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ABSTRACT

Sixty young males enrolled in an introductory course in psychology rated themselves on a series of 7-step, bipolar, adjectival scales. Afterwards they observed a young man perform a simple mechanical task, performed the same task and then rated the young man and themselves again. It was found that when the subjects perceived the young man as personally warm, they projected onto him attributes, which, they believed, characterized them. When the young man was perceived as warm and/or competent in the mechanical task, the subjects viewed themselves as more similar to him than in the absence of these perceptions. The results were interpreted as supporting Kagan's theory of identification. (Author)

WARMTH, COMPETENCE, AND IDENTIFICATION

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Kagan (1958) defined identification as an individual's belief that some of the attributes of the model belong to him. He further proposed that "the establishment of an optimally strong identification requires that three conditions be met: (a) the model must be perceived as nurturant to the child; (b) the model must be perceived as being in command of desired goals, especially power, love from others, and task competence in areas the child regards as important; and (c) the child must perceive — before the identification belief begins its growth — some objective bases of similarity in external attributes or psychological properties between himself and the model" (1964, p. 147). Kagan's definition of identification as a belief seems to be broad enough to include the many various aspects of identification and is not restricted to certain limited behavioural similarities. Thus, it appears that it avoids many of the shortcomings of other theories of identification.

Kagan focuses upon childhood and restricts his definition of belief to a change in the self-concept of the identifier. Yet other theorists (e.g., A. Freud, 1936; Freud, 1896, 1897, 1900, 1901, 1905, 1913, 1915, 1917, 1921; Klein, 1957; Schecter, 1968; Schonbar, 1967; Stotland et al., 1961; Tauber, 1939) maintain that new identifications may be formed in adulthood as well as in childhood. Moreover,

some (A. Freud, 1936; Klein, 1946, 1957; Knight, 1940; Stotland et al., 1961) have pointed out that the identifier may perceive greater similarity between himself and the person with whom he identifies without changing his beliefs about himself. In line with those contributions it may be possible to expand the scope of Kagan's theory, without changing its basic premises, in two ways: (1) By assuming that a belief in interpersonal similarity may arise after puberty as well as in childhood. (2) By extending the definition of identification to mean not only an individual's belief that some of the attributes of the model belong to him, but also his belief that some of his attributes belong to the model. This view has been succinctly put forward by Stotland et al. (1961): "The process of generalizing similarities is assumed to take either of two forms, introjection or projection. Introjection is the cognitive process whereby an attribute previously present only in a person's concept of the model now becomes an attribute in his self-concept. Projection is the process whereby an individual changes his concept of a model to include attributes previously present only in his self-concept" (p. 250). Thus, either introjection or projection may lead to identification.

In its expanded form Kagan's theory predicts that (1) perception of either warmth or competence of another person will give rise to identification with him, provided that some similarity to him is perceived by the identifier;

(2) identificatory beliefs may be formed after puberty;

(3) an identificatory belief may be brought about and supported either by a change in the identifier's self-concept or in his concept of another person.

These considerations lead to the following hypotheses:

(1) If another person is perceived as warm and/or competent, an individual will view that person as more similar to himself than when the other is perceived as affectively neutral and incompetent. That is, he will project some of his attributes onto another person.

(2) If another person is perceived as warm and/or competent, an individual will view himself as more similar to that person than when the other is perceived as affectively neutral and incompetent. That is, he will introject some of another person's attributes. This is assumed to be true, even if he previously projected some of his attributes onto another person.

The purpose of the present study is to test Kagan's theory experimentally by creating conditions that may lead to identification preceded by projection or introjection. The similarity variable, however, was not manipulated. In regard to the perception of salient interpersonal similarity which, according to Kagan's theory, is a prerequisite for identification, it was assumed that the same gender and common university background of "another person" and the subjects gave rise to that perception.

PROCEDURE

Overview

At the outset of the experiment the S rated himself on a series of bipolar adjectival scales. Then he followed the E to the experimental room where he was introduced to the other (O). After the S sat down, the O demonstrated the experimental task. Subsequently the S performed the experimental task. Following S's performance the O left the experimental room. Upon O's leaving of the room, the S rated the O and himself (in that order) on a series of bipolar adjectival scales identical to that which was used for his first self-rating. When he completed the ratings, a post-experimental interview was conducted during which he received a full explanation of the experiment. Finally, the S was paid for his participation and discharged.

Experimental Task

The Hand-Tool Dexterity Test (Bennett, 1965) was used for the experimental task. The test consists of a wooden frame composed of a base with two perpendicular panels attached to its sides, which is clamped to the surface of a sturdy table. In each panel there are 12 holes; four big ones in the top row, four of medium size in the middle row, and four small ones in the bottom row. At the beginning of the test there are 12 assemblies in the holes of the left panel, each assembly consisting of a bolt, a nut, and two

washers. The objective of the test is to transfer the 12 assemblies from the left to the right panel using a supplied set of tools.

The Other

A 20-year old male student from the Department of Drama served as the O. Throughout the duration of the experiment he wore the same suit and tie and his hair style and general appearance remained uniform.

Measures of Independent Variables and Identificatory Processes

The Ss rated themselves and the O on 29 seven-step, bipolar, adjectival scales. Twenty-seven of those were used in computations and two measured S's perception of O's warmth and competence (cold-warm and dexterous-clumsy). The instructions for Ss and the manner of presentation of the scales were fashioned after Osgood, Suci, and Tannenbaum (1957). The order of scales and the left-right arrangement of poles were randomly determined. The arrangement of scales in the booklet was the same in all three ratings.

Measures of projection and introjection. The differences between S's self-rating and his rating of the O yielded difference (D) scores ranging from 0 to 6 for each scale. The absolute differences between first self-rating and other-rating were summed across the 27 critical scales for each S; the sum of the differences is termed D_1.[1]

1. All D scores used throughout this study are unsquared.

$\underline{D}_1$ is considered to be a measure of projection. The sum of the absolute differences between $\underline{O}$-rating and second self-rating was termed $\underline{D}_2$. $\underline{D}_2$ was subtracted from $\underline{D}_1$ to yield $\underline{D}_3$ — a measure of increase (negative $\underline{D}_3$) or decrease (positive $\underline{D}_3$) in psychological distance between the self- and other-concepts ($\underline{D}_3 = \underline{D}_1 - \underline{D}_2$).

$\underline{D}_3$ is a measure of absolute change and does not take into account the initial distance between the self- and other-concepts. If there were differences in $\underline{D}_1$ scores among the experimental groups, $\underline{D}_3$ scores could be interpreted only in the context of $\underline{D}_1$. It would seem, therefore, that a more valid measure of change in perceived similarity to the $\underline{O}$ is the amount of change expressed as proportion of the original distance. The measure of introjection, then, was $\underline{D}_4$ ($\underline{D}_4 = \underline{D}_3/\underline{D}_1$).

Experimental Design

Affective warmth and competence of the $\underline{O}$ were manipulated in the experiment; thus, his differential behaviour determined the type of experimental condition. The $\underline{O}$ was either (1) affectively neutral or (2) warm and demonstrated either (1) a low level of competence (termed "incompetence") or (2) a high level of competence (termed "competence"). Accordingly, four experimental conditions were created: incompetent-affectively neutral (IN), incompetent-warm (IW), competent-neutral (CN), and competent-warm (CW).

The levels of warmth were operationalized in accordance

with the findings and definitions of Bandura and Huston (1961), McKeachie, Lin, Milholland, and Isaacson (1966), and Reece and Whitman (1962). Bennett's manual (1965) was consulted in defining levels of competence.

Neutral conditions (IN and CN). The E met the S at the door of the house in which the experiment was conducted and introduced himself. The S, without being told anything about the experiment or its purpose, was then ushered into a room and asked to rate himself. When he finished, the E asked the S to follow him. They moved to the experimental room. When they entered the room, the E said: "I would like you to meet Dave /C's surname/, my research assistant. Dave, this is /name of the S/." The O rose slowly from his chair and looking into space beyond the S's shoulder, shook hands with him and sat down silently, immediately busying himself with paper work. The E directed the S to a chair in front of the table on which the frame was mounted and sat down himself. When everybody was seated, the E said: "Dave will now demonstrate a certain task; please watch him closely." The O rose from his chair and walked to a position behind the frame. The E took a stop watch into his hand and asked the O "Ready?" The O nodded his head, the E said "Go!" and started the stop watch. The O then proceeded to transfer the 12 assemblies of bolts, nuts, and washers from the left to the right panel. When he finished he returned to his chair and resumed his writing. Meanwhile the E stopped the watch and wrote the time on a sheet of paper.

Then he rose, walked to the table and rotated the frame so that the assemblies were again on the left panel. Next he asked the S to step behind the table, took a stop watch in his hand and standing in front of the S gave him the task instructions. When the S picked up the first tool, the E started the stop watch and returned to his chair. While the S worked, the E observed him, but remained silent. When the S finished working, the E stopped the watch and wrote the time on a sheet of paper. He then asked the S to sit behind a small table, walked to a bookcase, and picked up two rating booklets. After picking them up he turned to the O and said "You can go now." The O walked out of the room in silence, avoiding looking at the S's face. When the O closed the door behind him, the E handed one of the booklets to the S, asking him to rate the O. Upon completion of that rating, the S was handed another booklet identical the the one used for the first self-rating, and told to rate himself. After this rating a postexperimental interview was conducted during which the S received a full explanation of the experiment and its purpose. After answering all his questions, the E paid the S for his participation, asked him not to discuss the experiment with anybody, and thanked him for his service, whereupon the S left the room.

Warm conditions (IW and CW). Until the introduction of the O to the S the procedure was the same as in the neutral conditions. Upon being introduced to the S, the O rose from his chair at a moderate speed and smiling at the S

said: "I'm pleased to meet you, /name of the S/." From then on, except for the time that he was demonstrating the experimental task, the O was looking at the S, smiled whenever appropriate, kept his hands still, and leaned slightly toward the S when talking to him. When he was standing behind the frame and the E asked him "Ready?", the O answered "Mhm." When the E rotated the frame to prepare it for the S, the O engaged the S in a conversation. The exchange was focused upon S's courses, his interest in them and academic satisfaction as well as his major or planned major with the O asking the questions and the S answering them. The O conveyed keen interest in the S and his opinions, but carefully avoided asking him questions that might be embarrassing (grades, for example, were never discussed). O's first question was always: "/Name of the S/, what courses are you taking?" From that point on, depending on S's answer, the O "played it by ear," staying within the aforementioned limits.

When he finished preparing the frame for the S, the E gently interrupted their dialogue and gave the test instructions to the S. When the S worked the O gave him three appropriately timed encouragements; e.g.: "Very good, /name of the S/." Furthermore since he watched the S, he readily responded to S's bids for attention.

When the E told the O that he could leave the room, the O rose, smiled to the S and, prior to leaving, said: "It's been nice to 've met you /name of the S/, good-by."

Competent conditions (CN and CW). In the competent conditions the O performed the experimental task smoothly and efficiently.

Incompetent conditions (IN and IW). In these conditions the O's hand movements were fast and he conveyed the impression not of slowness, but rather of clumsiness and tense inefficiency.

SUBJECTS

Seventy-four male paid volunteers enrolled in an introductory course in psychology served as subjects. Data collected from 14 of them were not used in the analysis for the following reasons: two had known the O before meeting him in the experimental room, one rated him on the basis of his predetermined attitude toward strangers, ten suspected that the O's behaviour was not natural, and in one case the O dropped a nut on the floor although it was supposed to be one of the competent conditions. The remaining 60 Ss (mean age: 19.7 yrs; range: 17 - 31 yrs.) were assigned to experimental groups in a random order within the limits imposed by the attrition of the sample:

Only 32 Ss perceived the O according to the a priori definition of his behaviour and the experimental groups were redefined according to the Ss' perception of the O. This procedure was carried out as follows: On the cold-warm scale, the O was rated from 1 to 6; the scale was split in half, that is, between the ratings of 3 and 4. On the

dexterous-clumsy scale the O was rated from 1 to 7 but only one S assigned the rating of 7 to him. Therefore, also on this scale, the split was performed between the ratings of 3 and 4. Table 1 presents the origin of the redefined groups and the number of Ss in each group.

Table 1

The Origin and Size of the Experimental Groups According to the Perception of the O

Experimental group	Originally included in the group	"Moved" to the group from other groups	Total (new N)
IN	6	3	9
IW	7	6	13
CN	7	5	12
CW	12	14	26
Total	32	28	60

RESULTS

Preliminary considerations. It will be recalled that the independent variables in this study were warmth of the O and competence of the O. Although they were varied independently of each other, there existed a possibility that the Ss rated the O as competent because they perceived him to be warm or vice versa. To test this eventuality, the correlation between the ratings of the O on cold-warm and

dexterous-clumsy scales was calculated, yielding an r of -.154, which is negligible and nonsignificant.

Since a large percentage of the Ss did not rate the O according to the experimental manipulation, it seems obvious that other factors influenced their judgment. One such possibility is that they simply assigned to the O their own self-ratings on the two scales that measured independent variables. Toward that end the correlations between first self-ratings of the Ss and their ratings of the O on the dexterous-clumsy and cold-warm scales were computed, yielding nonsignificant rs of .112 and -.004 respectively.

Test of the hypotheses. Table 2 presents the means and standard deviations of D_1 scores. Analysis of variance of the data revealed that the initial psychological distance between the S and the O was significantly smaller in the W groups than in the N groups ($F=9.35$, $df = 1/56$, $p < .005$). On the other hand, the main effect of competence as well as interaction effect were nonsignificant ($p > .10$ in both cases). Thus, the first hypothesis, which postulates that if an individual perceives another person as warm and/or competent, he will view that person as more similar to himself than when the other is perceived as affectively neutral and incompetent, is only partially supported by the data.

Table 2

Means and Standard Deviations of D_1 Scores

Experimental group	M	SD
IN	50.44	18.86
IW	37.38	15.72
CN	47.58	13.18
CW	36.08	12.55

The second hypothesis states that if another person is perceived as warm and/or competent, an individual will view himself as more similar to him than when the other is perceived as affectively neutral and incompetent. In other words, the psychological distance between the perceiver and another person, that is, between self- and other-concepts, will decrease.

To test the second hypothesis t tests of D_4 scores, for each experimental group separately, were carried out. The null hypothesis for those tests states that the mean D_4 score in each group will be zero, that is, that the first and second self-rating were the same. A significant t indicates that there was a significant decrease (or increase) in the psychological distance between the self- and other-concepts, i.e., the second self-rating was more (or less) similar to the other-rating than the first self-rating.

Table 3 presents the relevant data.

Table 3

Means, Standard Deviations, and Levels of Significance of D_4 Scores

Experimental group	M	SD	t	p
IN	-0.008	0.106	0.23	n.s.
IW	0.138	0.123	4.06	<.005
CN	0.157	0.112	4.87	<.001
CW	0.144	0.110	6.70	<.001

Note. — Negative sign indicates increase in the psychological distance between the self- and other-concepts.

It may be seen from Table 3 that perception of either warmth or competence of the O is sufficient to change the self-concept of the S by making it more like his concept of the O. On the other hand, combination of warmth and competence does not cause a greater change than any of these factors alone.

Analysis of variance of D_4 scores was performed to evaluate the influence of different levels of independent variables; it is summarized in Table 4. The main and interaction effects were significant. Investigation of the source of differences by comparing cell means using t test revealed that the IN group differed significantly from the other three

groups ($p < .01$ for every comparison) while the IW, CN, and CW groups did not differ significantly from each other ($p > .10$ for every comparison). Thus, additional support is obtained for the conclusions drawn from Table 3.

Table 4

Analysis of Variance of D_4 Scores

Source	df	MS	F	p
Competence (A)	1	0.095	7.49	< .01
Warmth (B)	1	0.057	4.48	< .05
A x B	1	0.082	6.46	< .05
Error	56	0.013		

IMPLICATIONS AND CONCLUSIONS

The results of the present investigation support Kagan's theory of identification. When the O was perceived as warm and/or competent, S's second self-rating was more similar to his rating of the O than his first self-rating. In more general terms, when another person was perceived as warm and/or competent, the perceiver changed his belief about himself to view himself as more similar to the other person than in the absence of those perceptions. It should be noted that perception of either warmth or competence was sufficient to bring about changes in Ss' beliefs about themselves.

On the other hand, the first hypothesis is only partially supported: when the O was perceived as warm, he was also perceived as being more like the S than under the perception of affective neutrality, but perception of competence did not bring about projection of one's own traits onto the O.

It will be recalled that the Ss rated the O after he had demonstrated the experimental task in front of them. This means that in the competent condition he has displayed his superior skills in a mechanical task before he was rated. It is possible, then, that the Ss, because of the relatively large difference in manual dexterity, could not perceive the O as very similar to themselves. On the other hand, in the warm condition, when there was no external standard of comparison, they could perceive the O as more similar to themselves than in the competent condition.

In order to test this explanation the relevant comparisons are those between self-ratings and O-ratings on cold-warm and dexterous-clumsy scales in the warm and competent conditions respectively; they are presented in Table 5.

Table 5

Means, Standard Deviations, and Levels of Significance of the Differences Between Self-Ratings and O-Ratings on Scales Measuring Independent Variables in Selected Experimental Groups

Type of difference	M	SD	t	p
Self-rating vs. O-rating on cold-warm scale in the warm groups	0.179	1.334	0.84	n.s.
Self-rating vs. O-rating on dexterous-clumsy scale in the competent groups	0.737	1.327	3.41	<.005

Note. — The O perceived as more competent in the competent condition.

Table 5 demonstrates that in the warm condition the difference between self-rating and O-rating on cold-warm scale is very small and nonsignificant. While the same difference on the dexterous-clumsy scale in the competent condition is not very large, it is significant and apparently large enough to create a feeling of greater dissimilarity than in the other condition.

The foregoing discussion may be summarized by stating that when the perceived difference between an observer and another person was large, it prevented attribution of traits perceived in one's self-concept to another individual. In other words, projection of traits that an individual believed characterized him did not take place when another individual

was perceived as markedly dissimilar.

The results of this study are in agreement with those reported by Ex and Schouten (1968). In that study sympathetic-antipathetic behaviour of the O (akin to warmth in the present study) and similarity-dissimilarity were the independent variables. The authors found that either sympathetic behaviour of the O or similarity to him led to projection of Ss' self-attributes onto the O. In a broader sense, the two studies complement each other in supporting Kagan's theory.

REFERENCES

Bandura, A., & Huston, A. C. Identification as a process of incidental learning. Journal of Abnormal and Social Psychology, 1961, 63, 311-318.

Bennett, G. K. Hand-tool dexterity test (manual and set of materials). New York: Psychological Corporation, 1965.

Ex, J., & Schouten, J. Experience of real similarity, sympathy, and person perception. Acta Psychologica, 1968, 28, 92-96.

Freud, A. The ego and the mechanisms of defense. New York: International Universities Press, 1966 (1936).

Freud, S. The origins of psychoanalysis: Letters, drafts and notes to Wilhelm Fliess, 1887-1902. Garden City, N.Y.: Doubleday, 1957 /1896, 1897/.

Freud, S. The interpretation of dreams. In The standard edition of....Vol. 4. London: Hogarth Press, 1953 /1900/.

Freud, S. The psychopathology of everyday life. In The standard edition of....Vol. 6. London: Hogarth Press, 1960 /1901/.

Freud, S. Fragment of an analysis of a case of hysteria. In The standard edition of....Vol. 7. London: Hogarth Press, 1953 /1905/.

Freud, S. Totem and taboo. In The standard edition of.... Vol. 13. London: Hogarth Press, 1955 /1913/.

Freud, S. Instincts and their vicissitudes. In The standard edition of....Vol. 14. London: Hogarth Press, 1957 /1915/.

Freud, S. Mourning and melancholia. In The standard edition of....Vol. 14. London: Hogarth Press, 1957 /1917/.

Freud, S. Group psychology and the analysis of the ego. In The standard edition of....Vol. 18. London: Hogarth Press, 1955 /1921/.

Kagan, J. The concept of identification. Psychological Review, 1958, 65, 296-305.

Kagan, J. Acquisition and significance of sex typing and sex role identity. In M. L. Hoffman & L. W. Hoffman (Eds.), Review of child development research. Vol. 1. New York: Russell Sage Foundation, 1964.

Klein, M. Notes on some schizoid mechanisms. In J. Riviere (Ed.), Developments in psycho-analysis. London: Hogarth Press, 1952 /1946/.

Klein, M. On identification. In M. Klein, P. Heimann, & R. E. Money-Kyrle (Eds.), New directions in psycho-analysis. New York: Basic Books, 1957.

Knight, R. P. Introjection, projection and identification. Psychoanalytic Quarterly, 1940, 9, 334-341.

McKeachie, W. J., Lin, Y., Milholland, J., & Isaacson, R. Student affiliation motives, teacher warmth, and academic achievement. Journal of Personality and Social Psychology, 1966, 4, 457-461.

Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. The measurement of meaning. Urbana, Ill.: Univ. of Illinois Press, 1957.

Reece, M. M., & Whitman, R. N. Expressive movements, warmth, and verbal reinforcement. Journal of Abnormal and Social Psychology, 1962, 64, 234-236.

Schecter, D. E. Identification and individuation. Journal of The American Psychoanalytic Association, 1968, 16, 48-80.

Schonbar, R. A. Identification and the search for identity. Contemporary Psychoanalysis, 1967, 3, 75-95.

Stotland, E., Zander, A., & Natsoulas, T. Generalization of interpersonal similarity. Journal of Abnormal and Social Psychology, 1961, 62, 250-256.

Tauber, E. Notes on identification and oral traits in relation to character. Psychiatry, 1939, 2, 55-61.