

The effects of emotional restraint upon the projection of positive affect¹

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The present study is one of a series aimed at determining the influence of affect arousal in a perceiver upon his judgments of other people. Whereas the previous experiments were concerned with such negative feeling state as anxiety (Feshbach & Feshbach, 1963; Feshbach & Singer, 1957; Singer & Feshbach, 1962) and aggression (Feshbach, Singer, & Feshbach, 1936), our interest here is in the projection of "happiness." Experimental variation of another affective state permits one to verify and extend empirical generalizations based upon different affective content. In addition, the use of a positive affect has particular theoretical implications with regard to the issue of the unacceptability of the projected impulse. Also, the experimental arousal of positive feeling, apart from methodological differences, may reflect a different effect upon social judgment than a correlational analysis of self-ratings of happiness and judgments of the happiness of others (Goldings, 1954).

A basic condition in the psychoanalytic explanation of the mechanism of projection is that the impulse, idea, or emotion in question must be unacceptable to the individual in order for him to project or attribute it to other people. Stress is placed on the anxiety-reducing function of projection. A dissonance theory account of projection is in this respect similar in that it asserts that the tension or dissonance created by an unacceptable impulse can be reduced by believing that other people share this impulse as well (Bramel, 1962). Neither the psychoanalytic nor dissonance model would predict the projection of positive affect. It should be added that neither theory pretends to encompass all the processes by which characteristics of the perceiver influence his judgment of other people, and a demonstration that positive affect is attributed to others does not imply that either position

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is in error but indicates that in this situation some other process is involved.

The writer has suggested elsewhere (Feshbach & Singer, 1957) that the "projection" of affect is based upon the extent to which the perceiver's affective responses are part of the stimulus complex which determines his judgment of other people. This process which has been variously labeled "infusion" and "expressive projection" is akin to the notion of physiognomic perception (Werner, 1948). The affective response of the perceiver provides a salient stimulus which he must learn to ignore when judging the emotions of others who are in a different situation. The degree to which his judgment will be influenced by his own feelings will be a function of factors which reduce discriminability between himself and the other person. Such factors include similarity between the perceiver and the stimulus person, preoccupation with self and internal cues, and intensity of the affect.

From this point of view, a valued positive affect no less than negative feelings should be attributed to others. But the expressive projection of affect is only one of several processes mediating social judgment. The use of the self as an anchorage point or frame of reference and comparison between self and others may also take place. If the discrepancy between one's own feelings and the apparent emotional expression of the person being judged is very great, then a sharp discrimination between self and others may be established. Berkowitz (1960) has argued that under such conditions contrast rather than assimilation will take place, e.g., a very happy person will judge a sad-looking individual as sadder than will a less happy person. Information regarding this proposition will be obtained in this paper by inducing a positive affective state in the perceiver and systematically varying the degree of happiness and sadness of the stimulus person. At the same time, by varying the sex of the stimulus, the effects of similarity between the perceiver and the stimulus object may be ascertained.

In addition, the effects of restraint of emotional expression will be examined. Restraint is to be distinguished from denial or repression. In the case of the latter, the affect may be conveyed to others although not consciously acknowledged. In the case of restraint, the affect is experienced but not communicated or

physically expressed. In an earlier study by Feshbach and Singer (1957), it was observed that suppression of fear significantly increased the attribution of fear to others. The experimental manipulation of "suppression" entailed both restraint and denial. In the present study, tendencies to deny affect will be minimized and stress will be placed upon emotional restraint. Restraint of affect should increase the degree of attribution because of the preoccupation with affect which is involved in the act of restraint. Since the individual is egocentrically preoccupied with his feelings, there should be some loss in discrimination and, as a result, increased generalization from himself to the person he is judging.²

On the basis of the preceding discussion, the following specific hypotheses are proposed:

1a. Individuals in whom positive affect has been aroused attribute more happiness to happy-appearing stimulus persons than a neutral affect group.

1b. Individuals in whom positive affect has been aroused attribute less happiness to sad-appearing stimulus persons than a neutral affect group.

2. Restraint in expressing positive affect increases the attribution of positive affect to others.

3. Women in whom positive affect has been aroused attribute more happiness to happy-appearing women than to happy-appearing men, i.e., the difference is greater than the comparable difference for a neutral affect group.

METHOD

Subjects

Letters were sent to sororities at a large metropolitan university asking for members to volunteer for a small group experiment in which both the individual member and the sorority were eligible for a monetary reward. Ss appeared in groups of four, and each group was randomly assigned to either a Positive Affect or to an Affective Restraint condition. There were 17³ Ss in the Positive Affect treatment and 12 in the Restraint group. Attempts at assigning these sorority

² It may be somewhat of a paradox that both preoccupation with one's affect and denial of affect can reduce the cues available to the perceiver for making appropriate discriminations between his own affective state and that of another person he is observing.

³ In one group, five Ss appeared and were included in the experimental analysis.

groups to a neutral affective condition were unsuccessful because of the excitement generated by the experimental situation. Consequently, comparable control data were obtained in a classroom situation from 27 college females similar in age and education to the experimental Ss.

Procedure

Each group of four girls was told by E^4 that she was interested in "contrasting the performance of individuals working toward a common goal with people they know, with the performance of individuals working with people they do not know." She further indicated that they would each work in a different room on exactly the same kind of task consisting of a jigsaw puzzle designed to test spatial ability, and that the level of performance would be based on the number and types of pieces correctly placed together, the more difficult pieces having greater weight. They were also informed that "those participants whose *individual* scores are superior to 75 per cent of college students on this particular task will receive \$3.00. In addition, there will be a prize for group scores as well. If two members of your group achieve this high level, the other members of the group will also receive \$3.00 each. In addition, the group automatically becomes eligible to compete for the grand prize of \$25.00 for your sorority."

They were further instructed that at the end of this phase of the experiment, they would be given other tasks to perform which were unrelated to the prize. Each girl then worked alone on a puzzle in a private cubicle for approximately seven minutes, at which time E returned and proceeded to "score" S's completed work. Each experimental S was individually informed that she had done better than 80 per cent of the college student population and was thereupon given \$3.00 by E . Ss were then told that they were to reassemble with the other girls in another room to participate in a normative study which was not part of the contest. Each S in the Restraint group was encouraged not to reveal her feelings or her performance to the other girls. The specific instructions used were as follows: "Oh! One more thing. I'd like to ask a favor of you. I don't want the knowledge of how well you did to affect the others' scores on the material we'll be working on in a few minutes. I would appreciate it if you don't indicate either verbally or by a sign—like a smile or a wink—how well you did. You'll have a chance to meet and discuss this afterward, when we've finished."

The girls then met in a group and were administered a series of pictures presented by means of a slide projector, which they had to judge on a happy-sad continuum. Ss were informed that they would be asked to judge on a number of dimensions a set of photographs

⁴ The author wishes to thank Mrs. Susan Leaf for her assistance in carrying out the experimental study.

taken of people under different circumstances, and that the initial dimension on which they would make judgments was "happy-sad."⁵ Ss judged 14 faces, ranging in affective expression, using a nine-point rating scale varying from Very Sad to Neutral to Very Happy. After the completion of the picture judgments, each S rated her own state of happiness on this same nine-point scale. The Control group followed the same procedure with respect to the administration of the dependent measure except that their judgments were elicited in the classroom.

Materials

The photographs used as stimuli were obtained by having men and women, ranging in age from 19 to 50, assume various poses conveying different degrees of happiness and sadness. The pictures were then submitted to 17 judges who sorted them into one of the following seven piles: very sad, considerably sad, somewhat sad, neutral, somewhat happy, considerably happy, very happy. Fourteen photographs were then selected by a modified Thurstone scaling technique, such that at least one photograph of a male and one of a female should occupy each of the seven points on the scale and the dispersion for each photograph should be minimal.

A nine-point rather than seven-point scale for judging the faces was employed in the final study in order to allow some room for movement at the extremes. The graphic rating scale was demarcated by nine bars but only the ends (very sad, very happy) were labeled. A score of 1 was assigned to the extreme sad judgment and corresponding scores to each of the other points so that a score of 9 was the maximum "happy" rating that could be given to a photograph.

RESULTS

The self-ratings of happiness made after completion of the judgments of the facial stimuli provide a crude indication of the effectiveness of the experimental procedure for arousing positive affect. Mean judgments of self-ratings of happiness were 7.1 for the Restraint group, and 6.1 for both the Positive Affect and Control groups.⁶ As the above results indicate, despite their intellectual success and financial rewards, the Positive Affect group rated themselves no higher than the Control group. The Restraint group, however, had higher self-ratings than the other groups, the difference in the case of the Positive Affect group being significant at the .05 level while that for the Control group attained

⁵ This was the only dimension on which the Ss actually made judgments.

⁶ All comparisons in this paper are based on two-tailed Mann-Whitney U tests.

only the .10 level. The ratings of the control Ss were more variable than was the case for either of the Experimental groups. Thus, the Control group had eight individuals with scores in the Neutral or Unhappy part of the scale in comparison to two for the Positive Affect group, while six of the 27 controls as compared to two of the 17 Positive Affect Ss gave ratings higher than 7. The findings for this single self-rating are indecisive with respect to difference in affective state between the Positive Affect and the Control group. Somewhat surprisingly, the combination of reward plus restraint apparently resulted in an increase in positive feeling.

The mean "happy-sad" judgments for each stimulus are presented in Table 1. Because of the markedly skewed distributions, non-parametric Mann-Whitney U tests (2-tailed) were employed instead of the more powerful analysis of variance procedures which directly evaluate interactions. The comparisons between

Table 1. Mean attribution of happiness and sadness as a function of experimental treatment.

Facial Expression	Male Stimuli			Female Stimuli		
	Restraint N = 12	Pos. Aff. N = 17	Control N = 27	Restraint N = 12	Pos. Aff. N = 17	Control N = 27
Extremely Sad	1.5*	1.9	2.2	3.1	3.3	2.6
Very Sad	2.9	2.7	2.6	2.9	2.9	2.8
Somewhat Sad	3.4	4.3	3.4	4.5	4.5	4.6
Neutral	5.3	5.1	4.9	4.9	5.1	5.0
Somewhat Happy	6.2	6.1	6.4	6.3	5.9	6.3
Very Happy	8.6	7.9	8.3	8.6	8.0	8.0
Extremely Happy	8.5	7.8	8.6	8.8	8.3	8.3

*Scale points: Very Sad = 1; Neutral = 5; Very Happy = 9.

	Restraint vs. Pos. Aff.	Restraint vs. Control	Pos. Aff. vs. Control
Σ of Happy Pictures	<.05	—	—
Σ of Happy Males	—	—	<.06
Σ of Happy Females	<.06	—	—
Extremely Happy Female	<.05	<.05	—
Extremely Happy Male	—	—	<.06
Very Happy Male	<.05	—	—
Σ of Sad Males	<.10	—	—
Somewhat Sad Male	—	—	<.05
Extremely Sad Female	—	—	<.05
Extremely Sad Male	—	—	—

the Positive Affect and the Control group not only fail to confirm the first hypothesis, but the differences which are significant or near-significant are in an opposite direction to that predicted. The Positive Affect group tended to judge the "happy" males as less happy than the Controls, but gave significantly higher ratings than the Controls to one of the "sad" male and "sad" female stimuli.

The differences between the Restraint and the other conditions are more consistent with expectation. The Restraint group tended to give higher happiness ratings to the more happy-appearing female stimuli than the Controls, the difference in the case of the Extremely Happy Female being significant at the .05 level. While the test for the "Very Happy" female stimulus yielded a nonsignificant p value of .11, the two groups clearly differed in their use of the less extreme happiness ratings. For example, only one out of the 12 Restraint Ss as compared to 14 of the 27 Control Ss had ratings less than 7.5. This difference yields a chi-square of 4.9, which is significant at the .05 level. There are no systematic differences between the Restraint and the Control Ss in their judgments of the male faces or the sad faces.

Comparisons between the Restraint and the Positive Affect Ss are of particular importance since these two groups differed only with respect to the Restraint instruction. In accordance with the experimental hypothesis, the Restraint group attributes reliably more happiness to the happy faces than the Positive Affect group. The differences are significant for the happy face totals, for the "Extremely Happy" female and the "Very Happy" male; the comparison of the sums of the three happy female stimuli falls just short of the .05 level of confidence. The Restraint group also shows a tendency to judge the sad-looking males as sadder than does the Positive Affect group. This is the only finding suggestive of a contrast effect in judgments of people whose affective state is obviously distant from that of the perceiver.

The comparison between the Restraint Ss and the other two groups, when taken as a whole, further suggests that the sex of the person being judged does influence the attribution process. A more direct test of the similarity hypothesis can be provided by determining for each S the difference between the sum of the

three "happy" female stimuli and the three "happy" male stimuli and comparing the means of these difference scores. Mean differences in attribution of happiness to females and males were + .21 for the Restraint group, + .56 for the Positive Affect group, and - .73 for the Control group.⁷ The negative mean difference score for the Control Ss indicates that they attribute more happiness to the male than the female stimuli, while the positive means for the two experimental groups indicate that they see the women as happier than the men. The difference between each of the experimental groups and the Control group is significant at the .05 level.

DISCUSSION

The effects of the Restraint condition are consistent and in accordance with prediction. We shall discuss these data first before turning to the complexities of the Positive Affect-Control comparisons. The girls who were instructed not to reveal their feelings attributed more happiness to the happy-appearing female stimuli than did the nonrestrained Positive Affect group or the Control Ss. The prediction of this effect was based on the assumption that the efforts at restraint would produce increased preoccupation with the perceiver's own affective state and thereby increase the probability that judgment of others would be influenced by the perceiver's feelings. However, since the Restraint condition also resulted in significantly greater self-reports of happiness, one might more parsimoniously argue that the critical mediating factor is the strength of the affective state rather than degree of self-preoccupation. The self-ratings are not the only evidence for heightened euphoria in the Restraint group. From observations of their behavior immediately after the experiment, it was evident that the girls could hardly wait to reveal their good fortune to each other. Their exuberance and excitement contrasted with the smiles of the Positive Affect Ss. The difference in happiness judgments between these groups may then be more readily accounted for in terms of generalization of a stronger response rather than increased preoccupation with their feelings. At the same time these two processes are not un-

⁷ Determined by subtracting male from female score for each S; a positive mean indicates greater attribution of happiness to females, while a negative mean indicates greater attribution to males.

related. The cognitive effects of intense excitement may be largely a function of the compellingness of these internal stimuli and the extent to which they preoccupy and demand one's attention. Self-preoccupation is probably a direct function of the intensity of internal stimuli, although the converse may not necessarily hold.

The attribution of positive affect is not only strongly influenced by the Restraint condition but at the same time is dependent upon the stimulus properties of the person being judged. There were no experimental changes in judgments of the neutral and "somewhat happy" faces, projection being restricted to the very happy-appearing individuals. Furthermore, the Restraint condition failed to have a reliable effect upon judgments of the sad faces, although there is some indication of a contrast effect in the judgments of the sad male faces by the Restraint group as compared to the Positive Affect group. Since the Control group mean approximates that of the Restraint Ss, the difference may be a function of an increment in the judgment of the Positive Affect group rather than an exaggeration of sadness judgments by the Restraint group. Although not reliable, it is nevertheless of interest that the largest difference between the Control and Restraint Ss, in a direction suggestive of contrast, occurred in response to the extremely sad male stimulus where a contrast effect is most likely. The sex of the stimulus person also proved to be a pertinent variable. Significant differences between the Restraint group and the Controls occur only in response to happy female faces and the difference-score comparison reflects a greater increment in attribution to females than to males. The Positive Affect Ss also attribute greater happiness scores to females than to males without, however, showing evidence of projection of positive affect to either the male or female happy faces. The absence of a significant difference in difference scores between the Restraint and Positive Affect groups poses a problem as to the meaning of the difference scores. One could, in this connection, question the Control group data since these girls were similar to but not randomly selected from the same population as the two experimental groups. Examination of the initial standardization data provides some information relevant to this question in that, as is the case for the present Control data, the mean judg-

ments for each happy male face were slightly higher than those for the corresponding female faces. The data evaluating the effects of similarity, then, are suggestive but not as clear-cut as those evaluating the effects of restraint and facial expression.

The judgments of the Positive Affect Ss do not conform at all with the experimental prediction. One could simply assert that the reward condition produced only a mildly positive state which had no demonstrable influences upon perception of others. The Positive Affect Ss do, however, differ from the Control Ss in that they see males as less happy (and also females to a lesser degree) and rate some of the sad faces as less sad. We suggest this group also utilized their own affective state in judging others. Since they were only mildly happy, they judged the very happy faces as less happy and, by the same token, the sad faces as less sad. The Control Ss, in whom no emotional response has been aroused, are less likely to utilize internal affective cues in making judgments of others. Individual differences in their perceptions are predominantly a function of more stable, enduring modes of judgment; hence, the greater variability in the Controls as compared to the experimental Ss where the experimentally induced affective state could serve as a constant and salient factor.

A broader implication of this argument is that the relationships obtained between measures of personality traits and perceptions of others need not be and probably are not the same as those obtained between affective states and perception of others because different as well as similar psychological processes and variables enter into these correlations. A generally happy person may tend to see others as happy (Goldings, 1954) because he has been largely exposed to rewarding and friendly people, because his own self-evaluation is in part defined by his perception of others, and because his self-evaluation has functioned as a significant reference point in his development of judgmental categories. He may exaggerate the sadness of an unhappy-appearing individual because of his lack of experience with such states and because of the contrast with his own characteristic self-evaluation. An individual who is currently experiencing strong euphoric feelings is in a different psychological situation. He is preoccupied with these feelings which then are a salient part of the stimulus field at the time he makes his judgment.

In conclusion, the results indicate that happiness, like anger and fear, will, under certain circumstances, be projected onto other people and that attribution of feeling is not restricted to negative affects. The data also point to the complexity of processes mediating attribution and to the need for and difficulty of systematic separation of simultaneously operating factors.

SUMMARY

The study was designed to demonstrate the projection of positive affect and to test the hypothesis that restraint of affect enhances projection. Positive affect was elicited in 29 female Ss through successful performance on an intellectual task and financial reward. Twelve of these Ss were assigned to a Restraint condition in which they were asked not to communicate their feelings to other Ss. All Ss then judged the degree of happiness-sadness of a series of male and female faces varying in affective expression. Comparable data were obtained from a Control group under neutral, classroom conditions. Projection of happiness was observed only in the judgments of happy-appearing female stimuli by the Restraint group.

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