

Body Cathexis: An Investigation of Sex and Age Differences
and its Relationship to Total Self Concept

by

Karen E. Davies

A Thesis

Submitted to the Faculty of Graduate Studies
in Partial Fulfillment of the Requirement for the Degree

Master of Arts

Department of Psychology

University of Manitoba

October, 1980

BODY CATHEXIS: AN INVESTIGATION OF SEX AND AGE DIFFERENCES
AND ITS RELATIONSHIP TO TOTAL SELF CONCEPT

BY

KAREN ELIZABETH DAVIES

A thesis submitted to the Faculty of Graduate Studies of
the University of Manitoba in partial fulfillment of the requirements
of the degree of

MASTER OF ARTS

© 1980

Permission has been granted to the LIBRARY OF THE UNIVER-
SITY OF MANITOBA to lend or sell copies of this thesis, to
the NATIONAL LIBRARY OF CANADA to microfilm this
thesis and to lend or sell copies of the film, and UNIVERSITY
MICROFILMS to publish an abstract of this thesis.

The author reserves other publication rights, and neither the
thesis nor extensive extracts from it may be printed or other-
wise reproduced without the author's written permission.

ABSTRACT

Body Cathexis is the degree to which an individual is satisfied or dissatisfied with the various parts, processes, and functions of his/her body. Previous research in this area has provided inconsistent results with respect to sex differences on measures of body cathexis, while age differences have received practically no attention. The existence of a positive, significant relationship between self concept and body cathexis has been clearly established among male and female university undergraduates, but this relationship has not yet been tested out with non-students of different ages.

In the present study, body cathexis was investigated among non-student young (25-35 years), middle-aged (45-55 years), and senior (65 years and over) men and women. The relationship between self concept and body cathexis was also examined. Questionnaire sets were distributed to volunteer participants (all of whom were involved in some type of physical activity) in each of six groups: young male, young female, middle-aged male, middle-aged female, senior male, senior female. Each questionnaire set included: (1) a questionnaire designed by the author to elicit demographic data, and information as to how an individual spends his or her leisure time, (2) the Tennessee Self Concept Scale, (3) Jourard and Secord's Body Cathexis Scale, and (4) a scale, similar to Jourard and Secord's Body Cathexis Scale, designed to elicit information as to how important an individual perceives various parts, processes, and functions of his body to be.

The major results of this study are summarized below.

- (1) The positive and significant relationship previously

demonstrated between self concept and body satisfaction was confirmed among four of the six groups in this study. A tentative explanation as to why this relationship did not hold true for middle-aged males and female senior citizens is discussed.

(2) Although neither sex nor age was found to have a significant effect on several Body Cathexis Scores, it is suggested that the homogeneity of the total sample with respect to the sample-wide involvement in some kind of physical activity may actually have suppressed any potential sex or age differences that may exist in the general population.

(3) Contrary to previously reported results that women "draw finer evaluative distinctions about the various aspects of the body" (Kurtz, 1969, p. 626) and thus show more overall variability in their responses on body cathexis scales than do men, this study found no significant differences between men and women in this regard.

(4) Providing further support to previously published results, perceiving oneself as overweight was found to have a general negative effect on one's level of satisfaction with one's body.

(5) Those five items considered most important most frequently revealed some interesting differences between males and females, especially as related to the aging process.

(6) For both males and females, general body build or shape seems to be most important to self esteem, whereas facial features do not appear to play an important part.

Limitations of the present study are discussed and recommendations for further research are offered.

TABLE OF CONTENTS

	page
Introduction	1
Relationship Between Self Concept and Body Cathexis	11
Body Cathexis: Sex and Age Differences	14
Differential Importance of Individual Body Aspects	16
Differential Relationships Between Self Concept and Cathexis for Individual Body Aspects	19
Method	
Subjects	24
Procedure	26
Results	
Relationship Between Self Concept and Body Cathexis	31
Body Cathexis: Sex and Age Differences	31
Importance of Body Aspects	35
Differential Relationships Between Self Concept and Cathexis for Individual Body Aspects	40
Type of Activity as Related to Self Concept and Body Cathexis	46
Weight Perception as Related to Self Concept and Body Cathexis	51
Discussion	
Relationship Between Self Concept and Body Cathexis	56
Body Cathexis: Sex and Age Differences	58
Body Cathexis as Related to Weight Perception	61
Differential Importance of Body Aspects	62
Differential Relationships Between Self Concept and Cathexis for Individual Body Aspects	67
Type of Activity as Related to Self Concept and Body Cathexis	69
Summary	74
References	76

LIST OF APPENDICES

	page	
Appendix A	Number of Subjects From Each Recreational Facility Broken Down by Sex and Age	81
Appendix B	Discussion and Analysis of Educational and Occupational Differences	83
Appendix C	Instructions and Concluding Remarks to Subjects in Questionnaire Sets	87
Appendix D	Questionnaire #1: Demographic Data and How Leisure Time is Spent	91
Appendix E	Tennessee Self Concept Scale	98
Appendix F	Body Cathexis Scale	104
Appendix G	Satisfaction With Parts and Satisfaction With Functions Subscales	111
Appendix H	Scale for Rating the Importance of Various Body Parts and Functions	113
Appendix I	Return Rates Broken Down by Age and Sex	119
Appendix J	Response Percentages for Those Items With Which Males and Females Expressed the Most Satisfaction Most Frequently	121
Appendix K	Response Percentages for Those Items Which Males and Females Considered Most Important Most Frequently	124
Appendix L	Zero Order Correlation Coefficients Between Self Concept Scores and Cathexis for Body Aspects Among Males and Females	127

LIST OF TABLES

	page	
Table 1	Correlation Coefficients Between Total Self Concept Scores and Body Cathexis Scores	32
Table 2	Items With Which Subjects Expressed the Most Satisfaction Most Frequently	34
Table 3	Items Which Subjects Considered Most Important Most Frequently	37
Table 4	Analyses of Variance - Total Importance Scores and Importance of Parts Subscale Scores Among All Subjects	39
Table 5	Oneway Analyses of Variance - Total Importance Scores and Importance of Parts Subscale Scores Among Middle-Aged Subjects	41
Table 6	Zero Order Correlation Coefficients Between Tennessee Self Concept Scale Scores and Cathexis for Individual Body Aspects	43
Table 7	Final Beta Weights for Male and Female Body Parts and Functions after Deletion of all Negative Suppressor Variables	45
Table 8	Participation in Physical Activities Expressed in Percentages	48
Table 9	Oneway Analyses of Variance - Second Listed Physical Activity Among Middle-Aged and Senior Males	50
Table 10	Oneway Analyses of Variance - Weight Perception Among All Subjects	53
Table 11	Oneway Analyses of Variance - Weight Perception Among Middle-Aged Males and Female Senior Citizens	55

INTRODUCTION

Interest in the study of the relationship between mind and body can be traced as far back as the early Greek philosophers. However, it was not until the early 1900's that serious attention was paid to personal body image. This was done by the British neurologist, Henry Head, who put forward a fairly elaborate theory.

Interested not only in the physiological events related to neurological deficit or loss, Head, and several other neurologists following him, became fascinated with the concept of body image, and the various body attitudes and feelings of those who suffered certain neurological problems. On the basis of his observations, Head suggested that each individual gradually develops a picture or model of himself which becomes a standard against which all body movements and postures are judged. For Head, every new stimulation or sensation was automatically brought into relation with this organized model of the personal body, and the relation that was established between stimulus and model gave rise to recognition of the meaning of the stimulation. Without such a model, Head did not feel that the individual would be able to change from one posture to another in a coherent way. Moreover, he proposed that this model or schema of the personal body was not fixed, but could in fact incorporate sensory data and reorganize itself appropriately.

Head maintained that body schemata were nonpsychological in nature and specifically stated that their use by the person occurred solely on the physiological level, functioning outside of consciousness. Head's thinking eventually stimulated the analysis of many neurological

syndromes in body image terms as researchers sought to determine the relationships between types of disorders and location of neurological damage.

Apart from the philosophical and neurological contributions to the study of personal body experience, there are sufficiently well-developed theoretical bases for psychological concern with the study of body perception. The psychological research that presently exists can be broadly classified into two groups--research that has a perceptual orientation, and research that is oriented toward the study of personality processes (Schontz, 1969). Schontz has suggested that perceptual research, as the study of the individual's experience of the spatial-geometric properties of the personal body, with its primary concern being for judgement accuracy, be identified with the term 'body schemata'. Although the perceptual research has made significant contributions to the overall understanding of personal body perception, it was the intent of this author to focus attention on the second group of studies, those oriented toward the study of personality processes.

Personality-oriented research, according to Schontz (1969), is concerned with what is commonly called the body image, i.e. "the personal body as a dynamic component of personality" (p. 6). While Henry Head, the neurologist, is generally regarded as the pioneer of the study of body experience, he was not concerned with personality and thus, in describing body schemata, wrote solely of physiological organizations and the perception and localization of stimuli. In 1935, Schilder moved the discussion of body experience to another theoretical level when he proposed that "there is no body image without personality" (p. 15). Schilder explained that "when we perceive or imagine an object, or when

we build up the perception of an object, we do not act merely as a perceptive apparatus. There is always a personality that experiences the perception" (p. 15). This postulation of active perceiving mental entities allows for the introduction of psychodynamic constructs, i.e. the body ego and its components.

The importance of the body as a component of and influence upon the personality of the individual has been considered in detail by numerous theorists. Freud, and others who have followed in the psychoanalytic tradition, have made considerable efforts to integrate body image constructs into their theoretical systems. In terms of ego formation, Freud advanced that a child initially acquires a basis for discriminating between the outer world and his own body through learning to integrate sensations from his body surface. Fenichel (1945) explains that

in the development of reality the conception of one's own body plays a very special role. At first there is only the perception of tension, that is, of an "inside something". Later, with the awareness that an object exists to quiet this tension, we have an "outside something". One's own body becomes something apart from the rest of the world and thus the discerning of self from nonself is made possible. The sum of the mental representations of the body and its organs, the so-called body image, constitutes the idea of I and is of basic importance for the further formation of the ego. (p. 35)

Once the fundamental distinction between internal and external realities has been made, the stage is set for "the growth of self-awareness, the ultimate equation of the self with the body, and the establishment of a sense of personal identity" (Schontz, 1969, p. 165). Witkin (1965) suggests that the "achievement of a differentiated body concept is a manifestation of the child's general progress toward psychological differentiation" (p. 26).

Freud's conception of the development of sexuality would also appear to be body image oriented. His theory of libido and of erogenous

zones is stated almost entirely in terms of body zones and areas of body sensitivity, and one may identify the passage through the oral, anal, phallic, latency, and genital stages, with progressive elaboration and repression of different portions of the body image. Freud has discussed the concept of fixation at various stages and has suggested that if libidinal fixation does occur in a given erogenous zone, that zone may then take on a disproportionate influence in the total body scheme and produce distortions of various sorts. Certainly it would seem that body image concepts are one of the cornerstones of Freud's theoretical system.

Adler's theoretical formulations, although not explicitly concerned with body image, are full of descriptions of personality dynamics that are rich with implicit body image references. His concept of organ inferiority and an individual's subsequent attempt to compensate for same through neurotic or otherwise maladjusted behavior certainly has body image connotations. In the words of Fisher and Cleveland (1958), Adler has suggested that "when an individual has a morphologically inferior organ or an organ which is below par for functional reasons, that individual develops generalized feelings of inferiority and tries to compensate for the 'defect' by use of another organ or by intensified use of the inferior organ itself" (p. 46). Fisher and Cleveland suggest this may be similar to saying that when an individual perceives an aspect of his body as inferior he then generalizes this inferiority to his total concept of himself. One organ may take on exaggerated importance and perceived size relative to the rest of the body scheme, and subsequently exert a generalized distorting effect.

Although their complete theoretical systems differ considerably,

both Jung's followers and Otto Rank have discussed at length the idea that in response to stress individuals may seek to convert their bodies into some kind of container analogous to the 'mother container' or womb. That is, individuals may seek security in visualizing their bodies as having invulnerable walls. Fisher (1970) has discussed and investigated extensively the notion of body boundary as an important aspect of overall body image.

Wilhelm Reich has discussed the complex interaction between an individual's personality conflicts, the individual's expressions of these conflicts in patterns of muscle tonus, and the repercussions of these tonus patterns upon the individual's way of experiencing himself and others. Thus, Reich has proposed a system wherein 'mental conflict' has a direct effect on the 'physical self' which in turn exerts an effect back on how an individual experiences himself and others.

As the originator and developer of Gestalt Therapy, Fritz Perls emphasized that the organism always works as a whole, stressing that the body cannot be considered separately from the self. Any emotion that is experienced subjectively is inevitably accompanied by some type of muscular movement, implying that an emotional existence can only be understood as it is related to a physical existence. Perls has suggested turning one's attention to one's physical existence to generate internal support in times of boredom or anxiety.

Clinicians interested in personality have also concerned themselves with problems of body image in patients with physical illnesses and disabilities, or somatic anomalies. Others have studied perception of the personal body from a developmental perspective, as a source of theoretical and practical concern.

The various theoretical formulations indicating the importance of body image as a crucial component in the development of personality, have led to a series of studies investigating the relationships between aspects of personal body perception and personality traits or dynamic characteristics. The personality-oriented body perception research has generally attempted to measure a subject's experience of his body as a conscious or unconscious, value-loaded phenomenal entity, rather than an individual's accuracy in determining spatial-geometric properties of his personal body.

One of the earliest empirical attempts to relate personality variables to the physical body was made by Sheldon in the early 1940's. Proposing that personality was an extension of an individual's biological structure as represented by his somatotype, Sheldon conducted an extensive study and reported significant correlations between body type or physique and temperament (ectomorphy-detached; mesomorphy-energetic; endomorphy-relaxed). Attempts to replicate Sheldon's results have generally been unsuccessful but Sugarman and Haronian (1964) point out that most of the subsequent studies employed inappropriate or unsophisticated procedures to determine somatotype.

In Sheldon's work, body type was determined by a set of objective measures, and Sheldon did not attempt to elicit subjective reports of satisfaction or dissatisfaction with one's particular physique. Thus, he did not discuss the subjective desirability of having one specific body type rather than another. Numerous studies have since confirmed the existence of stereotyped behavioral descriptions relating physique to social image (Brodsky, 1954; Kiker & Miller, 1967; Staffieri, 1967; Sleet, 1969; Kirkpatrick & Saunders, 1978). Even though different

researchers used significantly different populations (i.e. populations differed by age, sex, occupation) to rate or judge the different body types, the mesomorphic figure was overwhelmingly and consistently viewed as most positive while the endomorph was inevitably viewed as most negative.

Staffieri (1967), who had used six to ten year old children to rate silhouettes of the three different body types, suggested that

it is reasonable to assume that the individual who is the recipient of statements which are based on another person's perception of his body is likely to incorporate these perceptions into his own body concept. As a direct result of an individual's body configuration, he typically receives rather consistent reactions from others. These reactions thus provide a framework for his body concept, which becomes a significant part of the total self concept. (p. 101)

Certainly from a social learning theory perspective, one would expect that the regular and consistent reactions from a child's parents and peers concerning his body shape and size would have a strong impact on the child's personal perception of his own body. The fact that Staffieri found the young children in his study to show a clear preference to look like the mesomorph image, regardless of their actual body type, would indicate that at an early age, children have a definite sense of which body configuration is likely to elicit the most societal and parental approval.

Several studies with adult populations have generally found that those with a mesomorphic or average body build are most satisfied with their bodies while those with an endomorphic build are least satisfied (Sugarman & Haronian, 1964; Kurtz, 1966; Meeker, 1978). Certainly within our North American culture the ideal body configuration for males is portrayed as a mesomorphic figure, while for females it appears to be a mesomorphic bordering on an ectomorphic figure. Thus, it is not

unexpected that those with body configurations that differ substantially from the cultural 'ideal' would experience a greater degree of dissatisfaction with their bodies.

Many authors have discussed the importance of a healthy body image for a healthy total self concept, thus implying the existence of a theoretically significant relationship between the two. Fisher and Cleveland (1965) have suggested that through studying an individual's attitudes and feelings toward his body, we may be able to gain an increased understanding about his overall self concept. Fisher and Cleveland explain that

With increasing study of body image phenomena we have learned that the normal individual's attitudes toward his body may mirror important aspects of his identity. An individual's feeling that his body is big or small, attractive or unattractive, strong or weak, may tell us a good deal about his self concept or his typical manner of relating to other people. There is evidence that the individual has a unique way of perceiving his own body image as contrasted to non-self objects. As such, this body image or body concept frequently serves as a screen or target upon which he projects significant personal feelings, anxieties and values.
(p. 48)

Like the notion of 'self concept', 'body image' is a complex construct that defies simple definition. Whereas self concept has been the subject of extensive investigation in the psychological community, body image has not received nearly the same comprehensive, organized attention. Witkin (1965) describes the body image as representing the individual's systematic impression of his body which forms over the course of his development. He suggests that this impression is both cognitive and affective, and may be realistic or unrealistic.

In their efforts to further define and assess body image, investigators have focused their attention on a wide variety of body-related attitudes and behavior. The Draw-a-Person Test (Machover,

1949) has been used extensively as a global measure of the body image. Figure drawings have also been used (1) as evidence of how subjects perceive or are influenced by the spatial-geometric features of their own bodies (Apfeldorf & Smith, 1966; Lasky, 1974; Gellert, 1967, 1968; Silverstein & Robinson, 1961); (2) as indices of degree of differentiation and level of sophistication of the body image (Fisher, 1959; Witkin, Lewis, Hertzman, Machover, Meissner & Wapner, 1954; Sugarman & Haronian, 1964); (3) to assess a variety of personality characteristics, particularly in persons with physical disabilities (Wysocki & Whitney, 1965; Babin, 1975; Dimond & Hirt, 1973; Wachs & Zaks, 1960); and (4) in subjects under the influence of drugs (Silverstein & Klee, 1958). Recently however, several researchers have suggested that experimental support for the use of figure drawings in regard to body image is seriously lacking (Apfeldorf, Smith, Peixotto, & Hunley, 1974).

One's ability to select a picture or construct a model that closely resembles oneself has been used as a measure of body image in numerous studies (Schonbuch & Schell, 1967; Rowe & Caldwell, 1963; Adams & Caldwell, 1963; Gellert, 1975; Stiles & Smith, 1977). Fisher and Cleveland have discussed and researched extensively the notion of body boundary--the psychological structure which separates and protects the self from the environment--as an important component of the body image (Fisher & Cleveland, 1958, 1965; Fisher, 1970). Fisher (1970) has also conducted some preliminary research into level of present body awareness, suggesting that this too may be an important aspect of body image.

Body discomfort and somatic concern have been discussed as

representing further elements of this same construct (Plutchik, Bakur-Weiner & Conte, 1971, 1973; Secord, 1953; Hirschenfang & Benton, 1966), while Secord and Jourard (1953) have advanced that feelings of satisfaction or dissatisfaction with the body play an important part in determining one's overall body image.

Given the diverse directions in which the body image research has moved, and the vagueness and complexity of the concept, it is not surprising that one is unable to find a widely accepted means by which to measure an individual's overall body concept. Schontz (1969) has suggested that the concept of the body image may be something like the concept of intelligence, in that it is composed of several attitudes and expectations regarding the body which influence behavior in several different ways, just as intelligence is composed of several qualitatively different abilities, each of which must be measured separately. Thus Schontz has proposed that "a definitive identification of body image could be achieved through carefully devised, large-scale factor analytic research" (p. 180). Perhaps in time such an extensive project will be undertaken, and a battery of tests will be made available that will provide a complete assessment of this complex construct.

In the meantime, however, there is certainly a great deal to be learned with respect to several of the above mentioned individual aspects of body image. Of particular interest to this author are a series of studies that have investigated an individual's level of satisfaction with his or her body. Body satisfaction is defined simply as the degree to which an individual experiences positive or negative feelings about various parts and processes of his body. There can be

little doubt that feelings about the body have marked behavioral consequences both in clinical and nonclinical settings. Within our society, we see that many individuals devote great amounts of time and energy to the grooming and modification of their body structure and appearance. This widescale modification of body structure and appearance may reflect a general dissatisfaction with the body as it is, especially among those who strive to imitate the media-promoted body ideals.

Relationship Between Self Concept and Body Cathexis

The proposed theoretical relationship between self concept and body concept has been empirically investigated through the use of measures of body cathexis (or satisfaction) as representative of an important aspect of body concept, and general measures of self concept. Secord and Jourard (1953) were the first to empirically explore this relationship between body satisfaction and self concept, using their own Body Cathexis and Self Cathexis Scales. Their initial Body Cathexis Scale, as a measure of satisfaction with the body, was composed of 46 parts, processes and functions of the body, each of which subjects were requested to rate on a scale of 1 to 5 in terms of how satisfied they were with that part, process, or function. These 46 items had been chosen for the final form after items difficult to understand, or which resulted in little variability from subject to subject were eliminated. Organs pertaining to sexual or excretory functions were omitted because it was feared that their presence might give rise to an evasive attitude.

Secord and Jourard's (1953) Self Cathexis Scale, as a measure of

general self esteem, consisted of 56 self items (i.e. artistic talents, intelligence level, self discipline, etc.) each of which subjects were asked to rate on a five point scale in terms of how satisfied they were with that item as it pertained to themselves. Using these two scales, Secord and Jourard reported significant correlations between body cathexis and self cathexis for males ($\underline{r} = .58$, $\underline{p} < .01$) and females ($\underline{r} = .66$, $\underline{p} < .01$) and a split-half reliability coefficient for the body cathexis scale of .81. No significant sex differences were found on either measure when comparing mean scores.

A significant modification was later made to this Body Cathexis Scale through the deletion of several items that had resulted in little variability from subject to subject, and the inclusion of four items pertaining to sexual and excretory functions (Jourard & Secord, 1955). Although these additional items might in fact arouse a certain degree of avoidance or evasion in some subjects, Jourard and Secord felt that one simply could not overlook their potential importance to one's overall personal perception of his/her body.

Using this modified Scale, along with the original Self Cathexis Scale, Jourard and Secord (1955) again reported significant correlations between Body Cathexis and Self Cathexis for males ($\underline{r} = .84$, $\underline{p} < .01$) and females ($\underline{r} = .68$, $\underline{p} < .01$). As before, no significant sex differences were discovered. Rosen and Ross (1968) have argued that there appeared to be a considerable overlap in items on Secord and Jourard's Body Cathexis and Self Cathexis Scales and suggested that this may have spuriously inflated the correlations between the two measures.

Following Secord and Jourard's lead, a profusion of studies were conducted, all confirming this positive, significant relationship

between satisfaction with the body and satisfaction with the self (Rosen & Ross, 1968; Watkins & Park, 1972; Mahoney, 1974; Lerner, Karabenick & Stuart, 1973; Mahoney & Finch, 1976a; King & Manaster, 1977; Dujovne, 1973; Brunn, 1976; Kimlicka, 1978; Zion, 1965; White & Wash, 1965; Weinberg, 1960). For the most part, different researchers have used different measures of body satisfaction and of self esteem, thus diminishing the possibility that the empirically demonstrated relationship between the two is simply an artifact of the measures used.

Fisher (1970) has raised the concern that many of the measures used are vulnerable to social desirability effects, and therefore many of the fairly high positive correlations reported between self concept and body satisfaction may reflect their shared social desirability variance. Unfortunately, this is a potential problem with virtually all self report scales and questionnaires, and given the fact that an adequate, reliable measure of social desirability does not exist, there is, at present, no way to partial out the effects of this variable. Thus, one simply must keep it in mind when interpreting the results of this type of study.

In all but one (Brunn, 1976) of the studies which investigated the relationship between self concept and body satisfaction, the raw data has been gathered from male and female university undergraduates. Whether or not this relationship holds across different age groups in different subject populations is as yet unknown. Brunn (1976) did confirm this relationship in her sample of male and female institutionalized dependent and/or neglected adolescents, but beyond this single study researchers have restricted their attention to one specific sample population.

Body Cathexis: Sex and Age Differences

Also of interest to this author, and related to the study of satisfaction with the body, is the determination of potential sex and age differences. In the majority of cases, researchers have restricted their efforts to investigating differences between the sexes within a single age group. The available data, however, are extremely inconsistent. While several authors have reported no significant differences between male and female scores on scales of body satisfaction (Secord & Jourard, 1953; Jourard & Secord, 1955; Rosen & Ross, 1968; Lerner, Karabenick & Stuart, 1973; Goldberg & Folkins, 1974), Brunn (1976) and Howe (1973) both found males to be more satisfied with their bodies than females, while Kurtz (1966, 1969) and Sperling (1975) reported exactly the opposite.

It is noteworthy to point out that in those studies reporting no differences between males and females on scales of body satisfaction, the sample populations consisted solely of university undergraduates. Brunn (1976) and Sperling (1975) both studied adolescents while Howe's (1973) sample was comprised of adults ranging in age from 25 to 70 years. Thus, it may be that sex differences are related to age in some fashion. This relationship has not yet been fully clarified although Howe (1973) has begun to do so in her study of adult males and females in three different age groups. In her youngest age group (25-35 years), males scored significantly higher on a scale of body satisfaction than did females and in the middle age group (45-55 years) this same relationship held although scores were generally lower than those of the younger group. In the oldest group (60-70 years), differences between males and females disappeared as females' scores rose to the level of

the males'.

Although age differences in the sample populations may account for some of the inconsistency in the sex differences data, another possibility may be that the body satisfaction scales do not measure the same thing for males and females. Mahoney and Finch (1976b) have, in fact, reported somewhat different factor structures for males and females on their scale of body satisfaction, thus suggesting that the two groups may evaluate body satisfaction along somewhat different dimensions. If that is the case, then perhaps one might be better able to compare male and female scores if each item in the scale is weighted according to how important an individual perceives that item to be.

Although such a weighting procedure has been used in several studies investigating the relationship between body satisfaction and self esteem (Rosen & Ross, 1968; Watkins & Park, 1972; Lerner, Karabenick & Stuart, 1973), this has not yet been done in examining sex differences. This may prove to have been a significant oversight. Although Mahoney (1974) clearly demonstrated that the statistical relationship between body satisfaction and self esteem was not significantly altered one way or the other through taking the subjective importance of the individual items into account, this has yet to be determined for investigating differences between males and females on body satisfaction scores.

Apart from the one study by Howe (1973) mentioned above, age differences, with respect to body satisfaction, simply have not been examined to any extent. As the body experiences various physiological changes while one passes from youth through middle age to old age, do individuals become less satisfied with their bodies, or do they maintain

a fairly constant level of satisfaction? Or, does the involvement with and/or importance of the body and its various parts and functions change? Furthermore, do females respond to this aging process differently than males in terms of how they feel about their changing bodies? Although Howe has offered some preliminary answers to these questions, confirmation of her results through subsequent replication has not yet been accomplished.

Differential Importance of Individual Body Aspects

Since the development of Secord and Jourard's (1953, 1955) scale of body cathexis or satisfaction, researchers have expended considerable effort searching out relationships between body satisfaction and numerous other variables including: body type (Sugarman & Haronian, 1964; Kurtz, 1966); weight (Lasky, 1974; Meeker, 1978); negative emotional attitudes (Goldberg & Folkins, 1974; Morgan, 1975; Eichler, 1973); enjoyment of sexual activities (Eichler, 1973; Latorre & Borgeson, 1975); performance in an academic setting (Schomburg, 1975; White & Wash, 1965) and in a job interview (King & Manaster, 1977); and physical activity (Jeffers, 1977; Vincent, 1976; Tillman, 1965; Snyder & Kivlin, 1975; Snyder & Spreitzer, 1976). Surprisingly little attention has been paid, however, to differential responding within the measures of body satisfaction themselves. For example, are certain items more salient to males than to females and vice versa; are different items more important to different age groups, etc?

As mentioned above, Mahoney and Finch (1976b) have reported somewhat different factor structures for males and females on their scale of body satisfaction, leading one to question whether different

sets of items are more relevant to one's total body satisfaction for the two sexes. The scale used by these authors is composed of a list of body aspects (22 for men, 20 for women) which does not include any body processes or functions, nor any items pertaining to sexual or excretory functions. Subjects were requested to rate each aspect on a 5 point scale of satisfaction-dissatisfaction. Although these authors refer to this as "a standard body cathexis questionnaire" (1974, 1976a, 1976b), nowhere have they reported reliability or validity data. Notwithstanding this lack of reported statistical data on their measure, Mahoney and Finch have noted some interesting findings.

A principal components analysis of the responses to the individual scale items revealed that while a factor labelled as "face" (comprised of the following scale items: facial features, eyes, nose, teeth) accounted for the largest percentage of the variance for males, a factor labelled as "weight" (hips, weight, thighs, waist) accounted for the largest percentage of the variance for females. Among the males, the second most important factor was identified as "legs" (thighs, calves, leg shape, knees), while among the females, it was found to be "face" (lips, voice, eyes, hair color, facial features, nose, teeth). "Weight" (waist, weight, hips) was third for males while "height" (height, leg length, bust) was third for females.

Although Mahoney and Finch (1976b) used a relatively small sample for such an analysis (98 males, 128 females) their results do suggest that males and females may draw on different body aspects to determine their satisfaction with their bodies. Unfortunately, few researchers have attempted to confirm and clarify this observation. One possible approach may simply be to have each subject rate how important each body

aspect or characteristic is, and then examine the responses for basic group differences. Furthermore, this method could be applied to investigating differences among various age groups.

Lerner, Karabenick and Stuart (1973) employed a similar methodology with male and female undergraduates, but requested that subjects rate each scale item in terms of how important it was in determining how physically attractive they were. The scale used in this study was Rosen and Ross's (1968) 24-item Body Satisfaction Scale, which does not include any body processes or functions, nor any items pertaining to sexual or excretory functions. Test-retest reliability of .84 has been reported (Rosen & Ross, 1968).

Lerner et al. (1973) found that both males and females rated the importance of the various body parts in a markedly similar way. That is, both sexes rated general appearance, face, weight distribution, facial complexion, and body build to be the most important items for determining physical attractiveness.

While one cannot deny the importance of physical attractiveness as a part of how an individual perceives his total personal body, this author would contend that it alone does not account fully for the way a person feels about his or her body. Thus, I would suggest that researchers who ask subjects to rate their satisfaction with, or the perceived importance of individual body parts based solely on the appearance or attractiveness of those parts, are perhaps missing crucial determiners of overall satisfaction with the body. Certainly, the perceived effectiveness, and/or functioning capacity of various body parts could have a substantial impact on how satisfied a person is with those body parts. Furthermore, to neglect altogether items that