

# The Appraisal of Body-Cathexis: Body-Cathexis and the Self

Paul F. Secord and Sidney M. Jourard  
*Emory University*

A substantial amount of current research in personality is devoted to the study of the individual's personal world. One object which is ever-present in this personal world is the body. It is the thesis of the present writers that the individual's attitudes towards his body are of crucial importance to any comprehensive theory of personality; yet little attention has been given to this subject by psychologists. The present paper is concerned with one variety of attitude, namely, *body-cathexis*. By *body-cathexis* is meant the degree of feeling of satisfaction or dissatisfaction with the various parts or processes of the body.

If the variable body-cathexis is to be deemed important for personality theory, it is necessary to demonstrate that it is related to other personality variables which are recognized as significant. For reasons which need not be discussed here, body-cathexis is believed to be integrally related to the self-concept, although identifiable as a separate aspect thereof. From this notion of relatedness of body and self, the following more specific hypotheses were formulated and tested:

1. Feelings about the body are commensurate with feelings about the self, when both are appraised by similar scales.

2. Negative feelings about the body are associated with anxiety, in the form of undue autistic concern with pain, disease, or bodily injury.

3. Negative feelings about the body are associated with feelings of insecurity involving the self.

One of the few empirical studies relevant to the present focus is that of Schilder [4], who used a set of questionnaires which probed the feelings, associations, and memories of his patients toward various aspects of their bodies. These semiobjective ques-

tionnaires suggested the more objective scale employed in the present study. Another relevant paper, that of Secord [6], describes the use of a homonym word-association technique for the appraisal of body-cathexis in a disguised "projective" fashion. This technique was used here for purposes of comparison with the more direct *BC-SC Scale*.

## *The BC-SC Scale*

The writers approached the problem of appraising body-cathexis (BC) by asking the person to indicate on a scale the strength and direction of feeling which he has about each of the various parts or functions of his body. Such a direct approach, of course, has certain of the theoretical disadvantages which the more typical self-inventories also possess, but it was believed that the technique might have some usefulness in spite of these limitations. The first part of this scale consisted of a listing of 46 body parts and functions. Each item was followed by the numbers 1 through 5. The following instructions appeared on the cover page of the scale:

On the following pages are listed a number of things characteristic of yourself or related to you. You are asked to indicate which things you are satisfied with exactly as they are, which things you worry about and would like to change if it were possible, and which things you have no feelings about one way or the other.

Consider each item listed below and encircle the number which best represents your feelings according to the following scale:

1. Have strong feelings and wish change could somehow be made.
2. Don't like, but can put up with.
3. Have no particular feelings one way or the other.
4. Am satisfied.
5. Consider myself fortunate.

The second part of the scale concerned self-

cathexis (SC), and listed 55 items believed to represent a sampling of the various conceptual aspects of the self, which were rated by the respondents according to the same instructions used for the body scale. The self-traits included were phrased in nontechnical, popular terms, such as *morals*, *conscience*, and *personality*, so that they might approximate the terms in which the individual actually thinks of himself. Tables 1 and 2 list the items included in both parts.

Table 1

Body-Cathexis Items Used in BC Scale

hair	width of shoulders
facial complexion	arms
appetite	chest
hands	eyes
distribution of hair	digestion
over body	hips
nose	skin texture
fingers	lips
elimination	legs
wrists	teeth
breathing	forehead
waist	feet
energy level	sleep
back	voice
ears	health
chin	sex activities
exercise	knees
ankles	posture
neck	face
shape of head	weight
body build	sex (male or female)
profile	back view of head
height	trunk
age	

Table 2

Self-Cathexis Items Used in SC Scale

first name	sensitivity to opinions
morals	of others
ability to express self	ability to lead
taste in clothes	last name
sense of duty	impulses
sophistication	manners
self-understanding	handwriting
life goals	intelligence level
artistic talents	athletic skills
tolerance	happiness
moods	creativity
general knowledge	love life
imagination	strength of conviction
popularity	conscience
self-confidence	skill with hands

ability to express sympathy	fears
emotional control	capacity for work
self-consciousness	conscientiousness
generosity	ability to meet people
ability to accept criticism	self-discipline
thoughts	suggestibility
artistic & literary taste	neatness
memory	vocabulary
thriftiness	procrastination
personality	will power
self-respect	self-assertiveness
ability to concentrate	ability to make decisions
ability to take orders	dreams

The form of the scale presented in Tables 1 and 2 is the result of considerable preliminary work in which previous forms were tried out on college students. Items which were difficult to understand, difficult for the subject to assign a meaningful rating, or which resulted in little variability from subject to subject were generally eliminated, provided that they did not leave an important part of the body or self unrepresented. One exception to the latter qualification was allowed: organs pertaining to sexual and excretory functions were deliberately omitted from the body list because it was feared that their presence in the scale might give rise to an evasive attitude which would transfer to other items, resulting in an avoidance of the two answer categories representing negative feelings towards the body.

*The homonym test of body-cathexis (H test).* The H test consisted of a list of 75 homonyms, each of which has meanings pertaining to the body and meanings not related to the body. A substantial proportion of the words have meanings pertaining to pain, disease, or bodily injury. Twenty-five neutral or nonbody words were interspersed with the homonyms for purposes of disguise. This list was presented to the testees orally, the homonyms being read at the rate of one every five seconds, with instructions to the subjects to respond by writing down the first word that occurred to them. A score for each individual was obtained by totaling responses to bodily meanings. It was employed here to provide an independent measure of anxiety-related BC. This test has been fully described elsewhere, and some tentative evidence that it is related

to anxiety has been offered [5, 6].

*Procedure.* The H test and the BC-SC Scale were administered in a group situation to 70 college males and 56 college females. The BC-SC Scale and the Maslow Test of Psychological Security-Insecurity [3] were subsequently administered to an additional group of 47 college men and women.

A study of the patterns of responses of individuals to the BC-SC Scale suggested that response sets were operating for some individuals [1, 2]. In order that split-half reliability coefficients for the BC and SC scores, as well as intercorrelations between these scores, might not be inflated by the artifact of response sets, subjects falling in any of the following arbitrary classes were not included in computations: (a) a frequency  $\geq 32$  in category 4; (b) a frequency  $\geq 28$  in category 5; and (c) a frequency  $\geq 24$  in category 5, when accompanied by less than 2 responses in categories 1 and 2 combined. As a result, the 70 male subjects were reduced to 45, and the 56 females to 43. It should be emphasized that this selection of subjects *lowers* the correlation coefficients obtained between parts of the BC-SC Scale, and *reduces* the split-half reliabilities of the various subscores.

Results

*Statistics pertaining to the BC-SC Scale and the homonym test.* A single score for each individual was obtained on the H test, consisting of the total number of body responses to

Table 3

Means, Standard Deviations, and Reliabilities of the BC-SC Scale and the Homonym Test (N = 45 males; 43 females.)

Test	Mean	SD	Reliability*
<b>Homonym test</b>			
Males	22.00	6.04	.63
Females	21.14	5.70	.66
<b>Body-Cathexis</b>			
Males	3.43	.337	.78
Females	3.46	.401	.83
<b>Self-Cathexis</b>			
Males	3.43	.393	.88
Females	3.35	.510	.92
<b>Anxiety indicator</b>			
Males	3.09	.524	.72
Females	3.05	.625	.73

\* Corrected by the Spearman-Brown formula.

the 75 homonyms. Three types of scores were obtained on the BC-SC Scale. These were:

1. Total BC, obtained by summing the ratings for each individual on the 46 body items and dividing by 46.
2. Total SC, obtained by summing the ratings for each individual on the 55 self items and dividing by 55.
3. An *anxiety-indicator* score, obtained by summing the ratings for each male individual on the 11 BC-Scale items most negatively cathected by the group of males: facial complexion, nose, energy level, body build, profile, height, chest, teeth, sex activities, posture, and weight. These sums were divided by 11. A similar score, based on the 11 items most negatively cathected by females, was also obtained.

Split-half reliability coefficients were obtained for all of the above scores. These are given in Table 3. Reliability coefficients for the homonym test are about .15 lower than those obtained in previous studies, but are still satisfactory. Reliabilities for the various BC-SC scores are moderately high; they may be regarded as more impressive when it is recalled that subjects displaying the most consistency were removed from the sample.

No important differences between means of the various scores for the two sexes were obtained.

Table 4

Intercorrelations between BC-SC Scores, the Homonym Test, and the Maslow Test (N = 45 males, 43 females; except for the Maslow test, for which N = 46 males and females.)

Test	Body-Cathexis	Self-Cathexis	Anxiety Indicator
<b>Homonym test</b>			
Males	-.18	-.15	-.37*
Females	-.41**	-.23	-.40**
<b>Maslow test</b>			
	-.37**	-.52**	-.41**
<b>Self-Cathexis</b>			
Males	.58**		
Females	.66**		

\* Significant at the .05 level.  
 \*\* Significant at the .01 level.

*Relationship between body-cathexis and self-cathexis.* Intercorrelations between total BC scores and total SC scores are shown in Table 4. The *r* for men is .58, and for women, .66, suggesting that individuals have a moderate tendency to cathect their body to the same de-

gree and in the same direction that they cathect their self; that is, the two kinds of cathexis covary.

*Relationships between body-cathexis and the homonym test.* An examination of Table 4 reveals no significant correlations between the H test and BC, for the 45 males, or between the H test and SC. There was, however, an  $r$  of  $-.37$  between the H test and the anxiety-indicator score which, although low, was significant at the .02 level. For the 43 females, on the other hand, correlations significant beyond the .01 level were obtained between H-test scores and BC ( $r = -.41$ ), and H-test scores and the anxiety-indicator score ( $r = -.40$ ). Correlations between homonym scores and SC were not significant. In general, then, there is a low but significant relationship between BC as measured by the scale and anxiety-related BC as measured by the H test.

A concrete case may perhaps serve to indicate more specifically the manner in which the BC Scale and the H test concern anxiety.

A woman with an extremely high H-test score and an extremely low BC score responded to the test items in the following way:

1. Items on the BC Scale rated in category 1 (*Have strong feelings and wish change could somehow be made*) were: facial complexion, appetite, hands, distribution of body hair, nose, fingers, waist, energy level, ears, body build, skin texture, knees, and weight. Items rated category 2 (*Don't like, but can put up with*) were: hips, sleep, sex activities, and posture. None of the 46 body items were rated in category 5 (*Consider myself fortunate*).

2. On the homonym test, responses to meanings pertaining to the body, body processes, or pain and disease are shown below, preceded by the homonym stimulus word in italics: *acid-sour, arch-bend, back-broken, bare-ugly, condition-sick, crisis-sick, enlarged-grown, extract-tooth, function-stomach, gag-whiskey, gall-bile sac, gas-dying, glassy-dead, patient-doctor, rash-heat, red-hands, scarlet-disease, side-hurt, sling-broken arm, stain-blood, stiff-corpse, strip-New Orleans, system-biology, tablet-sleeping pill, tan-Daytona Beach, tape-sprained ankle, tender-skin, trunk-body, and waist-starve.*

These item responses give some idea of the importance of the body to this woman and reveal her anxiety concerning it. A consideration of the diverse nature of the processes involved in the BC Scale and the H test as revealed by these items lends significance to the correlation obtained between these two tests.

*Sex differences in degree of cathexis.* It was

found that females cathect their bodies, irrespective of direction, more highly than do males, in that they do not assign as many 3's to body items (3 - Have no particular feelings one way or the other). The mean number of 3's for all of the 46 body items was 10.76 for men, and 7.86 for women. This difference of 2.90 yielded a critical ratio of 1.92, which approached significance at the .05 level. Consistent with this datum is the greater variability of BC scores among women, as previously shown in Table 3, although this difference in sigmas is not significant.

*Relationships between the Maslow test and the BC-SC Scale.* The Maslow test was found to correlate  $-.37$  with BC,  $-.41$  with the anxiety-indicator score, and  $-.52$  with SC. These  $r$ 's are significant at the .01 level. It may be concluded that low cathexis is associated with insecurity to some degree.

#### Discussion

One of the most significant results is the demonstration that the body and the self tend to be cathected to the same degree. This supports the hypothesis that valuation of the body and the self tend to be commensurate.

Since the persons who obtain a high score on the H test are regarded as being more anxious concerning their bodies than those obtaining a low score, a moderate negative correlation would be anticipated between BC and the H test. This is consistent with the negative  $r$  actually obtained for women.

In the case of men, the relative lack of significant relationships between the homonym test and the BC-SC Scale cannot be clearly explained on the basis of available data. A likely but unproved hypothesis is that women are more likely than men to develop anxiety concerning their bodies, because of the social importance of the female body. This hypothesis is consistent with the datum that woman cathect their bodies more highly than men, irrespective of the direction of cathexis, and with the fact that when a BC score based only on those body items most frequently arousing negative feelings in men was employed, a significant  $r$  of  $-.37$  was obtained for men between this "anxiety-indicator" score and H-test scores.

A final support for the interpretation of BC as a self-related variable is found in the sig-

nificant correlation between BC and insecurity, as measured by the Maslow test.

#### Summary and Conclusions

The purpose of the present study was to develop a method for appraising the feelings of an individual towards his body and to ascertain whether or not variables derived from these appraised feelings are significant for personality theory. The latter was determined by testing the hypotheses stated under 2, 3, and 4 below.

A scale for the determination of the degree of cathexis towards various aspects of the body was designed and administered to groups of college males and females, along with a similar scale for aspects of the self, a homonym test of anxiety-related body-cathexis, and the Maslow Test of Psychological Security-Insecurity.

The following conclusions may be drawn:

1. The split-half reliabilities of the two parts of the scale were found to be satisfactory: .81 for body-cathexis, and .90 for self-cathexis.
2. The hypothesis that feelings about the body are commensurate with feelings about the self was supported by significant correlations between the two parts of the scale.
3. The hypothesis that low body-cathexis is

associated with anxiety in the form of undue autistic concern with pain, disease, or bodily injury was upheld by the demonstration of significant relationships between low body-cathexis as determined by the scale and by the homonym test.

4. The hypothesis that low body-cathexis is associated with insecurity was sustained by the demonstration of correlation between the former and the Maslow test.

Received January 19, 1953.

#### References

1. Cronbach, L. J. Response sets and test validity. *Educ. psychol. Measmt*, 1946, 6, 475-494.
2. Cronbach, L. J. Further evidence on response sets and test design. *Educ. psychol. Measmt*, 1950, 10, 3-31.
3. Maslow, A. H., Hirsh, E., Stein, M., & Honigmann, I. A clinically derived test for measuring psychological security-insecurity. *J. gen. Psychol.*, 1945, 33, 21-41.
4. Schilder, P. *Psychotherapy*. New York: Norton, 1938.
5. Secord, P. F. The homonym word association test. Unpublished doctoral dissertation, Stanford Univer., 1950.
6. Secord, P. F. Objectification of word association procedures by the use of homonyms: a measure of body-cathexis. *J. Pers.*, 1953, 21, 479-495.