

Negative salience in impressions of character: Sex differences

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Ss evaluated an unknown other from two opposing descriptions, one recounting commendable and another reprehensible behaviors. The factorial design varied sex of perceiver, sex of other, order of information, and trial (after each description and a week later). Initially positive ratings revised downward by negative information remained stable: initially negative ratings revised upward regressed significantly again within a week. There were no main effects of sex, but both sexes were rated more leniently by same-sex perceivers. Final ratings of opposite sex showed a significantly greater influence of negative information; ratings of own sex showed only a similar trend.

A recent study by Richey, McClelland, & Shimkunas (1967) obtained results interpreted as evidence that impressions of character are more strongly influenced by negative than by positive information. Ss made character ratings on the basis of two incompatible paragraphs describing the same person. Half received the information in positive-negative order and half in negative-positive. While both negative and positive first impressions were modified by subsequent information of opposite valence, positive impressions that had been changed in the negative direction thereafter remained stable, while negative impressions that had changed positively reverted to the negative again within a week's time.

The study described did not investigate sex differences. A related experiment by Cusumano (1968) had Ss of both sexes rate a male stimulus person in a similar design and found no sex differences in judgment. Klinger, Albaum, & Hetherington (1964) varied both sex of perceiver and sex of other in an earlier study in which college students evaluated a dishonest action by an older adult. No main effects of sex of perceiver or sex of other were found, but each sex was more severe in judging the opposite sex than its own. Richey & Fichter (1969) had college students of both sexes judge contemporaries of both sexes in actions involving either dishonesty or personal misconduct. There were no sex differences in judgments of reprehensibility of either sex in either situation. There was, however, an interaction effect in judgments of appropriate punishment for the misbehavior: Males prescribed more lenient punishment for females in both situations than for males; females prescribed similar punishments for both sexes.

The present study investigated impressions of mature adults formed by college students. As in the Richey et al (1967) and Cusumano (1968) studies, the experimental task required Ss to make an overall character evaluation of the stimulus

person from incompatible positive and negative information. It was predicted that evaluations made by both sexes would show the negative salience effect regardless of sex of stimulus person. No differences were hypothesized for either sex of perceiver or sex of stimulus person.

DESIGN

The experimental design was a 2 by 2 by 2 by 3 factorial with repeated measures on the fourth factor. Independent variables were sex of perceiver (P), sex of other (O), order of presentation of positive and negative information (NP or PN), and trials. Trials were given after presentation of each block of information and a week later.

Ss were 120 undergraduate students tested during regular class periods. All students in a class were tested, with surplus Ss discarded randomly. Within each sex, assignment to treatments was at random.

INSTRUMENT

The paragraphs describing the male stimulus person were the same as those of Form I in the earlier study by Richey et al (1967). An additional set of paragraphs describing a female stimulus person was constructed for the present study as follows: Standardization Ss were given a series of statements describing specific behaviors, each attributed to a separate person. All Ss rated every statement on a 7-point ordinal scale for the favorability of their impression of the person involved. Items most reliably rated near appropriate scale points of 2 ("poor impression") and 6 ("good impression") were combined into paragraphs that were administered to new Ss and revised until the desired values were obtained. Both the positive (P6) and negative (N2) paragraph included two statements about the stimulus person's interactions with her neighbors or part-time help and one each concerning interactions with her husband, children, and parents. The paragraphs are presented below:

Positive

Mrs. C. supported her yardman when a neighbor falsely accused him of stealing, and she has since recommended his services to her other friends. She is understanding and patient when her husband is delayed and comes in late from the office or when he feels obliged to bring an unexpected business associate home for dinner. Although she had been saving to buy a new outfit for herself, she readily spent this money to buy one of her daughters a new dress for an important and unforeseen party. Mrs. C. gave up her summer vacation to help her elderly mother through a difficult period while the rest of the family enjoyed a trip. Although her kaffeeklatsch friends enjoy gossiping and "wringing out the wash" at their get-togethers, she usually tries to emphasize the good qualities of others.

Negative

Mrs. C., despite the efficiency of her cleaning woman, usually finds some trivial thing to criticize and often is tardy in paying her wages. She thinks nothing of lying about her social background and family connections so that her neighbors will think more of her. She is vain about her appearance, and she never fails to flirt with younger men at parties which she and her husband attend together. Mrs. C. has never been as close to her younger daughter as to her other children, and when the girl's dog ruined a rug she immediately gave the pet away, despite the child's grief. She and her family accept many substantial gifts from her parents, who have very modest means, but she frequently forgets their birthdays and other special occasions or else gives them only a token remembrance.

In the case of the male stimulus person, interactions described are with associates (two) and with wife, children, and parents (one each). It was not considered practicable simply to change the gender of the stimulus person in the paragraphs describing a male, because several of the statements were more relevant to aspects of the conventional male role than to the female role. Thus, while the attempt was made to match male and female paragraphs for valence intensity, there is very little overlap in specific content.

PROCEDURE

Ss were given a first paragraph, either positive or negative, from which they rated the character of the stimulus person on the 7-point scale used in standardization of the paragraphs. After the first rating, they were given as a diversion the task of drawing two human figures. Approximately 15 min were allowed for the drawings. Then the second, incompatible block of information was presented with instructions to rate the

Table 1
Means and Standard Deviations
of Character Ratings

Group	Trial		
	1	2	3
MMPN*	6.400 .507	3.800 1.320	4.266 .961
MMNP	1.466 .517	4.933 1.486	3.333 1.545
MFPN	5.933 1.099	2.333 .976	2.933 .915
MFNP	1.666 .976	4.200 1.521	3.133 1.060
FMPN	6.133 1.246	2.400 1.121	3.000 1.000
FMNP	1.400 .507	4.466 1.060	2.666 1.175
FFPN	5.866 .991	2.866 .991	3.200 1.014
FFNP	1.533 .516	4.333 1.448	3.400 1.404

* First letter refers to sex of perceiver, second to sex of stimulus person, last two to order of presentation.

stimulus person again "using all information now available." A week later Ss were asked, with no previous notice, to rate the stimulus person a third time and to list all of his (her) actions that they could remember.

RESULTS

Summary statistics are presented in Table 1. A preliminary analysis was done to determine whether equally extreme positive and negative stimulus values (as developed in the standardization procedures) were still obtained in the experiment proper. Comparisons were run on the means of the first-trial ratings to discover whether or not the positive and negative members of each paragraph pair were equidistant from the scale neutral point of 4.0. For the paragraphs describing a male stimulus person, the values did not differ in extremeness ($t = 1.54$, $df = 58$, $p > .10$). For the female content form, however, the comparison indicated that the negative paragraph was more negative than the positive was positive ($t = 2.13$, $df = 58$, $p < .05$). For this reason, any statements regarding the negativity of impressions based on this paragraph pair should be based on a comparison of the averaged values of the independent positive and negative paragraphs (3.76) rather than on the scale neutral point of 4.0. While this consideration should not affect comparisons of trials, sex of perceiver, or order, it could enter into comparisons involving sex of stimulus person. For this reason, an additional t test was done to determine whether or not there was any difference between means of male-content vs female-content forms on Trial 1. Results indicated no significant difference ($t < 1$).

Any difference between male and female content forms on later trials, therefore, is not attributable to different stimulus values.

Results of the analysis of variance indicated no main effects of sex of P or sex of O. There were main effects of order ($F = 60.57$, $df = 1/112$, $p < .01$) and trials ($F = 9.82$, $df = 2/224$, $p < .01$). The order effect was due to the fact that higher ratings were obtained overall in the PN order. The trials effect reflected a drop in favorability of ratings from Trial 1 to Trial 3.

Significant interactions were found for Trials by Order, Sex of P by Sex of O, and Sex of P by Sex of O by Trials. The Trials by Order interaction was predictable because of the different valences of the univalent paragraphs presented on the first trial. Comparison of means with Duncan's multiple range test indicated that there were also differences due to order on the second trial. For both content forms and for both male and female Ss, the NP order received higher ratings on the second trial than did the PN order, showing a greater influence, on this trial, of the more recent communication. By the third trial, however, the recency effects had largely disappeared; there were no differences between the order means on the final trial for the MF, FM, or FF groups. The $MMPN_3$ mean, however, was significantly greater than the $MMNP_3$.

The Sex of P by Sex of O interaction reflected the fact that Os of both sexes received higher ratings from Ps of their own sex than from Ps of the opposite sex. The difference, however, reached significance in only 2 of the 12 relevant comparisons. Males received higher ratings from males than from females in the PN order groups on Trials 2 and 3 ($MMPN_2 > FMPN_2$; $MMPN_3 > FMPN_3$). The second-order interaction of Sex of P by Sex of O by Trials reflected the fact that the Sex of P by Sex of O interaction did not occur on Trial 1, but only on Trials 2 and 3, where ratings are based on both descriptions.

The Sex of P by Sex of O interaction effect was reflected in an additional comparison not based on the analysis of variance. To describe a rating as "negative" implies that it is significantly below a neutral or average scale point. To test for such differences, all final means were compared to the average of the values of the two univalent paragraphs comprising the relevant pair for that content form. Thus the $MMPN_3$ mean was compared to the value $(MMPN_1 + MMNP_1)/2$. The standard error of the cell mean was used as the error term. All MF (males judging females) and FM (females judging males)

final ratings were significantly below these average points: MM and FF means were not. In the order in which the groups are listed in Table 1, t values were 1.30, 1.45, 3.53, 2.35, 2.87, 3.50, 1.84, .80 (with $df = 13$, $p = .05$ for $t = 2.15$; $p = .01$ for $t = 2.98$).

DISCUSSION

The results in general support the hypothesis of a delayed disproportionate influence of negative information in impressions of character based on opposing positive and negative descriptions. The paragraphs describing a female stimulus person that were constructed for this study produced results similar to those that have been found in previous studies with male content forms (Richey et al, 1967; Cusumano, 1968). Negative impressions that had turned positive after new information regressed significantly toward the negative within a week; positive impressions turned negative by new information did not change thereafter.

While no main effects of sex of perceiver or sex of other were found, there was an interaction of Sex of P by Sex of O, with each sex receiving more favorable ratings from own-sex perceivers. This difference was significant only in comparisons involving the MMPN group. The MMPN group was also atypical in being the only perceiver-other combination that differed from its opposite in order (MMNP) on the final trial. Moreover, it was the only group to yield a final mean at or above the scale midpoint, 4.0. In a previous study using the same male-content paragraphs with undergraduates from the same university (Cusumano, 1968), the $MMPN_3$ mean, 2.66, did not differ from $MMNP_3$ (2.53) or $MFPN_3$ (2.40). Some question therefore is raised regarding the reliability of this treatment mean and hence of the significance of the Sex of P by Sex of O interaction. Ss in this group did not differ in age or other known characteristics from the other male Ss in the sample, nor were their ratings more variable. We have no explanation for the deviance of this mean.

On the other hand, the finding of a Sex of P by Sex of O interaction is supported by the comparisons of final means to the averaged values of the two paragraphs in the relevant pairs. Final ratings assigned to opposite-sex Os were in all cases significantly below the averaged values; final means assigned to same-sex Os were also less than the theoretical average in all cases except the MMPN group, but none of these differences was significant. There is also precedent for the Sex of P by Sex of O interaction in the work of Klinger et al (1964).

In summary, this study concludes in support of the generalization of the

negative salience effect to a female-content form. The finding of a Sex of P by Sex of O interaction is somewhat tentatively interpreted, since it depends primarily upon the ratings of a single treatment group that responded with higher ratings than did a presumably comparable group in an earlier study. Should this interaction prove reliable, it might reasonably be explained as a function of greater identification and empathy with others of one's own sex. It may be a function, also, of the relative ages of P and O. Own-sex others were not more favorably rated in the somewhat different type of study by Richey & Fichter (1969) in which college students judged other college students. In that study, it was suggested that judges might be more lenient toward opposite-sex persons who were their own age rather than older because they would be more likely to be attracted to contemporaries.

The negative salience phenomenon has theoretical implications for theories of information integration in impression formation, at least so far as these concern impressions of character. Neither a summation nor an averaging theory

specifically predicts a disproportionate weight of negative information. Empirical studies testing these theories have reported results consistent with the assumption of equal weight of positive and negative information. Differences between previous results and the present findings may be due to the stimuli (narratives vs adjective lists), the restriction of the present descriptions to behaviors with moral-ethical implications, and the use of delayed measures in the present study.

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Learning the rules of categorized free recall

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When Ss were presented with six lists of 25 stimulus words such that the only thing the lists had in common was that they were constructed using five words from each of five different categories, the number of words recalled and the average cluster size of responses increased over the six presentations. This increase interacted with the frequency of occurrence of the items used. The results were taken to indicate the development of a general strategy or rule used to advantage by Ss in free-recall experiments.

There seems to be no doubt that Ss make use of interitem associations when recalling a list of words. Words are found to cluster together in recall to the degree that they share common associative relations (Jenkins & Russell, 1952; Tulving, 1962). It also seems reasonable that there is some organizing process (a rule or strategy) at work in free-recall experiments that transcends simple word-to-word associations (Mandler, 1966; Hudson, 1968). It is possible to consider recall as the result of a generative process that depends upon a set of attributes associated with the to-be-recalled materials (Pollio & Gerow, 1968; Underwood, 1969). In the case of word associations, one word produces another as an associate because they share common attributes. In the

categorical case, items are generated as members of a category because all the elements of the category share attributes with each other and with the category name.

The experiment reported attempted to minimize all opportunities to take advantage of interitem associates and to make it possible to respond to categorical attributes. The experiment followed a learning-to-learn model where on a series of six trials Ss were asked to learn categorized lists of words where the items and the categories were different for each list. In fact, the only thing the lists had in common was that they were composed of 25 words, five each from five different categories. An increase in recall would be taken to indicate that Ss had learned a

"rule" that was appropriate to the task (and, as a matter of fact, overcome possible deleterious retroactive-inhibition effects). It was further reasoned that acquisition of this rule would be easier for words chosen from among those most frequently given as a member of a category than for words lower in the hierarchy of category members. Consequently, three sets of lists were prepared, varying the frequency of occurrence of the list items in the categories chosen.

SUBJECTS

The Ss used were 75 male and female undergraduate psychology students at the University of Colorado Denver Center.

MATERIALS

Six stimulus lists were prepared at each of the three "frequency" levels. Each list was made up of 25 words, five words from each of five categories, taken from the norms prepared by Battig & Montague (1968). Words qualified for high-frequency (HF) lists if they were among the first seven members of a given category. Medium-frequency (MF) lists were composed of items taken from the midrange of the response distributions, and low-frequency (LF) lists were composed of items from among the last seven responses given to category names. Within each frequency level stimulus items appeared only once. The same category was used only once within frequency levels.

PROCEDURE

Each S was read a stimulus list twice through at a rate of one word every 2 sec and was then asked to write down as many of the words from the list as he could recall in any order. After an allowance of 3 min to record recall, a second list was read twice and recall was again written. This procedure continued without pause until the S had heard and recalled six lists. As Ss reported to the experiment, they were assigned to a frequency level for the lists they were to hear. The lists were read in a different random order for each of the Ss. Thus, performance over trials was a within-S variable; frequency of occurrence of list items was a between-S variable. Ss were assigned such that there were 25 Ss for each of the three frequency levels.

RESULTS

The recall data are presented graphically in Fig. 1. The important thing to keep in mind about Fig. 1 is that the trials do not represent the same lists for all Ss, even within frequency levels. The between-frequency differences were significant ($F = 20.41$, $df = 2/72$, $p < .001$). For all frequency levels there was increased recall as a function of the order of presentation of the lists ($F = 24.68$, $df = 5/360$, $p < .001$). There was also a significant interaction effect ($F = 7.28$, $df = 10/360$, $p < .01$). This