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# Factors Influencing Body Image in the Aging Process

This study examined the personal and relational factors influencing the formation of body image among older persons. Aging-related physical changes, health, marital relationship, cognitive age, and moods were personal and relationship factors explained for influence on the body image of older persons. Data were collected via a mail survey of older married couples residing in three U.S. metropolitan areas of Florida. A total of 94 married couples who were 60 years older participated in this study. Results indicated that agingrelated physical changes, effect of physical changes on the self, self-assessed health, and evaluation of spouse's attractiveness, and perceived attractiveness (one's perception of the other spouse's appraisals of his or her attractiveness) were found to be significantly related to the body image of older men and women. For men, self-assessed health, evaluation of spouse's attractiveness, and perceived attractiveness were significantly related to body image while physical changes, effect of physical changes, and perceived attractiveness were found significant for women. The feelings of older persons about and satisfaction with their bodies and appearance were estimated by aging-related and relationship-related variables.

Although aging brings about changes of the body and appearance, little has been known about how attitudes toward or evaluation of the body and appearance change during the aging process. During the aging process, older persons experience physical changes that may have significant impact on how they perceive their bodies and appearance. Agingrelated physical changes go against a prevailing standard of attractiveness, especially in Western culture, where pleasing and youthful looks and a physically fit body are the standards for beauty (Cockerham, 1991). How does the aging process affect the body image of older people? If looking attractive, youthful, and healthy is so desirable, older people are obviously at a distinct disadvantage. Body image is influenced by many factors, including interpersonal factors, individual factors such as mood, and cultural factors (Body Image, 1997). However, little is known about older people's body image and the various factors which mediate the effects of physical changes associated with aging on older people's self-perception, especially their body image. This study explores the factors which may have impact on the formation of body image during the aging process in order to better understand how older persons feel about their aging bodies and appearance.

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Key Words: body image, aging-related physical changes, selfassessed health, cognitive age, marital relationship Body image is influenced by many factors, including interpersonal factors, individual factors such as mood, and cultural factors (*Body Image*, 1997).

Limited studies have examined the relationship of physical attributes such as weight to body image (Brown, Cash & Noles, 1986; Cash & Hicks, 1990; DelRosario, Brines & Coleman, 1984; Keyes, 1980; Landau, 1989; Tucker, 1982). Socio-cultural factors like gender, social class, ethnicity, and culture or subculture have been studied with regard to their influences on body image (Fallon, 1990; Parker et al., 1995). However, most previous studies have focused on adolescents' or college students' body image and its determinants. Less is known about older persons' body image and the social factors which mediate the effects of physical changes associated with aging on older persons' self-perception, especially their body image. In this study, aging-related variables (agingrelated physical changes including health), relationship-related variables, and psychological variables (cognitive age and mood) were examined as the factors explaining older persons' body image.

# Aging-related Physical Changes

Gupta, Schork and Dhaliwal (1993) reported that there was a significant inverse correlation between concerns about the aging appearance and body satisfaction among older women such that women who were more concerned about the effects of aging were more dissatisfied with their bodies and appearance. Signs of physical aging seem to be a threat to the sense of the self (including body image) for aging persons. No previous study has looked at the relation between the perception of aging-related changes and body image among older persons, although people often first realize that they are aging by looking at themselves in the mirror and by noticing changes of their bodies and appearance.

# Health

During the aging process, changes in physical ability as shown by losses in physical health condition, often lead to restrictions in social and personal activities, which often result in lower self-esteem (Roberto & McGraw, 1991). Body deterioration may bring changes or adjustments in body image. Wilcox (1997) reported that the self-assessment of health was significantly associated with appearance evaluation regardless of age and gender. Individuals

who perceived themselves as healthier rated their appearance more positively than those who perceived themselves as less healthy. Previous studies that have looked at how self-assessment of health influences older men's and women's body image are limited.

# Relationship with Spouses

Hennessy (1989) proposed that an individual's adaptation to physical changes with age is influenced by the individual's perception of supports provided by a spouse or significant other. Garner also found that individuals' feelings about the body were influenced by the quality of their relationship with a spouse and by the reaction of the spouse to the physical appearance of the individuals (*Body Image*, 1997). However, surprisingly few researchers have explored the relation of marital experience and feelings about the body and appearance.

Further research is needed to clarify relationships between marital experience and the perception of physical appearance among aging couples, especially the influences of the quality of interaction between husbands and wives on the perception of their own physical appearance and their spouses' physical appearance. It is possible that aging wives see their bodies as attractive or in a positive light because the wives evaluate their husbands as attractive. Wives may also think that husbands perceive them as attractive and, as a consequence, the wives feel more attractive. The same symbolic interaction effects are also possible for aging husbands.

### Cognitive Age

The feelings of older persons over aging bodies and appearance or their orientation to appearance-related activities may be linked to how old they really see themselves. Goldsmith and Heiens (1992) suggested that although physical changes associated with aging happen to everyone, the way people perceive these physical changes may depend on how old they feel internally. Wilkes (1992) found that cognitively younger "older" women manifested higher self-confidence and greater fashion interest, were more work oriented, and had greater participation in entertainment and culturally related

activities than did cognitively older "older" women. In a study by Barak (1998), middle-aged people were found to feel cognitively younger when they held strong, forceful masculine values, were more satisfied with their current status in life, felt healthier than others, felt better about themselves, were more concerned about the public impression they made, and were more involved in social activities. These results indicate that older persons who feel cognitively younger may hold more positive attitudes about themselves and age more successfully than older persons who feel cognitively older.

Cognitively younger "older" persons may be able to view their aging bodies and appearance independently from their inner self; they could avoid identifying themselves as being old and fitting negative stereotypes or stigma. Although there is no previous study that looked at the relation between cognitive age and the body image of older persons, it was expected that cognitively younger "older" persons may have more positive attitudes about their aging bodies.

#### Mood

Mood states are thought to be considerably important in assessing the psychological well-being of older persons (Curran, Andrykowski & Studts, 1995; Lawton *et al.*, 1992). Mood states that older persons experience may temperaneously affect the evaluation of their bodies and appearance. Positive moods may induce positive feelings about the body, while negative moods may foster dissatisfaction or intolerance with weight or body features. Garner reported being in a bad mood as one of the factors fostering negative body image (*Body Image*, 1997).

With regard to the relationship of moods and body image, a considerable number of studies have examined the relationship between negative moods, especially depression, and body image, such as dissatisfaction with the body, weight, or shape (Koenig & Wasserman, 1995; Rierdan & Koff, 1997). Depression has been found to fuel eating disorder behaviors such as bulimia or anorexia nervosa that are closely linked to dissatisfaction with the body, especially body weight (Dewberry & Ussher, 1994). Maximin (1989) found that older persons who

evaluated their appearance more positively were less depressed than were those who evaluated their appearance less positively. More research is needed to explore the effect of various moods including positive moods on body image among older persons.

In sum, older persons' body image appears to need adjustment to physical changes associated with aging. Although aging occurs in everyone, older individuals' experience of aging, including their experience of the aging body, may vary depending on their physical health, relationship with their spouses, cognitive age, and different psychological moods. This study examines various factors that affect the body image of older persons. The factors examined in this study included aging-related physical changes, relationship with a spouse, cognitive age, and psychological moods.

Based on the review of the previous research, the following hypotheses were generated:

- H<sub>1</sub>: Older persons who have experienced more aging-related changes of their bodies and appearance feel less positive about their bodies and appearance than do those who have experienced fewer changes.
- H<sub>2</sub>: Older persons who feel healthier feel more positive about their bodies and appearance than do those who feel less healthy.
- H<sub>3</sub>: Older persons who perceive that spouses evaluate their bodies as more attractive feel more positive about their bodies and appearance than do those who perceive that spouses evaluate their bodies as less attractive.
- H<sub>4</sub>: Older persons who evaluated spouses as more attractive feel more positive about their bodies and appearance than do those who evaluate spouses as less attractive.
- H<sub>5</sub>: Older persons who are more satisfied with marriage feel more positive about their bodies and appearance than do those who are less satisfied with marriage.
- H<sub>6</sub>: Older persons who are cognitively younger feel more positive about their bodies and appearance than do those who are cognitively older.
- H<sub>7</sub>: Older persons who have more positive mood

feel more positive about their bodies and appearance than do those who have less positive mood.

H<sub>8</sub>: Older persons who have more negative mood feel less positive about their bodies and appearance than do those who have less negative mood.

#### **METHOD**

# Questionnaire Development

Measures of body image The Appearance Evaluation scale of the Multidimensional Body-Self Relations Questionnaire (Cash, 1994) was used to measure body image. It included six items assessing feelings of physical attractiveness and satisfaction with overall individual physical appearance. Sample items include "I like my looks just the way they are" and "Most people would consider me good-looking". Brown, Cash and Mikulka (1990) found that internal consistency (Cronbach's alpha) was .88 for both females and males.

Measures of attractiveness Participants responded to items measuring perceptions of how spouses would evaluate their physical attractiveness and how spouses would be pleased with their physical appearance. Participants were also asked to indicate perceptions of their spouse's physical attractiveness and satisfaction with their spouse's physical appearance. Values of these two items were summed and averaged to create a composite score for Perceived Attractiveness and Spouse's Attractiveness, respectively.

Aging-related physical changes Participants were asked to check items they had noticed recently from the list of various changes in physical appearance and decrease/loss of function due to aging. This variable was labeled Physical Changes. Additionally, participants were asked to indicate how much changes in the body associated with aging affected personal feelings about themselves. This item named Effect of Physical Changes was developed by Passman (1995).

Self-assessed health Participants responded to items asking how many times they had seen a doctor or were unable to perform daily tasks due to a health problem during the last six months. The third question stated, "On a scale of 0 to 10 indicating a range of health from very poor to excellent health, indicate the number which best represents your health." Finally, participants were asked to indicate personal health in comparison to other people of similar age through a method developed by Passman (1995).

Marital relationship Three measures used to assess how people felt about their marital relationship were as follows: The Kansas Marital Satisfaction scale (Schumm et al., 1983), the Quality Marriage Index (Norton, 1983), and the Marital Instability Index (Booth, Johnson & Edwards, 1983). The Kansas Marital Satisfaction scale consisted of three items assessing the marriage satisfaction of participants and relationship with their spouses. The Quality Marriage Index was developed to measure global evaluation of the marital relationship as a whole (Norton, 1983). For the Kansas Marital Satisfaction scale, Cronbach's alpha has been found to be .90 for wives, .90 for husbands, and .93 for the total sample (Calahan, 1996). Booth et al. (1983) reported a Cronbach's alpha of .75 for the Marital Instability Index.

Cognitive age Cognitive age is a participants' self-report of their age status- how old they seem to themselves (Kastenbaum et al., 1972). Barak's (1987) cognitive age measure was used to measure the cognitive age of participants. Participants indicated the specific age decade from 20s to 80s in which they felt they really belonged on the four dimensions of, feel/age, look/age, do/age, and interest/age. Barak (1987) reported a Cronbach's alpha of .92 for the measure of cognitive age.

Mood states A shortened version of the Profiles of Mood States developed by Shacham (1983) was used to assess the transient but distinct mood states of participants. Participants indicated the degree to which each adjective described personal feelings during the last week. Six factors have been

consistently derived including Vigor, Tension, Depression, Anger, Confusion, and Fatigue with high reliabilities ranging between .81 and .95 (Curran, Andrykowski & Studts, 1995). In this study, Anger, Tense, and Depression were combined into one factor labeled Psychological Distress after examining the correlations among variables.

# Sample

After contacting 600 randomly selected married couples from the list purchased from a mailing company via telephone, the questionnaires were sent to the 194 married couples who agreed to participate in this study. A follow-up postcard reminder was sent to each household one week after the first mailing was sent. Finally, the third mailing that included a letter, a set of questionnaires, and a selfaddressed stamped envelope was sent to those who had not responded by the third week from the first mailing. A total of 129 married couples, aged 60 and older, residing in an independent dwelling, and living in three metropolitan areas in Florida, returned the questionnaires after three mailing attempts. Return rates of both usable and unusable questionnaires were 66.5%, with a usable rate of 48.4% (N = 94 couples). Husbands ranged in age from 60 to 95, with an average age of 74. 6 years; Wives ranged in age from 60 to 90, with an average age of 72.1 years. The average length of living with a current spouse was 43.6 years.

### Data Analysis

Hierarchical multiple regression analysis was used to examine how the body image was explained by a set of independent variables. Separate multiple regression analyses were performed for the men's and the women's data. Independent variables were grouped into four blocks of demographic variables (age, education and incomes), aging-related variables (self-assessed health, physical changes, and effect of physical changes), relationship-related variables (evaluation of spouse's attractiveness, perceived attractiveness, and marital quality), and psychological variables (cognitive age, vigor, psychological distress, and fatigue).

Demographic variables as predisposed variables

were entered first followed by aging-related variables. Since aging-related variables are related to chronological age and are hard to manipulate, they were entered before relationship-related and psychological variables. Due to a lack of evidence supporting any causal relationship between relationship-related and psychological variables, these two blocks of variables were added alternatively to the second model after the demographic and aging-related variables were entered.

In running multiple linear regression models, the problem of multicollinearity among independent variables was detected by examining the variance-inflation factor (VIF), the condition index (*k*), and the tolerance values for each independent variable. To improve accuracy in inferences of the parameter estimates in linear regression models, regression diagnostics were conducted to explore any violations of assumptions of regression analysis, outliers or influential data point, non-normality of residuals, heterogeneity of error variances, and nonlinearity.

# FINDING AND DISCUSSIONS

### The Appearance Attitude of Men

The final model with all 13 independent variables was significant ( $F_{(13, 67)} = 5.55$ , p = .0001), accounting for 52% of the variance of body image for older men. Except for Step 1 with demographic variables as predictors, Step 2 with aging-related variables and demographic variables ( $F_{(6,74)} = 3.34, p = .006$ ), Step 3 with relationship-related added to Step 2 ( $F_{(9,71)}$  = 7.86, p = .0001), and Step 4 with psychological variables added to Step 2 ( $F_{(10,70)} = 2.86, p = .005$ ) were significant in Table 1. The variances of appearance attitude explained by each model were: 3% (Step 1), 21% (Step 2), 50% (Step 3), and 29% (Step 4). Increases in the variance explained by adding each variable block were: 3% (demographic variables), 18% (aging-related variables), 29% (relationship-related variables), and 8% (psychological variables). The results of hierarchical multiple regression suggest that aging-related variables and relationship-related variables explained most of the variance in the appearance attitude of men.

TABLE 1. HIERARCHICAL MULTIPLE REGRESSION ESTIMATING APPEARANCE ATTITUDE FOR MEN (N = 80)

Variables -	Step 1		Step 2		Step 3		Step 4		Step 5	
	β	t value								
Age	04	33	.01	.01	09	95	.11	.66	.04	.28-
Education	.04	.32	.13	1.06	11	-1.00	.09	.72	12	1.11
Incomes	.14	1.06	.07	.54	.02	.23	.08	.66	.03	.24
Self-assessed health			.35	3.11	.38	4.12	.18	1.38	.35	2.97
Physical changes			.06	.55	.17	1.76	.07	.57	.16	1.49
Effect of physical changes			25	-2.25	17	-1.78	24	-2.15	17	-1.62
Spouse's attractiveness					.30	2.71			.30	2.63
Perceived attractiveness					.41	3.42			.40	3.26
Marital quality					06	68			06	60
Cognitive age				7.5%			07	41	20	-1.06
Vigor							.32	2.32	.02	.14
Psychological distress							11	94	09	79
Fatigue							.14	.96	.13	1.09
MSR	0.25		0.83		1.30		0.68		0.94	
MSE	0.30		0.25		0.17		0.24		0.17	
$R^2$	.03		.21		.50		.29		.52	

Note. t value in bold is significant at the significant level of .05. Due to missing values, N is less than the total sample of 94.

Aging-related variables Of three aging-related variables, only self-assessed health was significant in Step 5. Self-assessed health was positively related with the appearance attitude, indicating that older men who felt healthier were more satisfied with and had more positive feelings about their bodies and appearance than did those who felt less healthy.

Effect of physical changes on the self was insignificant in Step 5 but close to significance, indicating a possible weak relationship. Effect of physical changes had an inverse relationship with appearance attitude, indicating that men whose feelings about themselves were less influenced by physical changes associated with aging held more positive feelings about and were more satisfied with their bodies and appearance than did men whose feelings about themselves were more influenced by these physical changes. The significant correlation between the effect of physical changes and appearance attitude (r = -.30, p = .004) also supports this inverse relationship.

Relationship-related variables In Step 5, the evaluation of spouse's attractiveness and perceived attractiveness were significantly related to appearance attitude. Older men who evaluated spouses as

more attractive and who thought that spouses evaluated them as more attractive were likely to have more positive attitudes toward and greater satisfaction with their bodies and appearance.

# The Appearance Attitude of Women

The final equation with the 13 independent variables was significant ( $F_{(13,70)} = 6.67$ , p = .0001), accounting for 55% of the variance of women's appearance attitude. Step 1 with the demographic variables was not significant while Step 2 ( $F_{(6,77)} = 4.51, p = .0006$ ), Step 3 ( $F_{(9,74)} = 9.94$ , p = .0001), and Step 4 ( $F_{(10,74)} = 9.94$ ), and Step 4 ( $F_{(10,74)} = 9.94$ ).  $p_{73} = 3.97, p = .0002$ ) were significant in Table 2. The variances of appearance attitude explained by each Step were: 2% (Step 1), 26% (Step 2), 55% (Step 3), and 35% (Step 4). The increases in the variance explained by adding each variable block were: 2% (demographic variables), 24% (aging-related variables), (relationship-related variables), and 9% (psychological variables). Similar to the results of analysis of the appearance attitude of men, the appearance attitude of women were explained mostly by aging-related and relationship-related variables.

Aging-related variables Of three variables in this block, physical changes and effect of physical

TABLE 2. HIERARCHICAL MULTIPLE REGRESSION ESTIMATING APPEARANCE ATTITUDE FOR WOMEN (N=83)

Variables -	Step 1		Step 2		Step 3		Step 4		Step 5	
	β	t value								
Age	.03	.24	.10	.94	.10	1.00	.21	1.47	.12	.96
Education	11	92	09	88	05	60	13	-1.27	07	80
Incomes	.10	.85	.10	1.00	.10	1.15	.09	.89	.11	1.17
Self-assessed health			03	25	07	79	22	-1.75	12	-1.05
Physical changes			30	-2.82	31	-3.57	21	-1.90	29	-3.05
Effect of physical changes			31	-2.86	22	-2.43	26	-2.35	22	-2.27
Spouse's attractiveness					.04	.40			.04	.38
Perceived attractiveness					.54	5.80			.51	4.99
Marital quality					04	39			05	49
Cognitive age							19	-1.29	05	24
Vigor							.26	2.04	08	.73
Psychological distress							20	-1.87	05	51
Fatigue							.08	.77	.05	.54
MSR	0.24		1.67		2.34		1.35		1.64	
MSE	0.47		0.37		0.24		0.34		0.25	
$R^2$	.02		.26		.55		.35		.55	

Note. t value in bold is significant at the significant level of .05. Due to missing values, N is less than the total sample of 94.

changes were inversely related to appearance attitude in Step 5. Older women who experienced more physical changes associated with aging and whose feelings about themselves were more affected by physical changes had less positive feelings about and lower satisfaction with their bodies and appearance.

Relationship-related variables Perceived attractiveness was significantly related to appearance attitude, indicating that older women who perceived that their husband evaluated them as more attractive had more positive feelings about and greater satisfaction with their bodies and appearance. However, the evaluation of spouse's attractiveness and marital quality were not significant estimators of appearance attitude even though their correlations with appearance attitude were significant (evaluation of spouse's attractiveness: r = .35, p = .0005; marital quality: r = .29, p = .005). The effects of these two variables on appearance attitudes may be mediated by perceived attractiveness or other variables already in the model.

Among aging-related variables, self-assessed health was positively related to body attitude for men but not for women, suggesting that the loss of physical competence and physical independence during the aging process may be more fearful for the self concept of men including a sense of body image than those of women. Staying physically healthy in later years may overall reinforce the evaluation of older men of their bodies and appearance and help them accept their aging bodies and appearance. A positive relationship between self-assessed health and feelings about the body among older men has been reported by Ross et al. (1989) and Wilcox (1997). However, the insignificant association between self-assessed health and body attitude for older women was inconsistent with previous findings by Loomis and Thomas (1991). Interestingly, perceived physical changes associated with aging were found to damage only the feelings about and satisfaction of older women with their bodies and appearance, not that of older men. Women seem to be more sensitive to signs of aging in appearance than men. This may have a negative impact on the feelings about and satisfaction of women with their bodies and appearance. These findings were similar to those reported by Gupta et al. (1993).

These results imply that older women have internalized the double standard of aging argued by Sontag (1979), that aging has more serious consequences for women than it does for men. In contemporary western society, women tend to be judged more by physical appearance than do men. Departures from youthful appearance or socially accepted standards of beauty may have greater psychological cost for women than for men. In addition to perceived physical changes associated with aging, the feelings of older women about their bodies and appearance were subject to the degree to which older women's feelings about themselves were influenced by these perceived physical changes. Women who thought that aging-related changes of their bodies and appearance affected self-concepts more showed more negative attitudes dissatisfaction with their bodies and appearance.

Regardless of gender, the feelings of older persons about and satisfaction with their bodies and appearance appear to be dependent on the perception of how spouses evaluate their appearance. These results provided empirical evidence for the reflected self from the perspective of symbolic interaction (Mead, 1934). A positive reaction to personal appearance from a spouse may reinforce the self-appraisal of personal appearance. Similar effects of reflected appraisals on self-appraisals of self-concepts or behaviors have been found in previous studies by Ichiyama (1993) and May (1991).

Older men's actual evaluation of their spouse's appearance was significantly and positively related to the feelings of men about and satisfaction with their own bodies and appearance. However, women's actual evaluation of their spouse's appearance was not related to the feelings of wives about and satisfaction with their own bodies and appearance. These findings were inconsistent with the previous findings that in long-term marriages, attractiveness of husbands was emphasized more than the attractiveness of wives and wives' positive evaluation of husbands' appearance was related with the self-evaluation of wives on personal appearance (i.e., Webb, Delaney & Young, 1989).

No significant relationship between negative moods and feelings about the body and appearance among older men and women emerging from this study was in direct contrast to the findings of

previous studies (Davis & Katzman, 1997; Grubb, Sellers & Waligroski, 1993; Koenig & Wasserman, 1995; Maximin, 1989). However, these previous studies focused on bivariate relationships between negative moods such as depression and body image. In this study, significant associations between negative (or positive) moods and appearance attitude in bivariate analyses became insignificant in multivariate analyses. The effects of mood states on attitudes toward the body and appearance were meaningful when the effects of mood states were looked at in isolation, but were irrelevant when they were examined in combination with other variables. The possible influences of negative (or positive) moods on personal feelings about the body and appearance may be mediated by other variables.

Contrary to the expectation that older persons who feel younger would have more positive evaluations of their bodies and appearance (i.e., Barak, 1998), no association between cognitive age and appearance attitude was found from the results of multiple regression. This finding did not support previous findings by Barak and Rahtz (1989) and Wilkes (1992) that cognitive younger age was positively related with greater self-confidence and self-esteem.

# **CONCLUSIONS**

Older men who felt healthier, evaluated their spouse's appearance as more attractive, perceived that spouses evaluated them as more attractive were likely to feel more positive about and had greater satisfaction with their bodies and appearance. For women, physical changes, effect of physical changes, and perceived attractiveness were significantly associated with appearance attitude. Older women who perceived fewer aging-related changes of the body and appearance, whose feelings about themselves were less affected by these changes, and perceived that spouses evaluated them as more attractive held more positive feelings about and satisfaction with their bodies appearance. Overall, the feelings of older persons

about and satisfaction with their bodies and appearance were estimated by aging-related and relationship-related variables.

As expected, aging-related changes of the body and appearance appear to threaten the feelings of older women about and satisfaction with their bodies and appearance. Interestingly older men when compared to older women, noticed less changes of physical appearance such as wrinkles or sagging skin; as a consequence, the feelings of older men about and satisfaction with their bodies and appearance were not necessarily influenced by the perception of these physical changes.

The feelings of older persons about and satisfaction with their bodies and appearance were largely related to physical factors and relationshiprelated factors. The body image of men was more significantly related to self-assessed health while the body image of women was more closely associated with aging-related physical changes. For older men, a loss of strength and autonomy may threaten selfconcepts including a sense of body image. Signs of aging especially in appearance may damage women's evaluation of their bodies and appearance. Men and women differ in the experience of body awareness, such that when women are attentive to their bodies. the feelings they experience are significantly more negative than are those of men. In addition, women tend to scrutinize specific body parts or functions while men exhibit a greater tendency to see the body as a whole (Fisher, 1964; Franzoi, Kessenich & Sugrue, 1989). The body image of older men may be dependent on the overall feelings of body competence while the body image of older women may be disrupted by signs of an aging appearance in body parts such as face, hands, or neck. Further research is needed to investigate how differently men and women experience their aging bodies.

The results of this study should be evaluated in light of certain limitations. First, the measure of body image has been criticized as focusing on certain aspects of body image and may not represent personal feelings about the body as a whole. Second, the survey was limited to older people living in three cities in the U.S., married, and generally healthy (both physically and mentally). These findings may

not be generalized to older persons in other regional areas, to older persons who are never married, divorced, or widowed, or to those who are frail. Also, all the married couples who participated in this study showed fairly high marital satisfaction; therefore, the results of data analysis involving marital relation-related variables could be somewhat biased. As well, older persons who participated in this study may have held fairly positive attitudes toward themselves including their physical bodies and appearance; therefore, they may have felt more comfortable to express personal feelings about their bodies and appearance.

This study identified several factors influencing the body image of older persons. In later years, having positive body image contributes to the psychological well-being of older persons. Understanding the factors related to the formation of body image among older persons may help researchers or social workers prevent or intervene in potential problems related to negative body image among older persons. In addition, the findings may help older individuals understand why they feel the way they do. To understand how the body image changes during the aging process, longitudinal research is suggested. Although the aging process is universal, the individual experience of aging varies depending on physical, psychological, cultural, and relational factors. No previous attempt has been made to examine how the body image changes through different life stages. The life experience may be recorded in their sense of body image.

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