companion" were used to describe the type of relationship sought. If there was no reference to the type of relationship sought, the variable was coded 0.

Dating

This variable was coded 1 if terms or phrases such as "friends first", "possible relationship to develop later", "fun times", or "dating" were used to make reference to the type of relationship sought. If there was no reference to the type of relationship sought, the variable was coded 0.

Long Term Relationship

This variable was coded 1 if terms or phrases such as "lasting relationship", "monogamous", "long-term", "meaningful", "permanent relationship", "steady", or

"marriage" were used to make reference to the type of relationship sought. If there was no reference to the type of relationship sought, the variable was coded 0.

## Statistical Analysis

The main statistical procedure to analyse the data was SPSS 10 multinomial logistic regression with the dependent variable comprising six age-by-sex categories (i.e., male and female Pre-Boomers, Boomers, and Post-Boomers. The reason for combining the age and sex categories in a composite index was to avoid confounding because of any non-null relationship between age and sex. The reference category selected for the dependent variable was male Boomers because it typically has the highest count of any category.

The independent variables were designated covariates rather than factors if the scaling was continuous. The statistic used to interpret the size of relationship between a dependent category and a covariate or factor is  $e^B - \text{or } Exp(B) - \text{where } B$  is the regression coefficient. With a categorical or binary independent variable,  $e^B$  gives the odds ratio of the predictor category with respect to the dependent category. Although the Wald statistic provides an estimate of significance of a relationship, a conventional interpretation is to infer significance at the .05 level if the 95% confidence intervals for  $e^B$  do not include 1.

## Results

# Gender and age

The initial analyses examined gender, reporting of the advertiser's own age, and reference to desired ages for respondents within the full data set of 500 advertisements. The higher proportion of advertisers (63%) were males ( $\chi^2[1]=34.85$ , p=.000). The advertisers referred to age as follows:

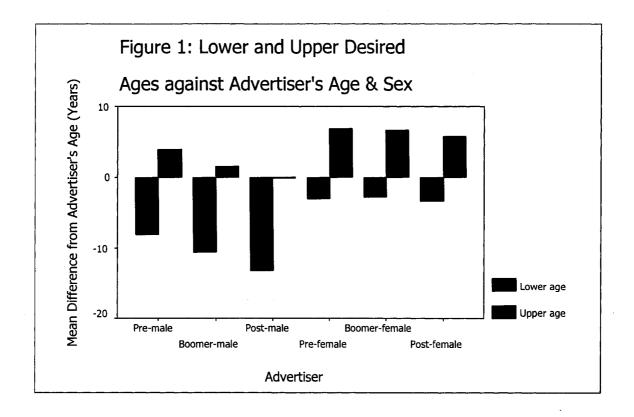
- 403 advertisers (80%) gave their own age;
- 291 (58%) specified an age range for respondents;
- 33 (7%) provided either a lower or an upper age boundary;
- 176 (35%) made no mention of the age of respondents.

Although males were more likely than females to give their own age (86% versus 71%; p = .000), there was no sex difference in the proportion specifying an age boundary for respondents (p = .154).

The own age classification was by year of birth, with 76 advertisers classified as Pre-Boomers, 225 as Boomers, and 102 as Post-Boomers. The Pre-Boomers ranged in age from 19-37 years, the Boomers from 38-56 years, and the Post-Boomers from 57-83 years. Table 1 shows a significant difference of sex across age categories ( $\chi^2[2]=9.01$ , p =. 011). Findings from a multinomial logistic regression of the age categories against sex show a significant over-representation of females in the Post-Boomer category relative to the proportion in the Pre-Boomer category (Appendix A).

## Desired ages in respondents

Figure 1 shows relationships between age and sex categories for advertisers and the desired ages of respondents. In order to control for the advertiser's own age, the lower and upper desired ages were expressed as differences from the advertiser's age (i.e., lower desired age minus own age; lower desired age minus own age). Figure 1 shows the mean scores. Statistical analysis of the data was by multinomial logistic regression supplemented by general linear model analysis.



Multinomial logistic regressions of age and sex categories for advertisers against covariates of desired age in respondents showed similar trends for the upper and lower desired ages. The lower desired age was higher than that by male Boomers (i.e., the reference group) in all groups except male Post-Boomers (Table 2). Similarly, the upper desired age was higher than that by male Boomers in all groups except male Post-Boomers (Table 3). A supplementary analysis of variance confirmed these findings, with multiple comparisons showing higher scores for females than males, and lower scores for males of Boomer and Post-Boomer ages than for Pre-Boomer males (Appendix B). Aggregated Self-Traits and Desired Traits, and Type of Relationship

In order to obtain a macro-level evaluation, the following multinomial logistic regression included aggregated self-traits, aggregated desired traits, and type of relationship desired as covariates against age and sex categories for advertisers. The findings in Table 4 are as follows. Compared with the reference category of Boomeraged males

- Males of Pre-Boomer age were more than three times as likely to mention friendship as a type of desired relationship;
- Males of Post-Boomer age were more than twice as likely to mention friendship as a type of desired relationship;
- Females of Pre-Boomer age proclaimed fewer of self-traits;
- Females of Boomer age stated more desired traits;
- Females of Post-Boomer age proclaimed fewer self-traits; they were more likely to desire friendship but less likely to want a long-term relationship.

## Self-Traits and Desired Traits

Initial analysis of discrete relationships of self-traits and desired traits with age and sex categories for advertisers used Crosstabs analysis. The findings in Appendix C show that relationships with the following traits were significant at p < .05:

- Body shape desired trait;
- Attractiveness self-trait and desired trait;
- Resources self-trait and desired trait;
- Sincerity desired trait;
- Presence of a child self-trait and desired trait.

A multinomial logistic regression with these traits as covariates and age and sex categories of advertisers as the dependent variable produced deviant singularities because of empty cells for Post-Boomer females on the desired traits of attractiveness and presence of children. With these traits omitted, Table 5 shows the parameter estimates.

The findings show that compared with the reference category of male Boomers

- Pre-Boomer males were more likely to report their attractiveness;
- Post-Boomer males were less likely to mention their own children;
- Pre-Boomer females were less likely to mention their own resources but more likely to mention resources as a desired trait;
- Female Boomers were more likely to mention resources and sincerity as desired traits;
- Post-Boomer females were less likely to mention attractiveness, resources, and their children as self-traits, and less likely to mention body shape as a desired trait.

#### Discussion

Overall, most of the data corresponded with evolutionary predictions of mate selection preferences throughout all age groups. However, there were three instances where the results did not fit with evolutionary theory.

Generally, evolutionary theory postulates that women have a tendency to utilise long-term mating strategies and are inclined to seek cues to resources and commitment, which may maximise the survival prospects of each of their offspring (Buss, 1989a; Symons, 1979). However, results from the current study demonstrated that females of post-boomer age were more likely to desire friendship and less likely to want a longterm relationship. This finding is certainly not in keeping with evolutionary accounts of female mate preferences. However, this finding is consistent with that of Bulcroft and O'Connor (1986) who found that older females reported not wanting to get "locked into" a traditional marital role and reported not being interested in marrying their dating partner.

Second, females of post-boomer age were less likely to mention self-traits, such as attractiveness, resources, and their children. In addition, they were less likely to mention body shape as a desired trait. This finding is consistent with the concept of the "marriage squeeze" (Elder & Rockwell, 1976). This perspective presumes that as the supply of men declines and the demand for them increases, women have little choice but to broaden the range of acceptable partners (Spanier & Glick, 1980). Adams (1979) and Becker (1981) offer variants on the "marriage squeeze" as it affects the older population. They suggest that as people move beyond the typical age for marriage, the pool of eligible partners may be significantly reduced. As a result, a person may settle with someone because they do not expect to do better by further searching or waiting (Becker, 1981).

Third, males of post-boomer age were more than twice as likely to mention friendship as a type of desired relationship. The sexual odds men face are much different in the later years. Due to the unbalanced number of single elderly men and women, men may be viewed as more desirable. Therefore, this factor may increase intra sexual competition among females, while allowing for men to be selective in whom they choose to date.

An alternate suggestion for this result may be that elderly men are fearful of engaging in a sexual relationship because of a chronic health condition. A variety of agerelated conditions may impair erectile processes and contribute to impotence. Some examples of such conditions may be disorders affecting the blood vessels (i.e., arteriosclerosis, high blood pressure, diabetes), operations done in the pelvic area (i.e., bladder, prostate, rectal surgery), injuries to the pelvic region and spine, and diseases such as kidney ailments or multiple sclerosis. Also, medications given for chronic illness

may have sexual side effects. For example, drugs taken for common late-life problems such as high blood pressure, heart conditions, or depression often either affect a man's capacity to have an erection or inhibit desire. In addition, there may be an element of fear, the idea that sexual excitement is too taxing and can lead to sudden death. This anxiety is especially common when people have heart disease (Block, Maeder, & Haissly, 1975). The fear that intercourse can cause a heart attack prevents people with heart conditions and their partners from fully enjoying sex (Corby & Solnick, 1980).

Overall, the data show that for older women, the social barriers to expressing sexuality will be hard to erase. The truth is that it is hard to find a partner at age 70 or 80 unless a woman searches for a younger man. The reality is that throughout human history, men have placed emphasis on youthful beauty in selecting a sexual mate (Kenrick, Groth, Trost, & Sadalla, 1993). This is why although a man's sexual problems tend to be more biological while a woman's sexual problems tend to depend on the availability of a sexual partner, one can predict that more advances will be made in the future in enhancing sexuality in older men.

It appears that not having a partner influences female sexual interest. At older age, the rates of widowhood and divorce increase. As a result, many women are single in their later years. Apparently, women are prevented from finding a new partner not only because the availability of men their own age shrinks, but also because men prefer younger women.

Three possible coping strategies used by elderly women have been suggested. First, research has shown that women compensate for not having a partner by increasing the frequency of masturbation (Brecher et al, 1985; Walz & Blum, 1987).

According to behaviourists, reinforcement drives all behaviours. Therefore, one may speculate that as with any behaviour that is not reinforced, sexual desire may fade rapidly as women age. Because men may not view an elderly woman as being sexually attractive, in addition to the lack of available men, an elderly woman may not be reinforced for being sexual, and therefore may lose her sexual feelings.

Furthermore, researchers have found that friendships in old age are often enduring relationships (Antonucci & Akiyama, 1987; Levitt, Weber, & Guacci, 1993). When someone has a friend for 25 or 50 years, that person can really become "like family" and may provide an ongoing basis of help. This is particularly true when an older widowed person's friends are also widowed. In comparing married women with widowed women, it was found that elderly widows reached out more often than wives to offer help to friends (Gallagher & Gerstel, 1993). According to the researchers, it appeared as though marriage "privatises help-giving" to family members. Once they are widowed, women rely on friends to perform the daily nurturing and instrumental functions that had earlier been confined to the marital bond.

The present study was vulnerable to limitations of generalizability. For example, given the selection of newspapers utilised, there may be a stronger representation of individuals of a lower socio-economic status. In addition, the present study only examines a select sample of people who utilise personal advertisements and the results may not be generalised to the entire population. By utilising personal advertisements, this study in fact examined the desire to date, rather than one's true dating behaviour.

A cross-sectional design was chosen for the current study because it is easier to carry out than a longitudinal study. However, there is a crucial problem with conducting cross-sectional studies. For example, they provide information about age differences,

but they do not reveal age changes. With this research strategy, true changes that occur as one advances in years may be confounded with differences that result from an extraneous factor, being in a different cohort.

Cross-sectional studies tell us only how groups differ from one another, not about individual patterns of change. The data used in the current study were from randomly chosen personal advertisements in various newspapers across Canada. Personal information, other than what was offered in the personal advertisement, was unknown. This did not allow for the researcher to match groups or to make groups comparable on important variables other than age.

#### Future Research

The current research examined the mate preferences in later life of heterosexual individuals. Few studies report on male and female homosexual seniors (Lee, 1987). Research on homosexuality in later life has only recently begun. Lee (1987) proposed some research questions that need to be studied. These include the longitudinal study of ageing gay and lesbian couples, gay widowhood, and aged gays and lesbians in the homosexual community. Studies of gay and lesbian ageing show that sexuality plays an important part in homosexual as well as heterosexual ageing.

It is presumed that attitudes and stereotypes of older people toward sexuality will change for several reasons as new cohorts of people enter old age. First, gerontology courses teach younger people and professionals the facts about sex in old age. This can change the attitudes of those who work with older people (Damrosch, 1984). Second, books that give advice to older people now encourage sexual activity (Arluke, Levin, & Suchwalko, 1984). Third, cohorts differ in their views on sexual relations. Older cohorts may have a more conservative view of sex. Younger cohorts

may have more open attitudes to sex, and if they bring these attitudes with them into old age, there may be more openness about sexual activity among the elderly.

# References

- Adams, B. (1979). Mate selection in the United States: A theoretical summarization. In Contemporary theories about the family. pp. 259-267. New York: The Free Press.
- Antonucci, T.C. & Akiyama, H. (1987). Social networks in adult life and a preliminary examination of the convoy model. *Journal of Gerontology, 42*, 519-527.
- Arluke, A., Levin, J. & Suchwalko, J. (1984). Sexuality and romance in advice books for the elderly. *The Gerontologist, 24*, 415-419.
- Baltes, P.B. (1982). Life-span developmental psychology: Some converging observations, history and theory. In K.W. Schaie and J. Geiwitz, (Eds.), *Adult development and ageing* (pp. 12-25). Boston: Little Brown and Co.
- Baltes, P.B. & Goulet, L.R. (1970). Status and issues of a life-span developmental psychology. In L.R. Goulet and Paul B. Baltes, (Eds), *Life-Span developmental psychology: Research and theory*. New York: Academic Press.
- Baltes, P.B. & Kliegl, R. (1992). Further testing of limits of cognitive plasticity: Negative age differences in a mnemonic skill are robust. *Developmental Psychology, 28*, 121-125.
- Baltes, P.B., Reese, H.W., & Lipsitt, L.P. (1980). Life-span developmental psychology.

  In M.R. Rosenzweig and L.W. Porter (Eds.), *Annual Review of Psychology* (pp.65-110), vol 31, Palo Alto: Annual Reviews, Inc.
- Becker, G. (1981) A Treatise on the Family. Cambridge, MA: Harvard University Press.
- Block, A., Maeder, J., & Haissly, J. (1975). Sexual problems after myocardial infarction. *American Heart Journal, 90*, 536-537.
- Botwinick, J. Aging and behaviour. New York: Springer, 1978.

- Brecher, E.M. (1985). Love, Sex, and Aging. Boston: Little, Brown.
- Brown, L. (1989). Is there sexual freedom for our aging population in long-term care institutions? Journal of Gerontological Social Work, 13, 75-93.
- Bulcroft, K. & O'Conner, M. (1986). The importance of dating relationships on quality of life in older persons. Family Relations, 35, 397-401.
- Bulcroft, R.A., & Bulcroft, K.A. (1991). The nature and functions of dating in later life. Research on Ageing, 13, 244-260.
- Buss, D. M. (1989a). Sex differences in human mate preferences: Evolutionary hypotheses testing in 37 cultures. *Behavioral and Brain Sciences, 12,* 1-49.
- Buss, D.M., Larsen, R., Westen, D., & Semmelroth, J. (1992). Sex differences in jealousy: Evolution, physiology, and psychology. Psychological Science, 3, 251-255.
- Buss, D.M. (1994). The strategies of human mating. American Scientist, 82, 238-249.
- Corby, N. & Solnick, R.L. (1980). Psychosocial and physiological influences on sexuality in the older adult. In J.E. Birren & R.B. Sloane (Eds.), Handbook of mental health and aging (pp. 893-921). Englewood Cliffs, NJ: Prentice-Hall.
- Damrosch, S.P. (1984). Graduate nursing students' attitudes toward sexually active older persons. Gerontologist, 24, 299-302.
- Damrosch, S.P., & Fischman, S. H. (1985). Medical students' attitudes toward sexually active older persons. Journal of the American Geriatrics Society, 33, 852-855.
- Datan, N., & Rodeheaver, D. (1983). Beyond Generativity: Toward a sensuality of later life. In R. Weg (Ed.), Sexuality in the later years: Roles and behaviour (pp. 279-288). San Diego, CA: Academic Press.

- Deacon, S., Minichiello, C., & Plummer, D. (1995). Sexuality and older people:

  Revisiting the assumptions. *Educational Gerontology*, *21*, 497-513.
- DeKay, W.T. (1995, July). *Grandparental investment and the uncertainty of kinship*.

  Paper presented at the Seventh Annual Meeting of the Human Behaviour and Evolution Society, Santa Barbara, CA.
- Elder, G., & Rockwell, R. (1976). Marital timing on women's life patterns. *Journal of Family History, 1*, 34-53.
- Euler, H.A., & Weitzel, B. (1996). Discriminative grandparental solicitude as reproductive strategy. *Human Nature*, *7*, 39-59.
- Finch, C.E. (1996). Biological bases for plasticity during aging of individual life histories.

  In The Life-Span development of individuals: Behavioural, neurobiological and psychosocial perspective, (Ed.), D. Magnusson, (pp. 488-511). Cambridge, UK: Cambridge Universal Press.
- Gallagher, S.K. & Gerstel, N. (1993). Kinkeeping and friend keeping among older women: The effect of marriage. *Gerontologist*, *33*, 675-681.
- Gangestad, S.W. & Simpson, J.A. (2000). The evolution of human mating: Trade-offs and strategic pluralism. *Behavioral and Brain Sciences, 23*, 573-644.
- Gangestad, S.W., Thornhill, R., & Yeo, R.A. (1994). Facial attractiveness, developmental stability, and fluctuating asymmetry. *Ethology and Sociobiology,* 15, 73-85.
- Gangestad, S.W., & Thornhill, R. (1997). Human sexual selection and developmental stability. In J.A. Simpson & D.T. Kenrick (Eds.), *Evolutionary social psychology* (pp. 169-195). Mahwah, NJ: Erlbaum.
- George, L.K. & Weiler, S.J. (1981). Sexuality in middle and later life. *Archives of General*

- Psychiatry, 38, 919-923.
- Greenlees, I.A., & McGrew, W.C. (1994). Sex and age differences in preferences and tactics of mate attraction: Analysis of published advertisements. Ethology and Sociobiology, 15, 59-72.
- Hall, A., Selby, J., & Vanclay, F.M. (1982). Sexual Ageism. Australian Journal on Aging, *1*, 29-34.
- Health Canada. (2002). Canada's aging population. Minister of Public Works and Government Services. Retrieved October 20 2003 from http://www.hcsc.gc.ca/seniors-aines.
- Jazwinski, S.M. (1996). Longevity, genes, and aging. Science, 273, 54-59.
- Johnson, T.R. (1995). The significance of religion for ageing well. *American Behavioral* Scientist, 39 (2), 186-208.
- Kalichman, S.C. (1989). Sex roles and sex differences in adult spatial performance. Journal of Genetic Psychology, 150, 93-100.
- Kenrick, D.T., Groth, G.E., Trost, M.R. & Sadalla, E.K. (1993). Integrating evolutionary and social exchange perspectives on relationships: Effects of gender, selfappraisal, and involvement level on mate selection criteria. Journal of Personality and Social Psychology, 64, 951-969.
- Kenrick, D.T., & Keefe, R.C. (1992). Age preferences in mates reflect sex differences in reproductive strategies. *Behavioral and Brain Sciences, 15,* 75-133.
- Kenrick, D.T., Sadalla, E.K., Groth, G.E., & Trost, M.R. (1990). Evolution, traits, and the stages of human courtship: Qualifying the parental investment model. *Journal* of Personality, 58, 97-116.
- Kenrick, D.T. & Trost, M.R. (1996). Power, harassment, and trophy mates: The feminist

- advantages of an evolutionary perspective. In D.M. Buss & N. Malamuth (Eds.), Sex power and status: Feminist and evolutionary perspectives. Oxford University Press.
- Koestner, R. & Wheeler, L. (1988). Self-presentation in personal advertisements: The influence of explicit notions of attraction and role expectations. *Journal of Social and Personal Relationships*, *5*, 149-160.
- Lampert, A., & Friedman, A. (1992). Sex differences in vulnerability and maladjustment as a function of parental investment: An evolutionary approach. *Social Biology,* 39, 65-81.
- Lee, J.A. (1987). The invisible lives of Canada's gray gays. In Victor W. Marshall, (Ed.), *Aging in Canada*. 2d ed. Toronto: Fitzhenry and Whiteside.
- Leiblum, S.R., & Segraves, R.T. (1989). Sex therapy with aging adults. In S.R. Leiblum and R.C. Rosen (Eds.), *Principles and practice of sex therapy*. (pp. 352-381).

  New York: Guilford Press.
- Levinson, D.J. (1978). The seasons of a man's life. New York: Knopf.
- Levitt, M.J., Weber, R.A. & Guacci, N. (1993). Convoys of social support: An intergenerational analysis. *Psychology and Aging, 8*, 323-326.
- Lynn, M. & Bolig, R. (1985). Personal advertisements: Sources of data about relationships. *Journal of Social and Personal Relationships, 2*, 377-383.
- Lynn, M. & Shurgot, B.A. (1984). Responses to lonely hearts advertisements: Effects of reported physical attractiveness, physique, and coloration. *Personality and Social Psychology Bulletin, 10,* 349-357.
- Marsiglio, W., & Donnelly, D. (1991). Sexual relations in later life: A national study of married persons. *Journal of Gerontology*, *46*, 338-344.

- Melman, A. & Hirsch, M. (2003). *Erectile dysfunction*. The National Kidney and Urologic Disease Information Clearinghouse. Montefiore Medical Centre: Bronx, NY.

Masters, W.H., & Johnson, V.E. Human sexual response. Boston: Little Brown, 1966.

- Mercer, R.T., Nichols, E.G., & Doyle, G.C. (1989). *Transitions in a woman's life* (vol 12). New York: Springer Publishing.
- Renshaw, D.C. (1983). Sexuality in Old Age, Illness and Disability. In D. Wheatley (Ed.), *Pscyhopharmacology and sexual disorders*. (pp. 88-100). Oxford: OUP.
- Riegel, K.F. (1977). History of psychological gerontology. In J.E. Birren & K.W. Schaie (Eds.), *Handbook of the psychology of aging* (pp.7-10). New York: Van Nostrant Reinhold.
- Robinson, P.K. (1983). The sociological perspective. In R. Weg (Ed.), *Sexuality in the later years: Roles and behaviour*. (pp. 81-103). San Diego, CA: Academic Press.
- Shackelford, T.K. & Larsen, R.J. (1997). Facial asymmetry as indicator of psychological, emotional, and physiological distress. *Journal of Personality and Social Psychology*, *72*, 456-466.
- Singh, D. (1993). Adaptive significance of waist–to-hip ratio and female physical attractiveness. *Journal of Personality and Social Psychology, 65*, 293-307.
- Singh, D., & Young, R. K. (1995). Body weight, waist-to-hip ratio, breasts, and hips:

  Told in judgements of female attractiveness and desirability for relationships.

  Ethology and Sociobiology, 16, 483-507.
- Spanier, G., & Glick, P. (1980). Mate selection differentials between whites and blacks in the United States. *Social Forces*, *58*, 707-725.
- Spence, S.H. (1992). Psychosexual Dysfunction in the Elderly. *Behaviour Change, 9*, 55-64.

- Striar, S.L., & Hoffman, K.S. (1984). Advocating for the socio-sexual rights of the single elderly: A six-step intervention strategy. Journal of Social Work and Human Sexuality, 3, 71-82.
- Symons, D. (1979). *The evolution of human sexuality*. New York: Oxford.
- Symons, D. (1995). Beauty is in the adaptations of the beholder: The evolutionary psychology of human female sexual attractiveness. In P.R. Abramson & S.D. Pinkerton (Eds.), Sexual nature, sexual culture, (pp. 80-118). Chicago: University of Chicago Press.
- Szasz, G. (1983). Sexual incidents in an extended care unit for aged men. Journal of American Geriatric Sociology, 31, 407-411.
- Trivers, R.L. (1972). Parental investment and sexual selection. In B. Campbell (Ed.), Sexual selection and the decent of man: 1871-1971 (pp. 136-179). Chicago: Aldine.
- Trivers, R. (1985). Social Evolution. Menlo Park, CA: Benjamin/Cummings.
- Vasil, L., & Wass, H. (1993). Portrayal of the elderly in the media: A literature review and implications for educational gerontologists. Educational Gerontology, 19, 71-85.
- Walz, T.H. & Blum, N.S. (1987). Sexual health in later life. Lexington, MA: Lexington Books.

Table 1 Sex By Age Group Cross Tabulation

		Males		Females	
	N	Std. Residual	N	Std. Residual	Total
Pre-Boomers	59	1.1	17	-1.6	76
Boomers	155	0.3	70	-0.4	225
Post-Boomers	58	-1.3	44	1.9	102
Total	272		131		403

Table 2 Parameter Estimates for Lower Age Difference

							95% C.I.	For Exp (B)
	В	Std. Error	Wald	df	Sig.	Exp (B)	Lower	Upper
Males								
Pre-Boomer	0.151	0.432	0.122	1	0.727	1.107	1.015	1.206
Post-Boomer	-1.594	0.475	11.262	1	0.001	0.941	0.875	1.013
Females								
Pre-Boomer	0.506	0.469	1.163	1	0.281	1.410	1.224	1.624
Boomer .	1.489	0.396	14.119	1	0.000	1.429	1.279	1.596
Post-Boomer	1.187	0.411	8.351	1	0.004	1.389	1.241	1.554

Table 3 Parameter Estimates for Upper Age Differences

		<u> </u>					95% C.I. F	or Exp (B)
	В	Std. Error	Wald	df	Sig.	Exp (B)	Lower	Upper
Males								
Pre-Boomer	-1.103	0.247	19.952	1	0.000	1.136	1.036	1.245
Post-Boomer	-0.949	0.217	19.119	1	0.000	0.913	0.825	1.009
Females	-							
Pre-Boomer	-2.798	0.472	35.092	1	0.000	1.298	1.143	1.473
Boomer	-1.839	0.322	32.699	1	0.000	1.300	1.178	1.435
Post-Boomer	-1.915	0.338	32.129	1	0.000	1.244	1.120	1.383

Table 4

<u>Multinominal Logistic Regression Estimates with Aggregated Self and Desired Traits and Type of Relationship as Covariates</u>

							95% C.I. I	For Exp (B)
	В	Std. Error	Wald	df	Sig.	Exp (B)	Lower	Upper
Pre-Male								
Intercept	-1.693	0.410	17.021	1	0.000			
SELF	0.046	0.092	0.245	1	0.620	1.047	0.874	1.253
DESIRED	0.121	0.130	0.867	1	0.352	1.129	0.875	1.456
FRIENDS	1.155	0.445	6.736	1	0.009	3.175	1.327	7.597
DATING	0.434	0.589	0.544	1	0.461	1.544	0.487	4.894
LONG-TERM	0.491	0.326	2.268	1	0.132	1.634	0.862	3.095
Post-Male								
Intercept	-1.090	0.389	7.868	1	0.005			
SELF	0.000	0.092	0.000	1	0.998	1.000	0.835	1.199
DESIRED	-0.064	0.138	0.216	1	0.642	0.938	0.715	1.230
FRIENDS	0.924	0.450	4.227	1	0.040	2.520	1.044	6.081
DATING	-0.188	0.687	0.075	1	0.784	0.829	0.216	3.183
LONG-TERM	0.199	0.326	0.372	1	0.542	1.220	0.644	2.310
Pre-Female								
Intercept	-1.778	0.594	8.972	1	0.003			
SELF	-0.402	0.166	5.868	1	0.015	0.669	0.483	0.926
DESIRED	0.316	0.195	2.633	1	0.105	1.372	0.936	2.009
FRIENDS	-0.166	1.087	0.023	1	0.879	0.847	0.101	7.139
DATING	1.263	0.759	2.767	1	0.096	3.535	0.798	15.648
LONG-TERM	0.212	0.576	0.136	1	0.712	1.237	0.400	3.824
Boomer-Females				·				
Intercept	-0.756	0.356	4.500	1	0.034			
SELF	-0.167	0.088	3.594	1	0.058	0.847	0.713	1.006
DESIRED	0.328	0.118	7.747	1	0.005	1.389	1.102	1.750
FRIENDS	0.486	0.485	1.004	1	0.316	1.627	0.628	4.212
DATING	-0.942	0.797	1.397	1	0.237	0.390	0.082	1.858
LONG-TERM	-0.096	0.313	0.094	1	0.759	0.908	0.492	1.677
Post-Female								
Intercept	-0.007	0.397	0.000	1	0.986			
SELF	-0.419	0.119	12.377	1	0.000	0.658	0.521	0.831
DESIRED	-0.015	0.163	0.009	1	0.925	0.985	0.716	1.355
FRIENDS	1.289	0.468	7.574	1	0.006	3.629	1.449	9.089
DATING	-0.587	0.816	0.519	1	0.471	0.556	0.112	2.749
LONG-TERM	-1.271	0.517	6.047	1	0.014	0.280	0.102	0.773

Table 5
Multinominal Logistic Regression Estimates with Self Traits (ST) and Desired Traits (DT) as Covariates

							95% C.I.	For Exp (B)
	В	Std. Error	Wald	df	Sig.	Exp (B)	Lower	Upper
Pre-Male		-				· <u>-</u>		
Intercept	-1.137	0.303	14.057	1	0.000			
ST Attractive	1.254	0.329	14.515	1	0.000	3.504	1.838	6.679
ST Resource	-0.386	0.330	1.368	1	0.242	0.679	0.356	1.298
ST Children	0.037	0.397	0.009	1	0.926	1.038	0.476	2.260
DT Shape	-0.437	0.377	1.344	1	0.246	0.646	0.308	1.353
DT Resource	0.024	0.468	0.003	1	0.960	1.024	0.409	2.563
DT Sincere	-0.272	0.332	0.672	1	0.413	0.762	0.397	1.460
Post-Male							······································	
Intercept	-0.752	0.288	6.815	1	0.009			
ST Attractive	-0.738	0.392	3.549	1	0.060	0.478	0.222	1.030
ST Resource	0.478	0.329	2.110	1	0.146	1.613	0.846	3.074
ST Children	-1.428	0.563	6.438	1	0.011	0.240	0.080	0.723
DT Shape	0.332	0.335	0.979	1	0.322	1.394	0.722	2.689
DT Resource	-0.690	0.585	1.391	1	0.238	0.502	0.160	1.578
DT Sincere	-0.530	0.352	2.272	1	0.132	0.588	0.295	1.173
Pre-Female								
Intercept	-1.994	0.471	17.894	1	0.000			
ST Attractive	0.076	0.586	0.018	1	0.895	1.081	0.343	3.407
ST Resource	-1.627	0.630	6.675	1	0.010	0.197	0.057	0.675
ST Children	0.153	0.701	0.048	1	0.827	1.166	0.295	4.602
DT Shape	-1.228	0.793	2.398	1	0.122	0.293	0.062	1.386
DT Resource	1.591	0.603	6.956	1	0.008	4.908	1.505	16.008
DT Sincere	0.472	0.537	0.771	1	0.380	1.602	0.559	4.592
Boomer-Females								
Intercept	-1.128	0.296	14.559	1	0.000			
ST Attractive	0.255	0.315	0.658	1	0.417	1.291	0.697	2.393
ST Resource	-0.247	0.308	0.641	1	0.423	0.781	0.427	1.429
ST Children	-0.582	0.437	1.769	1	0.184	0.559	0.237	1.317
DT Shape	-0.250	0.342	0.536	1	0.464	0.779	0.399	1.521
DT Resource	1.059	0.363	8.499	1	0.004	2.883	1.415	5.874
DT Sincere	0.648	0.300	4.650	1	0.031	1.911	1.061	3.444
Post-Female								
Intercept	-0.410	0.288	2.029	1	0.154			
ST Attractive	-0.992	0.491	4.080	1	0.043	0.371	0.142	0.971
ST Resource	-1.156	0.412	7.876	1	0.005	0.315	0.140	0.706
ST Children	-2.292	1.041	4.845	1	0.028	0.101	0.013	0.778
DT Shape	-1.403	0.566	6.136	1	0.013	0.246	0.081	0.746
DT Resource	-0.216	0.610	0.125	1	0.724	0.806	0.244	2.663
DT Sincere	0.585	0.368_	2.525	1	0.112	1.794	0.872	3.690

## APPENDIX A

# Multinomial Regression of Age Categories against Sex (Female) with Pre-Boomers as the Reference Category

#### Parameter Estimates

								95% Confider Ext	nce Interval for o(B)
Group		В	Std. Error	Wald	df	Sig.	Exp(B)	Lower Bound	Upper Bound
post-boomer	Intercept	985	.467	4.446	1	.035			1
	SEX	.968	.340	8.097	1	.004	2.633	1.352	5.129
boomer	Intercept	.516	.408	1.600	1	.206			
	SEX	.449	.311	2.093	1	.148	1.567	.853	2.881

## **APPENDIX B**

# ANOVA of Desired Minus Own Age on Upper and Lower Age Range (Repeated Factor) and Advertisers Age and Sex (Between Groups)

#### Multivariate Tests<sup>b</sup>

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
RANGE	Pillai's Trace	.713	521.349 <sup>a</sup>	1.000	210.000	.000	.713
	Wilks' Lambda	.287	521.349a	1.000	210.000	.000	.713
	Hotelling's Trace	2.483	521.349a	1.000	210.000	.000	.713
	Roy's Largest Root	2.483	521.349 <sup>a</sup>	1.000	210.000	.000	.713
RANGE * GROUP	Pillai's Trace	.048	2.122a	5.000	210.000	.064	048
	Wilks' Lambda	.952	2.122a	5.000	210.000	.064	.048
	Hotelling's Trace	.051	2.122a	5.000	210.000	.064	.048
	Roy's Largest Root	.051	2.122a	5.000	210.000	.064	.048

a. Exact statistic

b.

Design: Intercept+GROUP Within Subjects Design: RANGE

#### **Tests of Between-Subjects Effects**

Measure: MEASURE\_1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	618.897	1	618.897	21.592	.000	.093
GROUP	4126.750	5	825.350	28.795	.000	.407
Error	6019.213	210	28.663			

## **Multiple Comparisons**

Measure: MEASURE\_1

Bonferroni

Donterioni						
		Mean				
a in the second		Difference			95% Confide	
(I) GROUP	(J) GROUP	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Pre-male	Boomer-male	2.4453*	.7557	.021	.2015	4.6890
	Post-male	4.5621*	.9582	.000	1.7170	7.4071
	Pre-female	-3.9604*	1.1879	.015	-7.4874	4335
	Boomer-female	-3.9940*	.8994	.000	-6.6644	-1.3237
	Post-female	-3.2791*	.9688	.013	-6.1556	4026
Boomer-male	Pre-male	-2.4453*	.7557	.021	-4.6890	2015
	Post-male	2.1168	.8453	.195	3930	4.6266
	Pre-female	-6.4057*	1.0988	.000	-9.6683	-3.1431
	Boomer-female	-6.4393*	.7780	.000	-8.7492	-4.1294
	Post-female	-5.7244*	.8573	.000	-8.2698	-3.1789
Post-male	Pre-male	-4.5621*	.9582	.000	-7.4071	-1.7170
	Boomer-male	-2.1168	.8453	.195	-4.6266	.3930
	Pre-female	-8.5225*	1.2468	.000	-12.2244	-4.8206
	Boomer-female	-8.5561*	.9759	.000	-11.4536	-5.6586
	Post-female	-7.8412*	1.0402	.000	-10.9297	-4.7527
Pre-female	Pre-male	3.9604*	1.1879	.015	.4335	7.4874
	Boomer-male	6.4057*	1.0988	.000	3.1431	9.6683
	Post-male	8.5225*	1.2468	.000	4.8206	12.2244
	Boomer-female	-3.3613E-02	1.2022	1.000	-3.6030	3.5358
	Post-female	.6813	1.2549	1.000	-3.0448	4.4074
Boomer-female	Pre-male	3.9940*	.8994	.000	1.3237	6.6644
	Boomer-male	6.4393*	.7780	.000	4.1294	8.7492
	Post-male	8.5561*	.9759	.000	5.6586	11.4536
	Pre-female	3.361E-02	1.2022	1.000	-3.5358	3.6030
	Post-female	.7149	.9863	1.000	-2.2135	3.6433
Post-female	Pre-male	3.2791*	.9688	.013	.4026	6.1556
	Boomer-male	5.7244*	.8573	.000	3.1789	8.2698
	Post-male	7.8412*	1.0402	.000	4.7527	10.9297
	Pre-female	6813	1.2549	1.000	-4.4074	3.0448
	Boomer-female	7149	.9863	1.000	-3.6433	2.2135

Based on observed means.

<sup>\*.</sup> The mean difference is significant at the .05 level.

# APPENDIX C

47

Crosstabs Analyses of Age\*Sex Groups against Self-Traits and Desired Traits

## **OWN BODY SHAPE \* GROUP**

#### Crosstab

				GROUP							
			Pre-male	Boomer-male	Post-male	Pre-female	Boomer-f emale	Post-female	Total		
ownbodyshape	0	Count	20	46	19	9	31	20	145		
		Std. Residual	3	-1.3	4	1.2	1.2	1.0			
	1	Count	39	109	39	8	39	24	258		
		Std. Residual	.2	1.0	.3	9	9	8			
Total 🐞		Count	59	155	58	17	70	44	403		

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.980 <sup>a</sup>	5	.110
Likelihood Ratio	8.858	5	.115
Linear-by-Linear Association	6.156	1	.013
N of Valid Cases	403		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.12.

48

# **OWN ATTRACTIVENESS \* GROUP**

#### Crosstab

				GROUP							
			Pre-male	Boomer-male	Post-male	Pre-female	Boomer-f emale	Post-female	Total		
ATTRACT1	0	Count	24	106	47	12	43	38	270		
		Std. Residual	-2.5	.2	1.3	.2	6	1.6			
	1	Count	35	49	11	5	27	6	133		
		Std. Residual	3.5	3	-1.9	3	.8	-2.2			
Total		Count	59	155	58	17	70	44	403		

# **Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	32.333 <sup>a</sup>	5	.000
Likelihood Ratio	32.676	5	.000
Linear-by-Linear Association	9.309	1	.002
N of Valid Cases	403		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.61.

#### 49

# **OWN HEALTH \* GROUP**

#### Crosstab

				GROUP						
			Pre-male	Boomer-male	Post-male	Pre-female	Boomer-f emale	Post-female	Total	
HEALTH1 -	0	Count	36	100	33	15	52	31	267	
		Std. Residual	5	3	9	1.1	.8	.3		
	1	Count	23	55	25	2	18	13	136	
		Std. Residual	.7	.4	1.2	-1.6	-1.2	5		
Total		Count	59	155	58	17	70	44	403	

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.245 <sup>a</sup>	5	.100
Likelihood Ratio	9.953	5	.077
Linear-by-Linear Association	3.559	1	.059
N of Valid Cases	403		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.74.

## **OWN RESOURCES \* GROUP**

#### Crosstab

	<u></u>			GROUP						
			Pre-male	Boomer-male	Post-male	Pre-female	Boomer-f emale	Post-female	Total	
RESOURC1	0	Count	29	71	24	13	34	34	205	
		Std. Residual	2	9	-1.0	1.5	3	2.5		
	1	Count	30	84	34	4	36	10	198	
		Std. Residual	.2	.9	1.0	-1.5	.3	-2.5		
Total		Count	59	155	58	17	70	44	403	

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	20.629 <sup>a</sup>	5	.001
Likelihood Ratio	21.626	5	.001
Linear-by-Linear Association	7.749	1	.005
N of Valid Cases	403		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.35.

## **OWN SINCERITY \* GROUP**

#### Crosstab

				GROUP						
			Pre-male	Boomer-male	Post-male	Pre-female	Boomer-f emale	Post-female	Total	
SINCERE1	0	Count	31	83	27	9	48	26	224	
		Std. Residual	3	3	9	1	1.5	.3		
	1	Count	28	72	31	8	22	18	179	
		Std. Residual	.4	.4	1.0	.2	-1.6	3		
Total		Count	59	155	58	17	70	44	403	

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.448 <sup>a</sup>	5	.189
Likelihood Ratio	7.589	5	.180
Linear-by-Linear Association	3.160	1	.075
N of Valid Cases	403		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.55.

# **OWN CHILD \* GROUP**

#### Crosstab

					GRO	OUP			
			Pre-male	Boomer-male	Post-male	Pre-female	Boomer-f emale	Post-female	Total
CHILD1 0	0	Count	47	122	54	14	62	43	342
		Std. Residual	4	8	.7	1	.3	.9	
	1	Count	12	33	4	3	8	1	61
		Std. Residual	1.0	2.0	-1.6	.3	8	-2.2	
Total		Count	59	155	58	17	70	44	403

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.379 <sup>a</sup>	5	.009
Likelihood Ratio	18.243	5	.003
Linear-by-Linear Association	10.038	1	.002
N of Valid Cases	403		•

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 2.57.

# **OWN SMOKING \* GROUP**

#### Crosstab

					GRO	DUP			
			Pre-male	Boomer-male	Post-male	Pre-female	Boomer-f emale	Post-female	Total
SMOKER1 0	0	Count	37	97	32	12	42	32	252
		Std. Residual	.0	.0	7	.4	3	.9	
	1	Count	22	58	26	5	28	12	151
		Std. Residual	.0	.0	.9	5	.3	-1.1	
Total		Count	59	155	58	17	70	44	403

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.956 <sup>a</sup>	5	.556
Likelihood Ratio	4.034	5	.545
Linear-by-Linear Association	.475	1	.491
N of Valid Cases	403		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.37.

## **OWN DRINKING \* GROUP**

#### Crosstab

				GROUP						
			Pre-male	Boomer-male	Post-male	Pre-female	Boomer-f emale	Post-female	Total	
DRINKER1	0	Count	44	115	42	14	53	37	305	
		Std. Residual	1	2	3	.3	.0	.6		
	1	Count	15	40	16	3	17	7	98	
		Std. Residual	.2	.4	.5	6	.0	-1.1		
Total		Count	59	155	58	17	· 70	44	403	

	Value	df	Asymp. Sig. (2-slded)
Pearson Chi-Square	2.664 <sup>a</sup>	5	.752
Likelihood Ratio	2.847	5	.724
Linear-by-Linear Association	1.263	1	.261
N of Valid Cases	403		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 4.13.

# **OWN RELIGION \* GROUP**

#### Crosstab

					GRO	OUP			
			Pre-male	Boomer-male	Post-male	Pre-female	Boomer-f emale	Post-female	Total
RELIG1	0	Count	54	141	51	15	64	43	368
		Std. Residual	.0	.0	3	1	.0	.4	
	1	Count	5	14	7	2	6	1	35
		Std. Residual	1	.1	.9	.4	.0	-1.4	
Total		Count	59	155	58	17	70	44	403

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.350 <sup>a</sup>	5	.646
Likelihood Ratio	4.123	5	.532
Linear-by-Linear Association	.817	1	.366
N of Valid Cases	403		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 1.48.

## **DESIRED BODY SHAPE \* GROUP**

#### Crosstab

				GROUP						
			Pre-male	Boomer-male	Post-male	Pre-female	Boomer-f emale	Post-female	Total	
wantbodyshape	0	Count	47	111	37	15	53	40	303	
		Std. Residual	.4	5	-1.0	.6	.1	1.2		
	1	Count	12	44	21	2	17	4	100	
		Std. Residual	7	.9	1.7	-1.1	1	-2.1		
Total		Count	59	155	58	17	70	44	403	

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.122a	5	.022
Likelihood Ratio	14.386	5	.013
Linear-by-Linear Association	2.836	1	.092
N of Valid Cases	403		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 4.22.

## **DESIRED ATTRACTIVENESS \* GROUP**

#### Crosstab

				GROUP						
			Pre-male	Boomer-male	Post-male	Pre-female	Boomer-f emale	Post-female	Total	
ATTRAC2	0	Count	45	130	46	13	65	44	343	
		Std. Residual	7	2	5	4	.7	1.1		
	1	Count	14	25	12	4	5	0	60	
		Std. Residual	1.8	.4	1.1	9.	-1.7	-2.6		
Total		Count	59	155	58	17	70	44	403	

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.380 <sup>a</sup>	5	.004
Likelihood Ratio	23.810	5	.000
Linear-by-Linear Association	12.443	1	.000
N of Valid Cases	403		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 2.53.

## **DESIRED HEALTH \* GROUP**

#### Crosstab

				GROUP					
<b>5</b>			Pre-male	Boomer-male	Post-male	Pre-female	Boomer-f emale	Post-female	Total
HEALTH2 0	0	Count	50	138	51	14	61	39	353
		Std. Residual	2	.2	.0	2	.0	.1	
	1	Count	9	17	7	. 3	9	5	50
		Std. Residual	.6	5	1	.6	.1	2	
Total	•	Count	59	155	58	17	70	44	403

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.228 <sup>a</sup>	5	.942
Likelihood Ratio	1.171	5	.948
Linear-by-Linear Association	.008	1	.928
N of Valid Cases	403		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 2.11.

# **DESIRED RESOURCES \* GROUP**

#### Crosstab

59

		<u> </u>		GROUP					
			Pre-male	Boomer-male	Post-male	Pre-female	Boomer-f emale	Post-female	Total
RESOURC2	0	Count	51	135	54	11	48	40	339
		Std. Residual	.2	.4	.7	9	-1.4	.5	
	1	Count	8	20	4	6	22	4	64
		Std. Residual	4	9	-1.7	2.0	3.3	-1.1	
Total		Count	59	155	58	17	70	44	403

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.752a	5	.000
Likelihood Ratio	21.596	5	.001
Linear-by-Linear Association	3.793	1	.051
N of Valid Cases	403		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 2.70.

## **DESIRED SINCERITY \* GROUP**

#### Crosstab

				GROUP					
			Pre-male	Boomer-male	Post-male	Pre-female	Boomer-f emale	Post-female	Total
SINCERE2	0	Count	39	96	43	8	30	22	238
		Std. Residual	.7	.5	1.5	6	-1.8	8	
	1	Count	20	59	15	9	40	22	165
·		Std. Residual	8	6	-1.8	.8	2.1	.9	
Total		Count	59	155	58	17	70	44	403

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.300 <sup>a</sup>	5	.004
Likelihood Ratio	17.441	5	.004
Linear-by-Linear Association	9.311	1	.002
N of Valid Cases	403		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.96.

## **DESIRED CHILD \* GROUP**

#### Crosstab

				GROUP					
			Pre-male	Boomer-male	Post-male	Pre-female	Boomer-f emale	Post-female	Total
CHILD2	0	Count	49	132	55	14	65	44	359
		Std. Residual	5	5	.5	3	.3	.8	
	1	Count	10	23	3	3	5	0	44
		Std. Residual	1.4	1.5	-1.3	.8	-1.0	-2.2	
Total		Count	59	155	58	17	70	44	403

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.835 <sup>a</sup>	5	.017
Likelihood Ratio	18.558	5	.002
Linear-by-Linear Association	9.541	1	.002
N of Valid Cases	403		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 1.86.

## **DESIRED SMOKING \* GROUP**

#### Crosstab

			GROUP						
			Pre-male	Boomer-male	Post-male	Pre-female	Boomer-f emale	Post-female	Total
SMOKER2	0	Count	52	143	54	16	57	35	357
		Std. Residual	.0	.5	.4	.2	6	6	
	1	Count	7	12	4	1	13	9	46
		Std. Residual	.1	-1.4	-1.0	7	1.8	1.8	
Total		Count	59	155	58	17	70	44	403

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.867 <sup>a</sup>	5	.054
Likelihood Ratio	10.282	5	.068
Linear-by-Linear Association	6.238	1	.013
N of Valid Cases	403		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 1.94.

# **DESIRED DRINKING \* GROUP**

#### Crosstab

				GROUP					
			Pre-male	Boomer-male	Post-male	Pre-female	Boomer-f emale	Post-female	Total
DRINKER2	0	Count	55	152	56	17	64	39	383
		Std. Residual	1	.4	.1	.2	3	4	
	1	Count	4	3	2	0	6	5	20
		Std. Residual	.6	-1.7	5	9	1.4	1.9	
Total		Count	59	155	58	17	70	44	403

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.349 <sup>a</sup>	5	.066
Likelihood Ratio	10.749	5	.057
Linear-by-Linear Association	4.514	1.	.034
N of Valid Cases	403		

a. 5 cells (41.7%) have expected count less than 5. The minimum expected count is .84.

# **DESIRED RELIGION \* GROUP**

## Crosstab

				GROUP					
			Pre-male	Boomer-male	Post-male	Pre-female	Boomer-f emale	Post-female	Total
RELIG2	0	Count	56	151	56	15	62	42	382
		Std. Residual	.0	.3	.1	3	5	.0	
	1	Count	3	4	2	2	8	2	21
		Std. Residual	.0	-1.4	6	1.2	2.3	2	
Total		Count	59	155	58	17	70	44	403

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.534 <sup>a</sup>	5	.090
Likelihood Ratio	8.360	5	.137
Linear-by-Linear Association	3.231	1	.072
N of Valid Cases	403		

a. 5 cells (41.7%) have expected count less than 5. The minimum expected count is .89.