SELF-ACCEPTANCE AND CREATIVITY AMONG COLLEGE FRESHMEN

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The approaches to the study of creativity have generally followed four major paths of emphasis: in terms of products, as a process, its measurement, and its relationship to personality development (Golann, 1963). The present study was an attempt to push along the pathway of the fourth major area of emphasis, that is, the relationship of creativity to personality development.

Some of the more relevant studies reported in this area were those by Barron (1952), McKinnon (1961), Stein (1963), and VanZelst & Kerr (1954), who contrasted the self-descriptions of subjects judged to be creative with those of others who were found to be less creative. These studies have shown that, by and large, creative individuals viewed themselves more favorably than did the less creative subjects.

The present study was an attempt to test a hypothesis which arose from Maslow's (1959) formulation concerning the relationship between creativity and an aspect of personality development. namely, self-acceptance. It was hypothesized that persons who are self-accepting tend to be more creative than a matched group of less self-accepting, or self-rejecting, individuals.

Self-acceptance may be defined both negatively as well as positively. Negatively, to be self-accepting does no mean to coddle oneself, or to indulge in narcissistic vanity, self-glorification or self-adoration. Rather, to accept oneself means to have proper self-regard, or as Sheerer (1949) has pointed out, to perceive oneself as a person of worth, worthy of respect rather than condemnation.

Operationally, self-acceptance in the present study was inferred from the degree of congruence between two aspects of the self-concept: the real self, i.e., as the person would like ideal self, i.e., as the person would like to be. It seemed reasonable to inferself-acceptance from congruence between a person's concept of his ideal and real self, inasmuch as if he perceives his real self as in close agreement with his ideal self, he can to that extent be assumed to be satisfied with and accepting of himself.

Creativity may be described as freshness of approach to, and ability to find new and useful solutions to problems (Shen, 1964). As stated elsewhere (Getzels & Jackson, 1962), the use of the term does not assume that this type of intellective ability is characteristic only of persons judged to be creative in the artistic or scientific sense. Stated somewhat differently, the term refers to "creative potential" which may or may not find eventual expression in

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outstanding products in the arts or in the sciences. Creativity, operationally defined, refers to a specific type of cognitive ability reflected in performance on two paper-and-pencil tests.

Метнор

The first task in going about testing the stated hypothesis was to identify two groups of subjects: a self-accepting group and a self-rejecting group. The two groups must be matched with respect to sex, age, educational attainment, verbal achievement, and IQ, so that any observed variance in their creativity scores could be attributed to difference in their self-esteem.

Test Instruments and Procedure

Intelligence test. Intelligence was measured by the Otis Self-administering Test of Mental Ability. Higher Form A (Otis, 1928).

Verbal achievement. Verbal achievement scores were secured through the verbal portion of the College Qualification Tests (CQT). Form A (Bennett, Pennett, Wallace, & Wesman, 1958).

Self-concept instrument. Called simply "Alternation Ranking of Trait Adjectives," this instrument was an adaptation of the Q-sort technique (Stephenson, 1953) which has often been used to measure personality change resulting from client-centered therapy (Rogers & Dymond, 1954). The adapted instrument consisted of 50 trait adjectives representing favorable as well as unfavorable traits. For example: (favorable) dependable, resourceful, sociable: (unfavorable) immature, lazy, self-centered.

Using the 50 trait adjectives, the subjects were first asked to rate their ideal self along the continuum, "most descriptive of my ideal self." to "least descriptive of my ideal self." Then, in a subsequent administration, they were asked to rate their real self along the continuum, "most descriptive of myself." to "least descriptive of myself."

Each individual's ideal-self and real-self ratings were then correlated with each other by means of the Pearson product-moment coefficient of correlation. The size of the correlation between his ideal and real self-represented an individual's self-concept "score." A high positive correlation meant a high degree of congruence between ideal and real self, and by inference, high self-acceptance. A low or negative correlation meant a low degree of congruence between ideal and real self, and, again by inference, low self-acceptance, or simply self-rejection.

The self-concept instrument had a mean repeat-reliability coefficient of .73 based on a random sample of 50 subjects.

Remote Associations Test (RAT). This test was adapted by the Ateneo Central Guidance from Mednick's (1962) Remote Asso-

ciations Test. The RAT consisted of sets of three words drawn from mutually remote associational clusters. The subject was then asked to find a fourth word which would serve as a kind of associative, connective link between the three seemingly unrelated words.

Mednick's original RAT was made for US subjects and based on verbal associative habits that could reasonably be assumed to be familiar to almost all individuals that have been brought up in the American culture (Mednick, 1962). To make the test more culturally appropriate for Filipinos, new items had to be introduced. Briefly, the process of adaptation was accomplished as follows. Several subjects were asked to make as many associations as possible to given stimulus words. From the word-associations produced, the items for the new RAT were constructed using the same principle followed by Mednick. For example, dog, tree, meow. The correct answer in this case is "bark": "bark of a dog," "bark of a tree," "meow-bark." The final form of the adapted RAT had 24 items for which a time limit of 15 minutes was allowed.

The fact that the RAT appeared to tap at once a number of the basic creative abilities reported by Guilford and his associates (Guilford, J. P., Kettner, N. W., Christensen, P.R., 1954: 1956), namely, semantic redefinition (the ability to "shift the functions of an object, or part of an object, and to use it in a new way"), originality (the ability to "produce clever or uncommon responses to specific situations"), adaptive flexibility (the ability to "reject habbitual, conventional, or previously successful ways and strike out in new directions"), and associational fluency (the ability to produce words from a restricted area of meaning") argued for its inclusion in the present creativity battery. The task of making remote and somewhat unfamiliar associations to common words seemed to require all the above abilities. In addition, the test also seemed to require what Maslow (1959) called the ability to "put together... dissonances of all kinds, into a unity" (p. 87).

In a previous study (Shen, 1964) using subjects similar in characteristics to those used in the present study, the RAT was reported to have a reliability of .73 computed by the Kuder-Richardson formula.

Components Test. This test was taken from the Flanagan Aptitude Classification Tests. Form A (Flanagan, 1952). It presents the subject with a complex geometric figure and asks him to find one simple, specified figure within the complex drawing.

This test was included in the creativity battery because of its similarity to a test used by Guilford in assessing the ability for figural redefinition, that is, the ability "to give up one perceived organization of a visual pattern to see another," which was found related to creativity. The components test also closely resembles Cattell's (1956) Hidden Shapes which was used as a meas-

ure of creativity in a recent study reported by Getzels and Jackson (1962).

A correlational analysis of the creativity and other instruments (see Table 1) showed this test to be substantially related (r=.366) to the RAT. Reported reliability of the Components Test in the previously-mentioned study (Shen, 1964) was .76 computed by the Spearman-Brown formula.

Uses for Things. This test was an adaptation of a similar test used in the Getzels and Jackson (1962) study. The Uses test used in the present study required the subject to name as many different uses for five common objects (bricks, clothes hanger, cake of soap, toothpicks, and piece of chalk). Time limit was 10 minutes. The subject's score depended on the number of different uses he could list down for the five common objects within the alloted time.

The correlational analysis presented in Table 1 showed the Uses test to be more related to the IQ test (r=.385) than to the other tests in the creativity battery. Because of this, it was decided to drop the Uses test from the creativity battery at this point in the analysis. A subject's creativity score, therefore, consisted of his summated score in the RAT and Components Tests.

Subjects

More than 300 entering male college freshmen in a private university located in the Greater Manila area participated in the test-

ing phase of the experiment. The tests lected or adapted for the present study we administered along with other entrance to given by the school during the orientati week. Complete data were obtained for 2 students from which the two experiment groups were drawn. Mean age for the entigroup was 16.70 with a standard deviation of 1.23. Mean IQ was 107.41 with a standard deviation of 11.38

The two experimental groups were identified as follows. One group consisted subjects (N=56) whose self-acceptane "scores" belonged to the top 25% who compared to those of their colleague with the same age, verbal achievement, an IQ: these composed the self-accepting group. The other experimental group consisted a subjects (N=56) whose self-acceptance score belonged to the bottom 25% when compared, to those of their colleagues of the same age, verbal achievement, and IQ; these composed the self-rejecting group. Exclude from the two experimental groups were subjects (N=112) whose self-acceptance score fell within the middle 50%; these were called the middle group.

Table 2 gives a summary of the charac teristics of the two experimental groups and middle group with respect to age, verbal achievement and IQ. No significant differences in the means and standard deviations of age, verval achievement, and IQ were observed among the two experimental groups and middle group.

TABLE 1

Intercorrelations Among the Intelligence and Creativity Tests (N=224)

	1	2	3	4
1. Uses for Things		.154*	.105	.385***
2. Remote Association (RAT)		_	.366***	.181***
3. Components				.003
4. Intelligence	_			

^{*}Significant at .05 level **Significant at .001 level

TABLE 2

Means and Standards Deviation of Age, Verbal Achievement, and IQ for Experimental Groups and Middle Group

	Variable	Self-accepting group $(N = 56)$	Self-rejecting group $(N = 56)$	Middle group (N == 12)
Age	M	16.46	16.52	16.83
•	SR	2.44	.89	1.03
Verbal	M	39.21	40.82	41 13
Achievement	SD	13.23	12,30	12.62
Otis	M	107.57	107.50	107.13
Intelligence	SD	11.13	11.05	10.83

RESULTS

Qualitative Differences

It seemed worthwhile to touch briefly on the qualitative differences between the self-accepting group and the self-rejecting group. For example, certain questions suggested themselves.

- 1. Is there a noticeable difference in the character of the respective ideal of the two experimental groups?
- 2. What are the qualitative differences in the real-self perceptions of the two experimental groups?

Since ideal- and real-self descriptions were accomplished by ordering the adjectives from the most descriptive to the least descriptive of the ideal or real self, it was possible to compute the median rank assigned by each of the two experimental groups to each of the 50 trait adjectives in describing their respective ideal and real self. Thus, if for instance, the adjective "gentle" had a median rank of say, 5 in describing the ideal self, and a rank of 10 in describing the real self, it could be said that the ideal self was perceived as more gentle than the real self, or to put it negatively, that the real self was seen as less gentle than the ideal.

To cite a different example, if in describing the real self, the self-accepting

group assigned a rank of 15 to the adjective "self-conscious," whereas the self-rejecting group assigned the same adjective a rank of 10, the self-rejecting group could be said to perceive themselves as more self-conscious than the self-accepting group.

With the foregoing clarification, the questions raised earlier may now be First, on the difference in answered. the character of the ideal-self concepts of the two experimental groups. dian rank differences of three or more were observed in only five of the 50 adjectives in the list, namely, resourceful, self-conscious, domineering, gentle, and self-centered. For purposes of economy, only these five adjectives have been presented in Table 3. This means that compared to the self-rejecting group, the self-accepting group perceived their ideal self as less domineering, more gentle, less resourceful, more self-centered, and more self-conscious. Aside from these five adjectives, however, no major differences were observed in the ideal-self descriptions of the two experimental groups. It could be stated, therefore, that for all practical purposes, the self-accepting group and the self-rejecting group shared substantially the same concept of their ideal self. This would seem to answer a suspicion that the self-rejecting subjects had

TABLE 3

IDEAL-SELF DESCRIPTION OF THE SELF-ACCEPTING GROUP (SAG)

AND SELF-REJECTING GROUP (SRG)

		Median rank	
Trait adjectives	SAG	SRG	discrepance
Domineering	, 18	15	3
Gentle	5	8	3
Resourceful	. 18	6	12
Self-centered	17	21	4
Self-conscious	13	17	4

higher achievement drives, or were more "idealistic" than the self-accepting individuals, resulting in greater disparity between their ideal- and real-self-perceptions.

Now to answer the second question. What are the qualitative differences in the self-perceptions of the two experimental groups?

It was observed from the earlier table (Table 3) that the two groups hardly differed in their perception of the ideal self. In their perception of their real self, however, a wide gap separated the two. From Table 4 it is evident that compared to the self-accepting group, the self-rejecting subjects perceived themselves as possessing more of the negative traits but less of the positive characteristics. Compared to the self-

accepting subjects, the self-rejecting group saw themselves as more boastful more bossy, more easy going, more im mature, more impulsive, more insecure lazier, more self-centered, more selfconscious, more shy, and more stubborn On the other hand, they perceived themselves as less broad-minded, less calm, less confident, less cooperative. less creative, less dependable, less gentle, less genuine, less independent, less intelligent, less persevering, less realistic, less resourceful, and less responsible. Surprisingly, the trait "sociable" was ranked higher by the self-rejecting group than by the self-accepting subjects, though the median rank discrepancy was only 3. This means that the self-rejecting group saw themselves as slightly more sociable than the selfaccepting subjects.

TABLE 4
SELF-DESCRIPTIONS OF THE SELF-ACCEPTING GROUP (SAG)
AND SELF-REJECTING GROUP (SRG)

Trait adjectives	SAG Med	Median rank SAG SRG		
Boastful	23	17	6	
Bossy	19	14	5	
Broad-minded	6	10	4	
Calm	6	11	5	
Confident	в	10	4	
Cooperative	3	7	4	
Creative	8	11	3	
Dependable	6	10	4	
Easy Going	15	6	9	
Gentle	5	9	3	
Genuine	8	12	4	
Immature	21	17	. 4	
Impulsive	15	11	3	
Independent	7	10	3	
Insecure	18	14	4	
Intelligent	8	11	3	
Lazy	20	13	7	
Persevering	8	12	4	
Realistic	8	11	3	
Resourceful	8	13	5	
Responsible	7	10	3	
Self-centered	18	15	3	
Self-conscious	12	9	, 3	
Shy	15	11	4	
Sociable	10	7 '	3	
Stubborn	22	17	5	

Main Comparisons

The relative performance of the two experimental groups on the creativity tests could now be examined. Did the scores of the self-accepting group significantly differ in the predicted direction from those of the self-rejecting group? To answer this question, the means and standard deviations of the creativity scores for each experimental group were computed and tested for significance of difference using the t test for uncorrelated samples. The results of the analysis are presented in Table 5 which shows that on the creativity tests, the self-accepting group performed significantly better (p < .01)than the self-rejecting group.

It will be recalled that the two experimental groups had been matched in

every controllable variable except in their self concept. Indeed, they belonged to opposite extremes of the self-acceptance continuum. On the basis of the present data, it seems reasonable to state that a major portion of the variance in the creativity scores of the two experimental groups can be accounted for by their difference in self-esteem. Thus, it would appear that, at least in so far as the present sample is concerned, the hypothesis has been verified.

The next step was to compare the creativity scores of the two experimental groups with those of the middle group. The results of this analysis are shown in Table 6 from which two things may be observed. (a) The self-accepting group did not significantly differ

TABLE 5

Means and Standard Deviations of Creativity Scores for the Two
Experimental Groups

	Mean	SD
Self-Accepting Group $(N = 56)$	40.30	8.96
Self-Rejecting roup $(N = 56)$	35.23	9.62
t	2.86	
df	110	
p	<.01	

TABLE 6

MEANS AND STANDARD DEVIATIONS OF CREATIVITY SCORES FOR THE TWO EXPERIMENTAL GROUPS AND THE MIDDLE GROUP

	Self-accepting group $(N = 56)$		Middle group (N = 112)		Self-rejecting group (N == 56)
Mean	40.30		38.96		35.23
SD	8.96 [*]		8.66		9.62
t		.90		2.58	
df		166		166	
p	n	ot significant		<.02	

from the middle group; and (b) the middle group performed significantly better (p < .02) than the self-rejecting group.

Again, it will be recalled that the middle group did not differ in any appreciable degree from either of the two experimental groups in age, verbal achievement, and IQ. That the middle group significantly differed in mean creativity scores from the self-rejecting group (p < .02) (but not from the self-accepting group), may be partly accounted for by the fact that the middle group's mean self-esteem "score" of .63 was closer to the mean self-esteem score of the self-accepting group (.81) than to that of the self-rejecting group (.29).

DISCUSSION

If one were now to propose a theoretical model to explain the observed relationship between self-acceptance and creativity, such a model would perhaps be built along a pattern approximating the hierarchical arrangement of human drives or motivations. theory of motivation is that human wants seem to arrange themselves in some sort of hierarchy of prepotency (Maslow, 1954). For example, esthetic needs do not seem to become operative unless other more basic needs are first satisfied such as the need for food, shelter, physical security, etc. A person. for instance, could not be expected to think of writing poetry, or composing music. or being charitable to this neighbor, if his stomach were empty most of the time, if he were continually searching for a place to live in, or if he were hated by everyone else.

Like human needs, cognitive abilities could perhaps be logically conceived of as being arranged in some kind of hierarchy of prepotency. Some types of

cognitive abilities are probably more likely to become operative under certain personality conditions, while other types of cognitive abilities become activated under a different set of personality conditions. Applying then, this model to the present data, the condition of self-acceptance, and not selfrejection, would seem to serve as a trigger mechanism releasing those divergent types of cognitive abilities found to be related to creativity. And just as the equality of self-acceptance, like most human qualities and abilities, exists in varying degrees, so does creativity.

The foregoing model, however, seems somewhat deceptive inasmuch as it tends to suggest a cause-and-effect relationship between self-acceptance and creativity. and implies a value judgment concerning the relative worth of the different types of cognitive ability. It must be emphasized that no such implications are intended.

One might go a bit further and, at the risk of going beyond the data presented, relate the findings of the present study to certain theoretical constructs and empirical evidence offered by client-centered therapy. One enduring tenet of the theory of client-centered therapy is that the client's perception of himself changes during therapy in the direction of becoming a self that seems more comfortable and well worth one's esteem. Several studies tending to support this theory have been reported by several investigators (Butler & Haigh, 1954; Dymond, 1954; Luria, 1959; Raimy, 1948; Rogers, 1954; Rudicoff. 1954: Sheerer, 1949; Stock, 1949). In general, these studies have shown that as therapy progressed, the discrepancy between the client's concepts of his ideal and real self decreased resulting in greater psychological wellbeing, comfort, and self-esteem.

The sick person before therapy would represent the self-rejecting person in the present study, whereas the same client after successful therapy would represent the self-accepting subject. Like a person seeking therapy, the selfrejecting subject would seem to be in a state of psychological tension and conflict resulting from the great disparity between his perceived self and the self that he would wish to become. he would be near the lower end in the continuum of Maslow's (1959) "selfactualizing people," or Rogers' (1961) "fully-functioning person." Such internal conflict would, then, pose a constant threat to the individual's psychological freedom, well-being, and internal comfort, and would seem to paralyze certain intellective faculties in him, e.g., the creative faculty, and render these faculties inoperative at least while the conflict and the threat persisted. Such a person would be less capable of "unthinkable thoughts" which seem to be characteristic of divergent thinking.

On the other hand, the self-accepting subject whose ideal and real self are better reconciled would, like the healthy person coming out of successful therapy, tend to be more satisfied with himself. At such, he would seem to enjoy a greater degree of psychological comfort, freedom and well-being. And because he is not living under a self-threatening atmosphere and psychological strain, he would be able to permit himself to venture more fully into unfamiliar modes of thinking, to think "unthinkable thoughts", such as finding connective links between seemingly unrelated stimulus words. Since he wastes less time and energy protecting himself against himself, he would have more of himself "available for use. for enjoyment, and for creative purposes" (Maslow, 1959, p. 88). He would be close, or moving closer to the

concept of the "self-actualizing people", or the "fully-functioning" person.

I would be presumptuous to suppose that the foregoing explanations could fully account for the observed relationship between self-acceptance and creativity. They are, nevertheless, offered as tentative explanations in the hope that they would stimulate further thought and research on the subject.

Self-Acceptance and External Relations

Previous studies (Sheerer. 1949; Suinn, 1961; Suinn & Hill, 1964) have established the relationship between self-acceptance and acceptance of others.

Other fascinating areas of inquiry suggested may perhaps be best indicated by the following questions.

- 1. To what extent is the character of the external relationships of any given group, organization, or association determined by the self-image of that particular group, organization, or association?
- 2. To what extent is the conduct of the external relations of a town, city, province, or country influenced by its "collective" self image?
- 3. Finally, what role does culture play in the development of the self concept?

These, as well as others that may be asked, are no doubt rather ambitious questions, the answers to which would require the development of reliable measuring instruments to measure "collective" or "national" self-concepts, and their suggested correlates. However, with the growing sophistication of social scientists in the development and utilization of measuring tools, it is hoped that answers to these questions would eventually be attempted and forthcoming.

SUMMARY AND CONCLUSION

The present study was an attempt to examine the relationship between creativity and an aspect of personality denamely, self-acceptance. velopment. Taking a cue from Maslow's theoretical formulation, it was hypothesized that persons who are self-accepting tend to be more creative than a matched group of self-rejecting subjects. acceptance was defined as that situation where a person's concept of his ideal and real self are disparate. Creativity was defined as a specific type of cognitive ability reflected in performance on two paper-and-pencil "creativitv" tests, namely, the Remote Associations and Components tests.

The subjects of the study were 224 entering college freshmen of a private university for boys. From these 224, the two experimental groups and a middle group were composed as follows: One group consisted of subjects whose self-acceptance "scores" were within the top 25% when compared others of the same age, verbal achievement, and IQ; these formed the selfaccepting group. The other group was composed of subjects whose self-acceptance scores fell within the bottom when compared to of the same age, verbal achievement, and IQ; this formed the self-rejecting group. The middle group was composed of all subjects not falling under any of the two experimental groups.

The creative scores of all the three groups were then compared, from which the following things were observed. (a) The self-accepting group performed significantly better (p < .01) than the self-rejecting group, but not significantly better than the middle group; and (b) the middle group performed significantly better (p < .02) than the self-rejecting group.

On the basis of those findings, an attempt was made, firstly, to propose theoretical model describing the hierarchy of cognitive functioning in the light of existing motivational theories and, secondly, to relate the findings of the present study to certain theoretical constructs and empirical evidence of fered by client-centered therapy.

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