

Utah State University

DigitalCommons@USU

---

All Graduate Theses and Dissertations

Graduate Studies

---

5-1971

## Beards and Their Effect on Dimensions of Self Concept

Douglas C. Olsen  
*Utah State University*

Follow this and additional works at: <https://digitalcommons.usu.edu/etd>

 Part of the [Psychology Commons](#)

---

### Recommended Citation

Olsen, Douglas C., "Beards and Their Effect on Dimensions of Self Concept" (1971). *All Graduate Theses and Dissertations*. 5660.

<https://digitalcommons.usu.edu/etd/5660>

This Thesis is brought to you for free and open access by the Graduate Studies at DigitalCommons@USU. It has been accepted for inclusion in All Graduate Theses and Dissertations by an authorized administrator of DigitalCommons@USU. For more information, please contact [digitalcommons@usu.edu](mailto:digitalcommons@usu.edu).



BEARDS AND THEIR EFFECT ON DIMENSIONS OF SELF CONCEPT

by

Douglas C. Olsen

A thesis submitted in partial fulfillment  
of the requirements for the degree

of

Master of Science

in

Psychology

Approved:

UTAH STATE UNIVERSITY  
Logan, Utah

1971

## ACKNOWLEDGMENTS

The writer wishes to gratefully acknowledge Dr. Michael Bertoch, committee chairman, Dr. Keith Checketts, and Dr. David Stone for their help in planning and completing this study. Appreciation is also expressed to Dr. James Shaver for his suggestions. Thanks is expressed to those who gave of their time to participate. Finally, appreciation is expressed to his wife, Sherilyn, for her invaluable support and aid during this project.

Douglas C. Olsen

## TABLE OF CONTENTS

	Page
ACKNOWLEDGMENT . . . . .	11
LIST OF TABLES . . . . .	iv
ABSTRACT . . . . .	v
INTRODUCTION . . . . .	1
REVIEW OF LITERATURE . . . . .	4
METHODS . . . . .	10
Sample . . . . .	10
RESULTS . . . . .	15
SUMMARY AND CONCLUSIONS . . . . .	18
Limitations . . . . .	21
APPENDIXES . . . . .	22
Appendix I . . . . .	23
Appendix II . . . . .	24
LITERATURE CITED . . . . .	26



## LIST OF TABLES

Table	Page
1. Means and Standard Deviations of Group B and Group N on the Dimensions of the POI and the M-F Index . . . . .	16
2. F ratios of dimensions showing the greatest variability between the combined means of Group B and the combined means of Group N . . . . .	17
3. Significance of the difference between variances for the variables measured . . . . .	25

## ABSTRACT

Beards and Their Effect on Dimensions of Self Concept

by

Douglas C. Olsen, Master of Science

Utah State University, 1971

Major Professor: Dr. Michael Bertoch  
Department: Psychology

The effects of beards on aspects of self concept were studied. Experimental and control groups were administered measures of "self concept" in pre and post test situations. The experimental group grew beards while the control group continued to shave during the time interim. Results were analyzed using analysis of covariance, but failed to produce any significant differences.

Differences were found, however, in post test results of the within group variability of the experimental group in two areas: feeling reactivity and capacity for intimate contact. This suggests that possibly beards affect people in a wider variety of ways in their sensitivity to their own needs and feelings and also their capacity to develop warm interpersonal relationships.

(28 pages)

## INTRODUCTION

The "self-concept" has constituted a topic of concern for many researchers and theorists. Rogers (1951) defined self-concept as "an organized configuration of perceptions of the self which are admissible to awareness". Jersild (1952) saw the "self" as "A composite of thoughts and feelings which constitute a person's awareness of his individual existence, his conception of who and what he is." Mead (1934) saw the self concept as emerging directly from interactions with others, and indirectly from the physical and other attributes of the person; as did Cooley (1902), Rogers (1951) and Sullivan. Jersild (1952, 1957), Murphy (1947), and Diamond (1957) hypothesized that a person's attitudes toward himself will influence and be influenced by his views of his physical appearance, the emphasis being on what a person thinks he is. Zachary (1940) also alluded to the importance of the body by referring to it as a "symbol of the self". Wylie (1961) saw the way a person perceives his bodily characteristics as possibly having a central influence on the development of his self concept.

A review of the literature indicates considerable research on relationships between self concept and body structure, development, distortion, functioning, and malfunctioning. There is, however, a lack of controlled research on the relationship of changes in bodily appearances to changes in self concept.

One of the reasons the lack of research exists might be that there is a limited number of aspects of bodily appearance open to manipulation in a research design. Facial hair is, however, an area that may

be available to study and one in which the writer has become interested.

Freedman (1969) reported that a person who grows a beard may be perceived by other men as being independent and extroverted. Women described beards as making men more masculine, sophisticated and mature. Freedman also reported the work of Joseph Howard as indicating women feeling more feminine toward bearded males. He also cited evidence which indicates that beards increase the social distance between males but decreases it in relation to females.

Although Freedman gave some indication as to the reaction of others to beards, the effect of the beard on various aspects of the grower are still unanswered. There is, then, a lack of research related to change in body appearance and its effect on self concept and more explicitly, as far as this reviewer can determine, a total lack of research in the area of the affect of growing a beard on the self concept.

The purpose of this study was to determine whether differences in regard to self concept exist in those who volunteer to grow a beard and are asked to (Group B) versus those who volunteer but are asked not to grow a beard (Group N). The term "differences" in this case refers to dimensions of the self as measured by the Personal Orientation Inventory (POI) and the Berdie Masculinity-Femininity Index (M-F).

Another reason for this choice was the apparent relationship of certain variables of the POI and the M-F Index to the research cited by Freedman. More specifically, beards were said to be related to independence (POI-Inner-Outer-Directedness), maturity (POI-Self-Actualizing-Value), and masculinity (M-F). Other variables of the POI

may also be of interest; i.e., might a person increase his feelings of self regard and acceptance, might he become more sensitive to his own feelings, will he change in the way he deals with aggressive feelings or interpersonal relationships. The questions these variables seem to raise seem relevant to the question of beards at hand.

The following null hypothesis were tested:

1. There will be no difference between Group B and Group N in regard to those aspects of self measured by the POI.
2. There will be no difference between Group B and Group N in regard to masculinity as measured by the Berdie M-F Index.

The present study was not designed to eliminate the ambiguities in the use of the term self concept. Self concept was, therefore, defined as those variables measured by the POI and the M-F.

The decision to define self concept in these terms may well be a limitation of the research because it does not deal with all aspects of the self. It was felt, however, that it provided a more practical approach than a more extensive and comprehensive definition with its consequential additional measuring requirements.

## REVIEW OF LITERATURE

The availability of research directly related to the present problem is very limited. Freedman (1969) has cited work related to how others perceive and behave toward persons with beards, but leaves untouched the area of how the bearded individual changes as a result of his beard. Research on the idea of body image, the way a person perceives his body and its various parts, and subsequent behavior is, however, available.

Jones and Mussen (1958) found that "early maturing" adolescent females viewed themselves more favorably than did "late maturing" females. The late maturers had a greater need for recognition, poorer self concepts, slightly poorer parent-child relationships with some tendency for stronger dependency needs.

The same type of results have been found with males. In an earlier report (1957), the same researchers reported late maturing boys as being more likely to have negative self concepts, feelings of inadequacy, strong feelings of being rejected and dominated, prolonged dependency needs and rebellious attitudes toward parents than their earlier maturing classmates. Smith and Lebo (1956) found similar results.

Boys' views of their bodies are also related to athletic activity. Kagan and Moss (1962) maintain that boys with high body anxiety often avoid athletic activities and invest an increased amount of time in intellectual tasks. They also found that fearfulness about one's body in adulthood is significantly correlated with the level of such fearfulness in adolescence. It would appear that the rate of physical

maturity and the adolescent's view of his changing body may affect personality and self concept formation in a variety of different and significant ways.

Other aspects of body image include excess weight and tattoos. In both instances, it appears that there is a personal body image which the individual has of his body, but also that a cultural body image or a valued body image by others in the environment exists which causes individuals to react to obese persons or tattooed individuals in a unique way. Stunkard and Mendelson (1967) found that obese individuals viewed their bodies as "grotesque and loathsome" and as being viewed with hostility and contempt by others, particularly in families which did not value obesity. This was associated with self consciousness and impaired social functioning. This perception of self and body was not affected by weight reduction alone, but was reversed by long term psychotherapy.

A tattooed picture of a male arm was described as being more rugged and tough and its owner as having a more muscular body type than the same arm without a tattoo. Hawkins and Popplestone (1964) thus concluded that the tattoo signified masculine attributes of physical strength and psychological aggression. Mosher, et al. (1967) reported that tattooed prisoners had more positive feelings toward their bodies than did prisoners without tattoos. They concluded that the tattoo signified "exhibitionistic narcissism about the body" in the tattooed prisoners. It would appear that the tattoo has special significance to the wearer as well as the beholder. The significance people give to the tattoo will have an effect on the way individuals interact with one another,

which in turn will influence dimensions of the wearer's self concept.

Body self-image also is related to reactions of advertising. Packard (1967), in discussing advertising, pointed to the presumption that individuals buy "projections of themselves" in purchasing many products. He reported that researchers could predict with a high degree of success the products people used due to personality variables the consumer displayed. Packard also found an association between whiskers and a man's feeling of manliness. He reported that a New York advertising agency found the beard to be very symbolic to men; so much so that 97% of those interviewed displayed complete disinterest in a product to remove their beard permanently.

John Brody (1946) in speaking of the role of beards at various times in history portrays the beard as depicting various qualities depending on the time, the geographic local, and the way it was shaped.

It would appear then that man has attached meanings to many aspects of his body; i.e., obesity, tattoos, whiskers. These symbols may represent to the owner what he is or would like others to think he is. These symbols too, because they influence interactions between individuals, influence the self.

To this point, we have talked of external characteristics of the body which may influence the self concept. These characteristics are at various times open to observation not only by the individual himself, but also by others. Are body characteristics then only culturally defined and normed? Are there dimensions of the body that affect an individual's approach toward others which are not directly observable to others; which



the individual may not even be consciously aware of?

Perception of body boundary, the definiteness or articulation which one ascribes to the borders of his body, has also been linked with self concept and its subsequent influence on behavior. Fisher and Cleveland (1958a), Cleveland and Morton (1962), and Fisher (1963) found that the more definite a person's body boundaries are indicated to be on a projective measure, the more inclined he may be to act autonomously, to be highly achievement motivated, to be interested in task completion and communicating with others as well as serving an integrative role in small group situations.

Fisher and Cleveland (1958b) noted that the more definite a person's body boundary the greater his capacity to enter into "intimate expressive relationships". From a psychoanalytic viewpoint, Fenichel (1945) saw body boundary formation as basic to the development of a sense of identity and adequate ego functioning.

In previous paragraphs a concept affecting body image has been alluded to. This concept, affect or feeling, in combination with other variables determines a person's conceptions of himself. Weinberg (1960) found positive correlations between feelings related to the body, feelings of security and self concept. Zion (1965) stated that "... the security one has in one's body is related to the security with which one faces one's self and the world." She also reported a linear relationship between self concept and body concept.

Wylie (1961) said that "... self concept theorists agree on the general idea that body characteristics which are lowly valued by S may

be expected to undermine his general self-regard, while highly valued body characteristics should enhance self-regard".

How one feels about his body and its parts may be an important enough variable to make some effort to control in a research project. This was done in this study by choosing individuals who felt more positively about growing a beard than did other individuals.

In summary, the research reported seems to indicate a relationship between a person's body characteristics as he perceives them, the way others perceive them, the development of the individual's self concept and the way the individual may view and act in the environment. Self concept has also been shown to emerge through contact with others. An interaction then seems to exist between the perception of one's body and the cues and feedback he gets from others, each influencing and being influenced by the other.

It would appear that this could be true of beards also. The beard will be felt to convey a certain image to others by the wearer. The attitude of others will also influence and change a person's attitude toward his beard and the "message" it is giving to others about the wearer.

Because of the expectations the people have for people with beards, individuals who grow a beard will be expected to be treated differently than they were when they did not have a beard. The influence of others on the development of self concept has been pointed out earlier. The beard grower because of his growth, is likely to be given feedback or an evaluation of how others feel about his body. This feedback then will have an influence on the way the individual perceives himself.

Interacting with the reactions of others will have an influence on the individual's feelings about how he will look and what he feels he is with a beard. Freedman (1969) has indicated that the people he sampled indicated bearded males were thought to be more independent, extroverted, masculine, sophisticated and mature than non-bearded males.

As a person's beard grows, if the beard grower has inculturated a set of what bearded people are and if Freedman (1969) has a representative culture's feelings toward bearded males, then the person can be expected to begin to see himself as approaching this stereotype. He can be expected to begin to make changes in his behavior toward others because of the way he now views himself.

## METHODS

### Sample

A preliminary survey during Fall quarter of 1969-70 indicated that a process of random sampling of males living in Utah State University housing facilities was difficult. Problems encountered in the preliminary survey involved the inability of many students (selected at random from a roster of a men's housing unit at Utah State University) to grow an "adequate" beard. Resistance was also encountered on the part of individuals who did not for various reasons want to grow a beard. Because of this resistance and lack of facial endowment encountered in the preliminary survey an alternative to random selection of students in Utah State University housing facilities was used.

The research population was comprised entirely of volunteers -- individuals who of their own volition asked to participate in the experiment. The experimental group was randomly assigned from the general fund of volunteers by placing each volunteer's name in a hat and drawing out the names of the experimental or beard growing group.

The process of obtaining a group of individuals who were willing and able to grow a beard involved:

1. Placing posters in men's dormitories and in the Student Union Building that asked for volunteers and explained the experiment briefly.
2. A "spot" soliciting volunteers on KUSU-FM 9,10kc.
3. A newspaper article in "Student Life" seeking volunteers and a brief discussion of beards.

By January 20, 1970 a group of 28 persons had volunteered to

participate. Fourteen names were randomly assigned to participate in the experimental (beard growing - Group B) group and the remaining 14 were used in the control (non-beard growing - Group N) group. These groups were called together and administered the Personal Orientation Inventory (POI) and the Berdie Masculinity-Femininity Index (M-F). They were told that they would be contacted and that we would meet again on or about March 31, 1970 to retake the POI and the M-F.

By February 3 another sixteen individuals had volunteered. They were randomly assigned to an experimental and control group and administered the same instruments. They were told that we would meet again near April 14, 1970 to retake the "tests".

The final experimental group (Group B) consisted of 22 individuals as did the control group. During the process of beard growing, however, three beard growers discontinued. (One because of job interviews, one because his growth was too sparse and the other because of pressure from his fiancée.) The experimental group represented 15 different states and communities ranging from 1500 to several thousand in population. They ranged in age from 17 to 27 with a mean age of 21. There was one married student and two engaged beard growers. Two were graduate students, five seniors, four juniors, one sophomore and a freshman. The majority (86.8%) lived in university housing.

The control group (Group N) consisted of 22 volunteers whose names were not randomly assigned to the experimental group. They represented 17 different states and had home communities that ranged between 3,000 and several hundred thousand populations. They ranged in age from 18

to 26 with a mean age of 20.6. Two members of the control group were married and one engaged. There was one graduate student, three seniors, six juniors, eight sophomores and four freshman. The majority (81.8%) lived in university housing.

The Personal Orientation Inventory (POI) by Shostrom (1966) is described by the author as a measure of aspects of the self. It was used to measure aspects of the self in both a pre and post-testing setting for both the experimental (Group B) and the control group (Group N). (For a breakdown of the variables it measures see Appendix I.)

The Personal Orientation Inventory has been reported (Shostrom and Knapp, 1966) to distinguish between groups of individuals at different stages of therapy. This seems to indicate that those individuals who have been in therapy longer are learning how to deal with various aspects of their selves in a more acceptable manner.

Fox (1965) found that all scales differentiated psychiatric patients from a normal adult sample. All scales were significant beyond the .001 significant level.

In addition, the POI is reported as a valid discriminator of alcoholics (Zaccaria and Weir, 1966). All mean POI scores were significantly lower than the original validating and a clinically nominated sample.

The POI is according to Shostrom (1966) in agreement with theorists of the self (Maslow 1954, 1962; Reisman et al. 1950, May 1958, and Perls, 1947, 1951).

Shostrom (1966) reported subscale reliability coefficients ranging

from .55 to .85, and stated that "reliability coefficients are as high as those reported for most personality measures".

A factor that may well be related to the growth of a beard is the feeling of masculinity. This dimension was measured by the Berdie Masculinity-Femininity Index (Berdie, 1959). The author reported a test-retest coefficient of .81. Correlation with the MMPI M-F scale and the Berdie M-F Index was significant at the .01 level of confidence. It has been found to distinguish between males and females and also male heterosexuals and male homosexuals (Berdie 1959).

The items for the POI are printed in a reusable test booklet with instructions to the examinee. Between 5 and 10 minutes were required for completion.

Attached to the M-F Index was an information-orientation sheet (Appendix II). The purpose of this sheet was to orient the subjects as to the nature and use of the information gathered as well as to gather information about the research population.

On January 21, 1970, the experimental and control groups were brought together and administered the POI, the M-F Index and the information-orientation sheet. After seating the subjects the test material was distributed and they were told to take their time and to answer all questions as best they could. This procedure was repeated on February 4, in a pre-testing situation and again on March 31, 1970 and April 14 in post testing situations.

The test materials were held until all tests were completed. Hand-scoring templates were used by the researcher and an aid to score the

answer sheets. Periodic checks were made on each other to help eliminate any errors in scoring.

In order to control the possibility of bias between the pretest scores and the experimental and control group, analysis of covariance was used to test the significance of variance between the regression lines of the two groups. This method was used on the fourteen scores provided by the POI as well as the scores of the M-F Index. Application of "covariance" was applied to those self-concept variables which were shown to have the greatest variability between the combined means of the control group and the experimental group.

An analysis of the difference between the variances of Group B and Group N was also calculated. This was done because of the possibility that the effect of the experimental conditions might be found not only between the groups but also within the groups themselves.



## RESULTS

Of the fourteen self concept variables the three means showing the greatest variability failed to show a difference when analyzed using analysis of covariance. This was also true of the M-F Index. It was upon this basis that the null hypotheses were accepted and that the remaining scores were assumed to show no difference.

The analysis of the variability within the experimental group on the post test produces a significant difference at the .05 level of significance in regard to feeling reactivity. This seems to indicate that perhaps the beard growing group was more varied in the degree of sensitivity they had for their own feelings and needs. At least this was true when compared to the non-beard growing group.

This analysis also produced a significant difference at the .05 level of significance in the beard growers post-test scores on "capacity for intimate contact". Therefore, it seems they displayed more variability in regard to whether they would develop warm interpersonal relationships in comparison with the non-beard grower.

A significant difference at the .05 level of significance was also obtained on "self regard" on the POI. This difference, however, was obtained for both the pre and post test beard growers compared to the non-beard growers on pre and post tests. Thus it seems the experimental group differed both initially and finally from the control group in the way they viewed themselves because of their worth or strengths. This seems to indicate that the experimental group as individuals knowing they were to grow beards reacted in a significantly varied way.

TABLE I

Means and Standard Deviations of Group B and Group N on the dimensions of the POI and the M-F Index.

		Group B		Group N	
		Pre-Test	Post Test	Pre-Test	Post Test
1. Time Incompetency	$\bar{X}$	6.79	6.63	6.82	6.82
	SD	3.29	3.08	2.41	2.91
2. Time Competency	$\bar{X}$	16.21	16.21	15.91	16.09
	SD	3.23	3.41	2.52	3.22
3. Other Support	$\bar{X}$	42.74	42.16	43.36	40.91
	SD	9.31	10.85	9.42	9.16
4. Inner Support	$\bar{X}$	83.00	84.47	84.45	87.55
	SD	10.11	11.37	13.71	10.31
5. Self-Actualizing Value	$\bar{X}$	19.79	19.63	20.09	19.46
	SD	2.26	2.50	2.75	2.27
6. Existentiality	$\bar{X}$	20.68	20.74	19.36	20.36
	SD	2.88	3.47	2.86	2.35
7. Feeling Reactivity	$\bar{X}$	15.95	15.53	15.73	16.46
	SD	4.15	3.46	3.47	3.79
8. Spontaneity	$\bar{X}$	11.84	12.00	12.64	12.27
	SD	2.32	2.58	2.07	1.91
9. Self Regard	$\bar{X}$	12.21	12.00	12.64	12.55
	SD	2.02	2.25	1.30	1.38
10. Nature of Man	$\bar{X}$	11.47	11.53	11.46	11.73
	SD	1.60	2.01	1.88	2.14
11. Acceptance of Aggression	$\bar{X}$	16.68	16.26	16.18	16.82
	SD	3.34	3.80	3.33	2.89
12. Synergy	$\bar{X}$	6.53	6.32	6.73	6.36
	SD	1.39	1.49	1.40	1.67
13. Capacity for Intimate Contact	$\bar{X}$	17.05	17.90	17.00	18.64
	SD	3.59	3.91	2.99	2.60
14. Self Acceptance	$\bar{X}$	15.42	16.74	15.82	17.18
	SD	3.20	3.93	3.83	3.24
Berdie M-F Index	$\bar{X}$	11.21	11.47	9.09	8.00
	SD	5.41	6.41	5.32	5.27

TABLE II

F ratios of dimensions showing the greatest variability between the combined means of Group B and the combined means of Group N are as follows:

<u>Variable</u>	<u>F</u>
3. Other Support	.891
4. Inner Support	.589
7. Feeling Reactivity	.983
M-F Masculinity-Femininity	1.589

7.33 would be required for significance at the .01 level of significance and 4.09 at the .05 level of significance.

## SUMMARY AND CONCLUSIONS

In view of the review of literature it might have been hypothesized that a person's self concept might be altered as a result of growing a beard. The present study did not support this hypothesis. The following may be several reasons for this along with some suggestions for further research:

1. After the research was completed the researcher interviewed several of the experimental group. It was reported that they felt different. There was no consistency to the difference expressed. One subject reported that he studied better with a beard. Another subject felt he was more outgoing and friendly when his beard was new and then added that he had the same feeling right after he shaved. It may be then the instruments used may not have been appropriate for measuring the changes that took place. It may also be that the change that is reported is because of the newness of the beard and is therefore, seen again when a person has "newly" shaved his beard.

Setting up an experimental design to study the subjective rather than the objective aspects of self concept change might be implied by this hypothesis. This would imply interviewing each subject to find out how he felt about his beard. This would have some variables which would need to be controlled such as; structuring to minimize subjects from out guessing and trying to please the experimenter. The development and validation of a subjective questionnaire might also be used.

2. It is expected that a person's self concept changes as a result of the reactions of others. The interviews with the beard growers

indicated that it may have been possible that not everyone got any meaningful feedback about their beards. One subject reported that he never knew people had any feelings about his beard until after he had shaved. It was then that people asked why he shaved and that they had liked his beard.

In regard to this possibility of lack of feedback it may be that a bearded student at this time on college campuses does not get the reaction of others because beards are generally quite prevalent.

It may be that researching in a university setting where beards are generally more common cause members of the subject's environment to not respond to the extreme they would in another setting. The feedback thus would be more subtle and more difficult to read and assimilate, therefore, resulting in less affect on the person's self concept. It would seem then that research in a non-university setting would help to alleviate this difficulty.

3. The literature suggests a person's self concept is also affected by the way he perceives his physical body and its attributes. Because of the variety of styles of beards it is possible that there is no single stereotype of what people with beards represent. This seems plausible when one thinks of the judgment differences ... that might be made between an individual with a well trimmed beard and an individual with an untrimmed beard.

It may be plausible then that the beard grower himself sees himself differently because of the style of beard grown. This may result in a differentiated effect on self concept. Some support for this was in the

variability of the experimental group on variables of feeling reactivity and capacity for intimate contact.

Rather than using a shotgun approach it may be well to see if beards are seen in any special way by a population and then if they do use those stereotyped variables to help narrow the field of variables to be measured. It would appear possible then to see if different beard styles are related to any specific self concept variable.

Beards may not elicit the same responses when grown on different people. Some subjects may not look as "good" in a beard as others. Thus all subjects would be treated to a degree of whether they looked "good" or "bad" which would result in variability in its final effect on self concept variables.

Doing research on subjects in a setting where members of the subject's environment could respond to one experimental group in terms of whether the beard was "good" looking and another experimental group as "bad" looking and treat the control with no feedback in regard to beard. This would seem to help determine if feedback in the form of either positive or negative would have a differentiating result in terms of pre and post test self concept measurement.

4. Peoples' self concept may not be changed by growing a beard, but rather reflect and reinforce the self concept which the individual already has. The task then is not to measure differences in self concept but rather to measure self concept dimensions and their correlation to beard style which might be a "projection" of the individual's self.

5. It may be, however, that self concept is affected by the

growing of a beard but not on the self concept variables used in this research setting except on variables of feeling reactivity and capacity for intimate contact where there was an increase in the experimental group's post test variability. This would imply that research on beards and self concept be done using different self concept variables.

### Limitations

The generalization of these research findings seems to be limited to college males living primarily in university housing at a small western college who would volunteer to grow a beard. It may be that those who volunteered for this research project had a different set toward growing a beard than would subjects chosen at random from the male university population. The problems encountered in such a procedure have been discussed and seen as more limiting in terms of participation than the use of volunteers. That is, there may be subjects chosen who do not want to grow a beard or do not have enough beard to participate.

The experimental group and the control group both consisted of two sections each. This was done because of the lack of knowledge as to how many would volunteer. Regardless, this could have been an influencing factor and would be viewed as a limitation.

APPENDIXES



## APPENDIX I

Scoring categories for the Personal Orientation Inventory.

1. Time Competent-Incompetent -- measure of time orientation, i.e., present or past.
2. Inner-Outer Directedness -- measure of whether reactive orientation is basically toward self or others, i.e., how independent one might be.
3. Self Actualizing Value -- measures whether one holds or rejects the values descriptive of self actualizing people.
4. Existentiality -- measure of how flexible or rigid one is in the application of values.
5. Feeling Reactivity -- sensitivity of responsiveness to one's own needs and feelings.
6. Spontaneity -- measures how free one is to react spontaneously or to be oneself.
7. Self Regard -- measures affirmation of self because of worth or strengths.
8. Self Acceptance -- measures affirmation of weaknesses or deficiencies.
9. Nature of Man -- measures whether or not "man" is generally seen as good or evil.
10. Synergy -- measures whether opposites in life are seen as related or antagonistic.
11. Acceptance of Aggression -- measures whether feelings of anger are accepted or denied.
12. Capacity for Intimate Contact -- measures whether or not a person develops warm interpersonal relationships.

## APPENDIX II

The questions contained on the following pages and booklet are part of a research project. All information given about yourself will be kept confidential and will be used only for this research project. Results on an individual basis will be made available on request. Your co-operation is appreciated.

NAME \_\_\_\_\_ AGE \_\_\_\_\_

DATE OF BIRTH \_\_\_\_\_ PLACE OF BIRTH \_\_\_\_\_

HOME ADDRESS \_\_\_\_\_

CURRENT ADDRESS \_\_\_\_\_

MARITAL STATUS \_\_\_ Single \_\_\_ Married \_\_\_ Divorced \_\_\_ Separated

YEAR IN SCHOOL \_\_\_ Frosh \_\_\_ Soph. \_\_\_ Jr. \_\_\_ Sr. \_\_\_ Grad.

MAJOR \_\_\_\_\_

SIZE OF CITY OF HOME ADDRESS:

- |                             |                     |
|-----------------------------|---------------------|
| 1. Under 3,000              | 2. 3,000 - 5,000    |
| 3. 5,000 - 10,000           | 4. 10,000 - 100,000 |
| 5. Several hundred thousand | 6. Over 1,000,000   |

TABLE III

Significance of the difference between variances for the variables measured.

	Pre	Post
1. Time Incompetency	1.865	1.120
2. Time Competency	1.639	1.120
3. Other Support	.977	1.402
4. Inner Support	.543	1.215
5. Self-Actualizing Value	6.79	1.205
6. Existentiality	1.433	.832
7. Feeling Reactivity	1.014	2.181*
8. Spontaneity	.263	1.816
9. Self Regard	2.409*	2.650*
10. Nature of Man	.729	.885
11. Acceptance of Aggression	1.010	1.729
12. Synergy	.984	.800
13. Capacity for Intimate Contact	1.447	2.267*
14. Self Acceptance	.697	1.467
Berdie M-F Index	1.033	1.478

\*Indicates a significant difference at the .05 level.

An F ratio of 2.12 is required for a significant difference at the .05 level of significance and 2.93 is required for a level of significance at the .01.

#### LITERATURE CITED

- Berdie, Ralph F. "A femininity adjective check list". *Journal of Applied Psychology*, 1959, October, Vol. 43, pp. 327-333.
- Brody, John. *The Human Face*. New York: Prentice Hall, Inc., 1946.
- Cleveland, S. E., et al. "Perception of body size in schizophrenia". *American Medical Association Archives of General Psychiatry*, 1962, p. 7, 277-285.
- Cooley, C. H. *Human Nature and the Social Order*. New York: Scribner, 1902.
- Diamond, S. *Personality and Temperament*. New York: Harper and Brothers, 1957.
- Fenichel, O. *The Psychoanalytic Theory of Neurosis*. New York: Norton, 1945.
- Fisher, S. "A furthur appraisal of the body boundary concept." *Journal of Consulting Psychology*, 1963, 27, 62-74.
- Fisher, S. and Cleveland, S. E. *Body Image and Personality*. Princeton, N. J.: Van Nostrand, 1958a.
- Fisher, S. and Cleveland, S. E. "Body image boundaries and sexual behavior." *J. Psychology*, 1958b, 45, 207-211.
- Fox, J. "Sex, age, hospitalization, and self actualization." Mimeo Report, 1965.
- Freedman, D. G. "The survival value of the beard". *Psychology Today*, 1969, October, p. 36-39.
- Hawkins, R. E. and Popplestone, J. A. "The tattoo and an exoskeletal defense." *Perceptual and Motor Skills*, 1964, Vol. 19, p. 500.
- Jersild, A. T. *The Psychology of Adolescence*. New York: McMillan Co., 1957.
- Jersild, A. T. *In Search of Self*. New York: Bureau of Publications, Columbia University, 1952.
- Jones, Mary Gover, Mussen, Paul Henry. *Child Development*, Vol. 29, No. 4, December 1958, p. 490-501.
- Kagan, J. and Moss, H. A. *Birth of Maturity*. New York: Wiley, 1962.

- Maslow, A. *Toward a Psychology of Being*. New York: Van Nostrand, 1962.
- Maslow, A. *Motivation and Personality*. New York: Harper, 1954.
- May, R., Angel, T., and Ellenberger, H. *Existence*. New York: Basic Books, 1958.
- Mead, G. H. *Mind, Self and Society*. Chicago: University of Chicago Press, 1934.
- Mosher, Donald L., Oliver, Wayne A., and Dolgan, Jeffery. "Body image in tattooed prisoners". Ohio State University. *J. Clinical Psychology*. 1967, 23(1), p. 31-32.
- Murphy, G. *Personality: A Biosocial Approach*. New York: Harper and Brothers, 1947.
- Mussen, Paul Henry and Jones, Mary Gover. "Self-conceptions, motivations, and interpersonal attitudes of late and early maturing boys." *Child Development*, Vol. 28, No. 2, June 1957.
- Packard, Vance. *The Hidden Persuaders*. New York: Pocket Books, 1957.
- Perls, F., Hefferline, R., Goodman, P. *Gestalt Therapy*. New York: Julian, 1951.
- Perls, F. *Ego, Hunter and Aggression*. London: George Allen and Unwin, Ltd., 1947.
- Reisman, D., Glazer, H., and Denney, R. *The Lonely Crowd*. New York: Doubleday, 1950.
- Rogers, C. *Client-Centered Therapy*. Boston: Houghton Mifflin, 1951.
- Rogers, C. *On Becoming a Person*. Boston: Houghton Mifflin, 1961.
- Shostrom, E. L. "A test for the measurement of self-actualization." *Educational and Psychological Measurement*, 1965, 24, 207-218.
- Shostrom, E. L., and Knapp, R. R. "The relationship of a measure of pathology (MMPI) to therapeutic growth." *American Journal of Psychotherapy*, 1966, 20, 193-202.
- Smith, W. D. and Lebo, D. "Some changing aspects of the self-concept of pubescent males." *J. Genetics and Psychology*, 1956, 88, 61-75.
- Stunkard, Albert and Mendelson, Myer. "Obesity and the body image: I. characteristics of disturbances in the body image of some obese personalities." *American Journal of Psychiatry*, 1967, 123, 1296-1300.

- Sullivan, H. S. *The Interpersonal Theory of Psychiatry*. New York: Norton, 1953.
- Weinberg, Jon R. "A further investigation of body-cathexis and the self." *Journal of Consulting Psychology*, 1960, Vol. 24, No. 3, 277.
- Wylie, Ruth C. *The Self-Concept: A Critical Survey of Pertinent Research Literature*. Lincoln: University of Nebraska Press, 1961.
- Zaccaria, J. S., and Weir, W. R. "A comparison of alcoholics and selected samples of non-alcoholics in terms of a positive concept of mental health." *Journal of Social Psychology*, 1966.
- Zachary, G. B. and Lightly, M. *Emotions and Conduct in Adolescence*. New York: Appleton-Century-Croft, 1940.
- Zion, Liela C. "Body concept as it relates to self concept." *Research Quarterly*, 1965, Vol. 36, 490-495.