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Self-Esteem and Romantic Attraction : Four Experiments

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Résumé

(Estime de soi et attrait romanesque.)

Etudie l'hypothèse que l'estime de soi des hommes et des femmes doit modifier leur perception de la sympathie des autres pour eux et, par conséquent, leur sympathie pour les autres. Critique les chercheurs qui ont admis que les hommes et les femmes à auto-estime inégale percevront correctement le degré de sympathie qu'on leur porte. La réflexion est poursuivie en se demandant comment l'estime de soi devrait affecter la sympathie pour les autres selon qu'ils sont favorables ou défavorables. Présentation d'une série de modèles mathématiques pour prédire 1) comment l'estime de soi des sujets devrait affecter leur perception de la sympathie d'autrui ; 2) comment les vues des sujets sur la sympathie d'autrui peuvent affecter la sympathie des sujets pour autrui et 3) en conséquence, comment l'auto-estime des sujets peut affecter leur sympathie pour autrui.

Pour éprouver ces modèles, nous avons mené quatre expériences de laboratoire ou de terrain et nous avons été surpris de trouver que les suppositions naïves des théoriciens antérieurs étaient, semble-t-il, correctes et surtout que le meilleur pronostic de la perception par les sujets de la sympathie que les autres leur portent était à la mesure de la sympathie réelle ou déclarée d'autrui pour eux. Le meilleur pronostic de la sympathie d'un sujet pour autrui réside dans le degré de sympathie que les autres lui portent.

How highly people regard themselves is critical for understanding and predicting how they will regard others and react to them. Psychoanalysts such as Adler (1926), Horney (1939), and Fromm (1939) were the first to document the close connection between self-esteem and receptivity to others. Recently, social psychologists have systematically studied the relationship between self-esteem and feelings toward others. For reviews, see Gergen (1971) and Rosenberg (1979).

In this paper we would like to propose a paradigm, which allows us to look at the relationship between self-esteem and interpersonal attraction in a more step-by fashion than was possible heretofore. This paradigm is meant to apply to all relationships-friendships, love affairs and marriages. Since almost all previous research has focused on casual relationships, however, in the following research, we will attempt to test our hypotheses in the most intense of encounters-intimate romantic encounters.

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How should self-esteem affect social interaction ? In this paper we would like to propose that self-esteem affects reactions to others in a number of interlocking way :

1. SELF-ESTEEM AND PERCEPTION

People's self-esteem should affect their perception of how much they are liked by others. In the early stages of relationship, it is difficult for people to assess whether or not they are liked by new acquaintances or dates. (Walster [Hatfield], Aronson, Abrahams & Rottman, 1966). People's perception of how much others like them should be colored by their evaluations of themselves. (Berman, 1978 ; Heider, 1958 ; Jones, & Davis, 1965 ; Kelley, 1967 ; Mc Guire, 1968 ; Stroebe W., Eagly & Stroebe W., 1977).

Although this statement seems obvious, until recently researchers ignored this possibility. For example, early researchers such as Dittes (1959) and Walster [Hatfield] (1965), interviewed high and low self-esteems subjects about their reactions to a person who was accepting vs. rejecting. They assumed that all subjects would "correctly" perceive the experimental manipulation. They where merely interested in subjects' reactions. (They hypothesized that low self-esteem subjects would be more appreciative of acceptance and more resentful of rejection than were those with higher self-esteem.)

Conversations with subjects in experiments of the Walster [Hatfield] (1970) type, however, suggests that it is not safe to make such an assumption. There are many anecdotal examples of how inferences may vary as a function of self-esteem. Walster [Hatfield], (1965 and 1970), made just this discovery. Even though the reseachers tried to compose unambiguous messages of either liking or disliking, the messages were interpreted in various ways by different subjects. For example, after being severely rejected, one man gave a knowing smile and commented, "You can always tell when a girl is interested in you — she plays hard to get". The converse was also true. A few subjects could always manage to reinterpret the most positive of communications as evidencing subtle rejection, pity, or, if all else failed, a case of mistaken identity.

Based upon this anecdotal evidence, Jacobs, Berscheid and Walster [Hartfield] (1971) hypothesized that people's perception of how much they were liked would be a joint function of 1) their own self-esteem, and 2) the liking the other *expressed.* This prediction was diagrammed in Figure 1. These authors argued that only when another's expression of liking was totally unambiguous — when the other expressed unambiguous love or unambiguous hatred for the subjects — would all subjects correctly perceive how much the other liked them. The more ambiguous the message, the more it was expected that subjects' self-esteem would influence their perceptions as to how much they were liked. The more ambiguous the message, the more the high self-esteem persons should exaggerate the other's liking for them and the more low self-esteem persons should undrestimate the other's liking. Unfortunately, Jacobs et al. reported no evidence to support this contention.

In sum, theoretical, anecdotal, and some empirical evidence exists to suggest that low and high self-esteem individuals vary in how much they perceive others like them.

2. SELF-ESTEEM AND LIKING

People's self-esteem should affect their liking for others. For the sake of argument, let us assume that Dittes' (1959) and Walster's [Hatfield's] (1965) assumptions were correct and that subjects of all self-esteem levels can correctly perceive how much they are liked by others (i.e., let us assume that the liking subjects' perceive = The liking the confederate expresses.) How might we expect Ss' self-esteem to influence their reactions to expressions of affection or hostility ?

Two different theoretical approaches would lead us to predict that low and high self-esteem persons should differ in how they react to evaluations from others. These two theoretical approaches are self-esteem theory and self-consistency theory.

The self-esteem position begins with the assumption that individuals need to reach and maintain a high level of self-worth. One potent source for this high self-worth is social approval from others. According to Dittes (1959), the lower a person's self-regard, the more he/she will crave social approval. Dittes' prediction follows directly from social approval theory, i.e. the lower Ss' self-esteem, the more the provider (of approval) will be liked. Thus, according to the self-esteem argument, low self-esteem individuals will react more positively to favorable evaluations and more negatively to unfavorable evaluations than will high self-esteem individuals. (See Figure 1.)

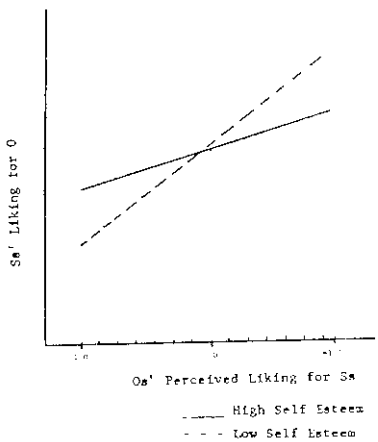

Figure 1. The effect of Subjects'self-esteem and Others' perceived liking for Subjects' on Subjects' like for Other.

Self-consistency theory also predicts that self-esteem will effect people's affective reactions to evaluations. However, while self-esteem theory assumes a need for positive self-attitudes, self-consistency theory assumes a need for consistent self-attitudes. Secord and Backman (1961) have discussed the effect of desire for consistency on attraction : "An individual tends to increase his liking for others who behave toward him in a congruent manner" (P. 25). Thus, according to the self-consistency argument, low self-esteem individuals will like those who evaluate them in a negative way more than those who evaluate them in a positive way. Conversely, high self-esteem individuals will like those who evaluate them in positive way. In the circumstances when an individual has low self-regard, self-esteem theory and self-consistency theory yield different predictions.

Jones (1973) reviewed sixteen studies bearing on the contradictory predictions from these two theories and concluded that the evidence tends to favor self-esteem

theory over self-consistency theory. Of the sixteen investigations he reviewed, ten supported self-esteem theory, and methodological and conceptual problems were found for those remaining studies supporting self-consistency theory. In a more recent review, Stroebe (1977) came to the same conclusion. For other discussion of these two competing approaches, see : Shrauger (1975), Shrauger and Lund (1975), and Bowerman (1978).

More recently, there appears to be a growing consensus that the dilemma between the two approaches may not be a meaningful one. Rosenberg (1979), for example, states that the question of whether self-esteem or self-consistency is the more important motive is not a meaningful question because it "depends on whether we are speaking of the self as a whole or in terms of its specific components, or whether the particular component is central or peripheral to the self-concept, and so on" p. 62). McFarlin and Blascovich (1981) argue that self-esteem theory and self-consistency theory are not necessarily competing theories, if cognitive and affective reactions are examined separately.

However, in summary of the empirical evidence to date, it weighs in favor of self-esteem theory. Low self-esteem individuals seem to be especially enthusiastic about those who like them and especially hostile to those who reject them. High self-esteem individuals' reactions seem to be less volatile.

Our hypotheses

Hypothesis 1 :

Self-Esteem and Perception : People's self-esteem will affect their perception of how much they are liked by others. Specifically, (in a dating situation) : *Low self-esteem individuals will underestimate how much they are liked by dates while high self-esteem individuals will over-estimate how much they are liked. Such distortions will be especially pronounced when the date's expression of liking or disliking for the subjects is ambiguous.*

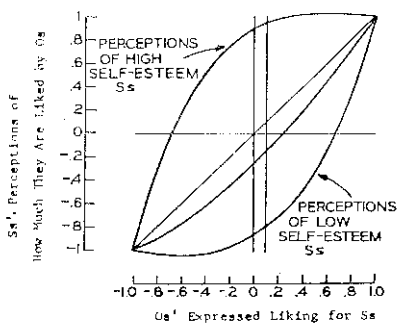

Figure 2. The Relationship between Subject's self-esteem, and Others' expressed liking for Subjects, and Subjects' perceptions of how much they are liked.

Hypothesis 2 :
Dittes (1959) proposed that low self-esteem people should be especially attracted to those they perceive like them and especially hostile to those who they perceive do not. (This relationship was depicted in Figure 1.)

We propose that : (a) Subjects' self-esteem will effect their perceptions of how much they are liked by O as depicted in Figure 2. (b) We agree with Dittes that Ss' liking for Os $= \frac{1}{\text{Ss' Self-esteem}} \times$ Ss' perception of Os' liking as depicted in Figure 1

In Figure 3 we attempt to integrate these two predictions. We predict Ss' self-esteem, O's expressed liking for Ss, and Ss' liking O will be related as depicted in Figure 3. That is : *Low self-esteem individuals will have more volatile relations with others than will high self-esteem individuals. Low self-esteem individuals should especially like those who like them and especially dislike those who do not.* (Figure 3 depicts a model which integrates Figures 1 and 2.)

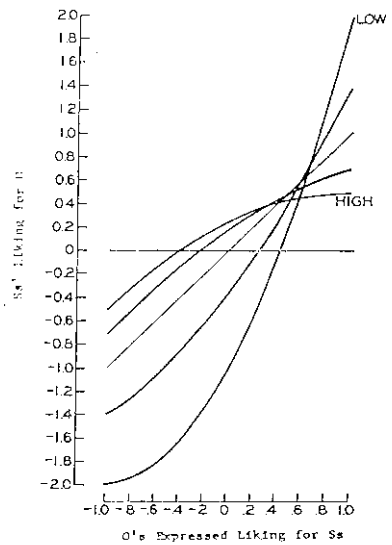

Figure 3. The relationship between Subjects' self-esteem, Others' expressed liking for the Subjects and Subjects' resulting for the Other.

We designed and conducted four experiments to test validity of the preceding model.

EXPERIMENT 1

Method

Subjects

Subjects were 92 men, who applied for a free "Date Match Project" at the University of Wisconsin. At the time the men applied for the Project. they filled out an application

form which was presumably to be use for matching purposes. In addition to two pages of biographical questions, the application form included the *Berger (1952) measure of self-esteem.* These self-esteem measures were labeled "For Reseach Purposes Only", and the men were assured that their scores on this test would not be used in selecting their dates.

Thoses men scoring above the highest quartile or below the lowest quartile on the *Berger self-esteem measure* were selected for the experiment. Under a separate cover, these low and high self-esteem men were later sent a letter asking them to participate in a "Communication Reseach Project."

Procedure

When each man arrived for a "Communication Study," he was told that the "purpose" of the experiment was to see how accurate people's first impressions were. A woman from the Date Match Project had been choosen as his partner for this study. She had already formed an impression of him. Now we needed to find out how he felt about *her.* He was asked to read her biographical information and listen to a taped interview, in which she gave her first impression of him. Subjects were randomly assigned to listen to one of four taped interviews. On all tapes, the woman was asked a series of questions about her feelings for the subject. They included such things as : Generally what do you think of this person ? What do you think about his political ideas ? If you were matched with this person on a blind date, how do you think it would go ? Do you think this person would be interesting to talk to ? Would you like to meet his friends ?

Varying Expressed Liking

The liking the women expressed for the subject was systematically varied on the four tapes. On one tape the woman's evaluation of the subjects was *totally favorable.* (For example, she replied that she was "really pretty impressed" with him.) A second tape contained an *ambiguous favorable* evaluation. (For example, she continually expressed how difficult it was to tell anything from "just this". Would he be interesting to talk to ? "I'd like to talk with him, I think. Why not ?") A third tape was ambiguous *rejecting.* For example, on this tape — as on the ambiguously accepting tape — she complained that it was difficult to make an evaluation based on "just this". When asked if he would be interesting to talk to, she replied, "Ahh-it might be really good and it also might be a waste of time.") On the final tape the evaluation was *totally negative.* (The woman stated, "I guess I'd have to say I'm not too impressed by whoever this is.") Pretesting indicated that these tapes, which varied in content and tone, were seen as varying in both ambiguity and favorability as we intended them to.

Dependent Measures

After the subject read the woman's biography and heard the woman's evaluation of him, he was asked to complete a brief questionnaire. Two key items measured the *subject's perception of how much he was liked.* These items were summed to form an index of perceived liking.

Two other key items in the questionnaire measured the *subject's liking for the woman.* Again, these two items were summed to form an index of expressed attraction.

Results

Hypothesis 1

In hypothesis 1 we predicted that low self-esteem individuals would underestimate how much they are liked by others while high self-esteem individuals would overestimate how much they are liked. We expected such distortions to be especially pro-

nounced when the expressed liking or disliking for the subject was ambiguous. We expected to secure both an A main effect (for Self-Esteem) and an A x Quadritic B interaction (between the subject's self-esteem and the woman's expressed liking). This expectation, however, was not borne out. Low self-esteem individuals did not differ from high self-esteem individuals in their perceptions of how much the woman liked them.
Nor did the subject's self-esteem and the other's expressed liking interact as predicted. (See Table 1.)

TABLE 1

Experiment 1 : The Impact of S's Self-Esteem and O's Expressed Liking on S's Perception that He Is Liked and His Liking for O.

Ss' **Self-Esteem**	Os' **Expressed Liking**	**(N)**	Ss' Perception of O's **Liking for Him**(1)	Ss' Liking for **O**(1)
High	+ +	(14)	13.50	11.93
High	+	(9)	5.00	5.78
High	-	(12)	1.17	5.33
High	--	(9)	- 15.78	- 1.67
Low	+ +	(12)	14.67	10.58
Low	+	(14)	6.07	7.79
Low	-	(12)	- 3.33	1.08
Low	--	(10)	- 14.30	- 3.00
		(92)		
(S.D.)			(4.06)	(5.79)

F-Tests

A (Ss Self-Esteem)	.12	.60
B (O's Expression of Liking)	578.26***	39.14***
Ax Quadratic B	3.29	.07
A x Linear B		.32
A + A x Linear B		.34

* p <.05
** p <.01
*** p <.001

1 and 84 d.f.

(1) The higher the number, the more S perceives he is liked by the partner and the more S likes the partner.

Hypothesis 2

In hypothesis 2 we predicted that low self-esteem individuals woukd have more volatile relations with others than would high self-esteem individuals. We examined this hypothesis based on two possible assumptions.

First, past experimenters have assumed that individuals of all self-esteem levels would be able to correctly perceive how much their partners liked them. Given this

assumption, they predicted that the subject's self-esteem and the other's expressed liking for the subject would interact in influencing subsequent liking for the other as indicated in Figure 1. They predicted an A x B (i.e., + +vs. +vs. −vs.− −) interaction between these variables. This contention was not supported in this experiment.

Second, we examined the hypothesis under our assumption that subject's self-esteem would influence his perception of how much he was liked. Thus, we predicted that the subject's self-esteem, other's expressed liking, and subject's perception of the other's liking would interact in determining subject's liking for other as indicated in Figure 3. We predicted that we should secure a significant A main effect and an A x Linear B interaction (i.e., + +vs. +vs. −vs. − −). This prediction, however, was also not supported by the data. (Again, see Table 1 for these data.)

Additional Analyses

If individual differences in self-esteem were not found to be important in determining the subject's perceptions as to how much they were liked, nor important in determining how much the subject's liked the woman, what *was* important ? The answer is *reality.* The "naive" assumption of previous researchers that people, regardless of their own self-esteem levels, will correctly perceive how much they are liked, in retrospect seems not to be so naive after all. Subject's perceptions of how much they were liked were significantly affected by the other's expressed liking. In addition, subject's liking for the other was influenced most by her expressed liking for him.

EXPERIMENT 2

Method

Subjects

Subjects were 182 men and women from the University of Wisconsin who volunteered to participate in a computer matching experiment. Each participant filled out a background information questionnaire. A section of the questionnaire included the *Rosenberg's (1965) self-esteem scale. Within a week or so of completing the questionnaire, the subjects were given the name of at least one blind date. This part of the study was then terminated.*

Later in the year, those students who scored in the highest and lowest quartiles of the self-esteem scale were asked to volunteer for an experiment on the impact of ecology on social relations. Almost all subjects agreed to participate in the experiment.

Procedure

Each subject was told he/she would be dating two members of the opposite sex. Half of the subjects were assigned to meet two dates who possessed high self-esteem ; half to meet two dates who possessed low self-esteem. This yielded a 2 × 2 design, in which self-esteem of the subject and self-esteem of the dates were varied. An appointment was then scheduled for the subject and his/her first date. The couple was asked to meet at the Social Science building for the final instructions.

When the subjects reported for the get-acquainted date, the experimenter explained in more detail the purpose of the experiment. He said that he wanted to get about how ecology might influence social relations. He explained that four different types of environments (a bar near campus, a lake path, a quiet lounge in a campus building, or the Rathskeller of the Union) had been chosen to examine the differential impact of various environments on social relationship. *All* subjects were then told that they had been randomly assigned to interact in the environment of the Rathskeller. The experimenter gave them money to cover the expense they would incur on the coffee date.

Before leaving, each subject was given a questionnaire and asked to complete it independently after the 30-minute coffee break, and drop it in an intercampus mailbox. After the subjects mailed in their questionnaires, the first half of the experiment was completed. Some days later they returned for a date with a second person. At that time, the procedure described above was repeated.

Dependent Measures

Imbedded in the "Social-Ecological Questionnaire" which the subjects filled out, were a number of questions designed to determine how the subjects felt about one another.

Subjects' perception ot *how much they were liked* was assessed by two items. Their responses on these items were summed to form an index of the subject's estimate of how much he/she liked.

Subjects' liking for their dates was assessed by two items : The two items formed an index of the suject's expressed liking for the other. (The subject's date's actual score on these two items served as the measure of the independent variable, *Other's Liking.)*

Results

TABLE 2A

The Impact of Ss' Self-Esteem, and Os' Self-Esteem on Ss' Perception of Os' Liking for S and Ss' Subsequent Liking for 0.

Ss' **Self-Esteem**	Os' **Self-Esteem**	(N)	**Ss' Perceptions**		**Ss' Liking for 0** Difference between Ratings of **Dates 1 and 2**	Extremity of **Ratings**
			Perception of **Os' Liking**	Tendency to overestimate **Os' Liking**		
Males Ss						
Low	Low	(23)	2.95	-.90	8.26	14.96
Low	High	(20)	5.20	1.87	7.80	15.40
High	Low	(21)	7.42	-2.11	7.67	13.76
High	High	(21)	5.42	2.89	9.52	14.76
Female Ss						
Low	Low	(25)	2.05	-8.71	8.84	13.72
Low	High	(27)	2.65	-6.00	8.26	14.93
High	Low	(20)	8.13	-6.27	8.80	16.00
High	High	(25)	2.24	-2.29	8.64	14.40
(S.D.)		(182)	(8.38)	(11.41)	(6.00)	(5.09)
F Tests						
A (S's sex)			1.78	11.03	.11	0.00
B (S's Self-Esteem)			3.16	.94	.15	0.00
C (O's Self-Esteem)			.75	3.73	.02	.15
B x Linear C			3.92	.22	.54	.65
			.34			

1 and 174 d.f.

TABLE 2B

The impact of Ss' Self-Esteem, and Os' Expressed Liking on Ss' Perception that They are Liked and Their Liking for 0.

Ss' **Self-Esteem**	First Date's **Expressed Liking**	(N)	S's Perception **of Liking**	S's Liking for **First Date**
Male Ss				
High	+ +	(12)	2.92	4.00
High	+	(18)	2.06	1.83
High	-	(3)	1.33	2.67
High	--	(5)	1.60	4.00
Low	+ +	(10)	2.40	4.40
Low	+	(10)	3.00	4.90
Low	-	(7)	2.00	3.43
Low	--	(8)	1.88	3.88
		(73)		
(S.D.)			(2.45)	(2.90)
F-tests (Men only)				
A (Ss' Self-Esteem)			.04	2.34
B (Date's Liking)			1.58	.17
A x Linear B			.14	.34
A + A x Linear B			.36	2.54
				d.f. = 1/65
F-Tests				
Self-Esteem (A)				
Female Ss				
High	+ +	(12)	3.50	3.50
High	+	(7)	3.43	4.57
High	-	(10)	2.00	1.40
High	--	(7)	-1.71	-.57
Low	+ +	(13)	1.92	2.38
Low	+	(13)	2.77	4.62
Low	-	(10)	.60	2.20
Low	--	(7)	1.71	2.14
F-tests (Women only)				
A (Ss' Self-Esteem)			.20	.35
B (Date's Liking)			15.94	6.45
A x Linear B			8.56	2.92
A + A x Linear B			1.72	1.60
				d.f. = 1 and 71

Hypothesis 1

In this experiment, self-esteem was *measured* by *Rosenberg' (1965) measure of self-esteem* (instead of manipulated). Although we predicted that high self-esteem sujects would perceive that they were liked more than low self-esteem subjects would, this was not so. Subjects' self-esteem did not affect their perception of how much their dates liked them. (See Table 2A.)

In addition, when we look just at the tendency to "overestimate" in the perception of liking, we find that high self-esteem subjects were not more likely than low self-esteem subjects to overestimate how much they were liked. (See Tables 2A and 2B for these data.)

Hypothesis 2

In the second hypothesis, we predicted that low self-esteem individuals would especially like those who liked them and especially dislike those who did not. First, we tested this hypothesis under the assumption traditionally taken by many experimenters... the assumption that individuals of all self-esteem levels would be able to correctly perceive how much their partner liked them (see Figure 1). This hypothesis was not supported. Second, we tested the hypothesis under the assumption that subjects' self-esteem would affect their perception of how much they were liked (as depicted in Figure 3). This was also not supported by the data.

Dr. David Jackson (Personal communication) suggested that in Experiment 2 there is a third way to test our hypothesis that low self-esteem individuals have especially volatile relations whith others. Jackson argued that if low self-esteem individuals are especially reactive to acceptance and especially hostile to rejection, low self-esteem couples should have more volatile relations than do high self-esteem couples. We tested Jackson's hypothesis but the data provide no support for this ingenious hypothesis. Low self-esteem subjects with low self-esteem partners do not differentiate more between the two Os than do high self-esteem subjects with high self-esteem partners.

We could also test Jackon's hypothesis by examining how extremely subjects rate their dates (i.e., by determining how far from neutrality (0) their ratings were). This second analysis also fails to support Jackson's hypothesis. Low self-esteem Ss do not rate their low self-esteem partners more extremely than high self-esteem subjects rate their high self-esteem partners.

Additional Analyses

Once again we find that self-esteem was not important in determining subjects' perceptions as to how much they were liked. Nor was self-esteem important in influencing expressed liking for the other. Once again, what seemed to be important, at least for females, was reality. Although men's perceptions of their dates' liking for them was *not* affected by their date's actual liking, women's perceptions were reality based. In addition, while men's liking for their partners was not influenced by their partner's liking for them, women's affective reactions were.

EXPERIMENT 3

Method

Subjects

Subjects were 200 male and female students at the University of Wisconsin who signed up to participate in a "Date Match Project". As part of this project, the subject filled out a battery of tests. Included in this battery was *Berger's (1952) measure of*

self-esteem. Those subjects who scored in the top third on this measure were labeled as high in self-esteem, those scoring in the lower third were labeled low in self-esteem.

Procedure.

Subjects were randomly assigned to date one another. The self-esteem levels of both persons of the randomly matched couples were then compared.

When the men and women reported to receive the names of their computer dates, they were given a Date Assessment questionnaire and asked to complete it immediately after returning from their first date. The experimenter explainted that this information was needed to improve the dating service... he wanted to know which matches worked out and which didn't. Only those couples who returned this questionnaire to us were included in the sample.

Dependent Measures

In the Date Assessment Questionnaire were four key items. The subjects' *perception of how much they were liked* was assessed *via* one question. Subjects' *liking for their dates* was assessed *via* three questions. Respondents' scores on these three items were summed to form an index of expressed affection.

Results

Hypothesis 1

In this study, self-esteem was *measured* by *Berger's (1952) measure of self-esteem.* In this expriment, Hypothesis 1 received some minimal support. For female subjects, self-esteem did seem to affect their estimates of how much their dates liked them. The lower the women's self-esteem, the less they assumed they were liked. For male subjects, however, self-esteem did not affect their perception of how much they were liked.

We also examined the specific tendency for subjects to overestimate how much they were liked. High self-esteem males were not more likely than other males to overestimate how much they were liked. High self-esteem women were. The data thus provide only partial support for the notion that high self-esteem subjects are especially likely to overestimate, low self-esteem subjects to underestimate how much they are liked by others.

Hypothesis 2

When we examined the impact of the subjects' self-esteem and others' expressed liking for them on the subjects' subsequent liking for other, we found that these variables did not interact as predicted in Figure 1. Low self-esteem subjects were not any more likely to dislike those who disliked them and like those who liked them than were higher self-esteem individuals.

When we tested this hypothesis by including the variable of the subject's perceived liking for the other, (Figure 3) the hypothesis was still not confirmed. Low self-esteem subjects were not any more likely to dislike those they perceived as disliking them than were higher self-esteem subjects ; nor were they more likely to like those they perceived as liking them than were those with higher self-esteem.

Finally, we attempted to determine whether or not there was any support for Jackson's hypothesis that low self-esteem couples will have more volatile relations than will high self-esteem couples. Three items were used to measure Ss' liking for their partners. Rating were converted to extremity score by the following formula : $[\log_e (X - M)^2]$. The score S received on the three items were summed. The higher the resulting number, the more Ss varied from the norm in the extremity of their liking

or disliking for their date. When we examine this index, we see that there is no evidence that low self-esteem Ss have more violent reactions to their low esteem partners, than high self-esteem Ss have to high self-esteem partners.

TABLE 3A

The Impact of Ss' Self-Esteem, and Os' Self-Esteem on the Extremity of S's Liking 0.

Ss' **Self-Esteem**	Os' **Self-Esteem**	(N)	Extremity of Ss' **Liking for O***
Male Ss			
Low	Low	(11)	4.91
Low	High	(15)	7.78
High	Low	(8)	7.38
High	High	(9)	7.60
S.D.			(5.03)
		(43)	
F-Tests			
A (Men's S.E.)			.74
B (Women's S.E.)			.92
AB Interaction			.70
Female Ss			
Low	Low	(11)	5.73
Low	High	(8)	9.50
High	Low	(15)	2.78
High	High	(9)	8.27
$(S.D._x)$		(43)	(4.68)
F-Tests			
A (Women's S.E.)			0.01
B (Men's S.E.)			1.19
AB Interaction			.34

* Calculated by the formula : $\log_e (W - \overline{M}_x)^2$

TABLE 3B

The Impact of Ss' Self-Esteem, and Os' Expressed Liking on Ss' Perception that They Are Liked and Their Liking for 0.

Ss' Self-Evaluation	Os' Expressed Liking	(N)	Ss' Perceptions		Ss' Liking for 0
			Perception of Os' Liking for them	Tendency to Overestimate Os' Liking (1)	
Male S's					
High	+ +	(10)	1.80	-.80	1.90
High	+	(15)	2.07	-.07	2.27
High	-	(4)	3.00	.00	2.75
High	--	(2)	3.00	1.50	2.50
Med	+ +	(9)	1.78	-.78	2.22
Med	+	(16)	2.25	-.25	2.00
Med	-	(6)	2.83	.17	2.83
Med	--	(1)	4.00	.00	4.00
Low	+ +	(5)	1.80	-.80	2.20
Low	+	(19)	2.37	-3.68	2.32
Low	-	(10)	2.40	.60	2.20
Low	--	(3)	3.00	1.00	3.00
		100			
S.D.			(.82)	(.81)	(1.07)
F-Tests					
Linear A			.11	.00	.06
Linear B			10.68	17.91	1.08
A x Linear B			.05	.00	.32
A + A x Linear B			.08	.00	.19
					1/88 d.f.
Female S's					
High	+ +	(4)	1.40	-.40	1.80
High	+	(7)	2.00	.00	1.69
High	--	(11)	2.38	.61	2.23
High	-	(11)	3.00	2.00	2.50
Med	+ +	(5)	1.90	-.90	2.10
Med	+	(11)	2.06	-.06	1.75
Med	-	(11)	2.75	.25	3.50
Med	--	(8)	2.40	2.20	2.60
Low	+ +	(6)	1.83	-.83	1.67
Low	+	(11)	2.55	-.55	2.28
Low	-	(6)	3.20	-.20	2.40
Low	--	(9)	2.67	2.00	1.67
S.D.		100	(.63)	(.64)	(.79)
F-Tests					
Linear A			7.24	12.05	.44
Linear B			16.67	40.01	1.45
A x Linear B			.43	1.55	.84
A + A x Linear B			3.83	6.81	.64
					1/88 d.f.

(1) The higher the number, the **less** Ss perceive the date likes them, the more they overestimate the date's liking, and the **less** they like the date.

EXPERIMENT 4

Method

Subjects

Subjects were 376 men and 376 women who purchased tickets to a freshman dance held at the University of Minnesota during "Welcome Week."

TABLE 4A

The Impact of Ss' Self-Esteem and Os' Self-Esteem on Ss' Perception of Os' Liking for Them and on the Intensity of Ss' Subsequent Liking for O.

Ss' **Self-Esteem**	Os' **Self-Esteem**	**(N)**	Ss' Estimate of **Os' Liking**	Ss' Tendency to Underestimate **Os' Liking**	Intensity of **Ss' Reaction**
Males Ss					
High	High	(41)	4.17	-2.95	- .24
High	Med	(39)	4.08	-2.64	- .72
High	Low	(31)	4.19	-3.45	-1.42
Med	High	(35)	4.11	-2.57	-1.67
Med	Med	(37)	4.08	-2.89	- .72
Med	Low	(32)	4.06	-2.38	-1.74
Low	High	(51)	3.88	-2.90	- .96
Low	Med	(37)	4.03	-3.32	- .10
Low	Low	(24)	4.08	-3.13	-1.66
S.D.		327	(.67)	(3.67)	(3.05)
F Tests					
Linear A			3.66	.05	.05
Linear B			.41	.13	2.26
Linear A x B			.60	.05	.21
					1 and 318 d.f.
Female Ss					
High		(41)	3.98	-2.56	-1.34
High		(35)	4.11	-3.69	- .85
High		(51)	4.08	-2.22	-1.09
Med		(39)	4.02	-2.85	-1.07
Med		(37)	4.03	-3.03	-1.27
Med		(37)	3.86	-1.32	-1.51
Low		(31)	3.94	-2.39	-1.44
Low		(32)	4.00	-3.16	-2.15
Low		(24)	4.04	-3.75	-1.11
S.D.		327	(.63)	(3.60)	(2.99)
F-Tests					
Linear A			.66	.17	1.40
Linear B			.05	.56	.01
Linear A x B			.00	1.91	.01
					1 and 318 d.f.

TABLE 4B

The Impact of Ss' Self-Esteem, and Os' Expressed Liking on Ss' Liking for 0s.

Ss' Self-Evaluation	Os' Expressed Liking	(N)	S's Perception of O's Liking	Ss' Liking for 0
Male S's				
High	+ +	(32)	4.16	4.03
High	+	(58)	4.22	4.00
High	-	(10)	3.90	3.30
High	--	(11)	3.90	3.64
Med	+ +	(35)	4.26	3.74
Med	+	(50)	4.04	3.70
Med	-	(14)	3.92	4.21
Med	--	(5)	3.80	3.80
Low	+ +	(25)	4.20	3.88
Low	+	(46)	4.06	4.04
Low	-	(28)	3.79	4.29
Low	--	(12)	3.58	3.75
S.D.		(326)	(.66)	(1.14)
F-Tests				
Linear A			3.33	.67
Linear B			5.77	.11
A x Linear B			1.90	1.24
Linear A + Linear AB			2.62	.95
				1 and 314 d.f.
Female S's				
High	+ +	(35)	4.37	4.03
High	+	(58)	4.01	4.03
High	-	(22)	4.00	4.00
High	--	(12)	3.41	3.67
Med	+ +	(35)	4.11	3.97
Med	+	(49)	4.06	4.02
Med	-	(16)	3.94	3.38
Med	--	(12)	3.33	4.00
Low	+ +	(17)	4.29	3.94
Low	+	(49)	3.98	4.06
Low	-	(10)	4.00	3.70
Low	--	(11)	3.55	4.00
S.D.		(326)	(.58)	(1.09)
F-Tests				
Linear A			.40	.01
Linear B			20.10	.06
A x Linear AB			.38	.04
A x Linear B			.37	.08
				1 and 314 d.f.

Procedure

Subjects began by filling out a questionnaire. Included in the questionnaire was the *Berger self-esteem scale.* Based upon their scores on this scale, subjects were labeled as either low, medium, or high on self-esteem.

Two days after the subjects completed the questionnaire, they were randomly assigned to a date by the experimenters. Of the 376 couples, 44 couples failed to appear at the dance.

Dependent Measures. During the intermission at the dance, all couples were given an evaluation questionnaire to complete. The intermission questionnaire assessed subjects' attitudes toward one another. Subjects were to estimate *how much their dates seemed to like them via* a single question *and how much the subjects liked their dates via* four questions. The answers to these questions were summed to form an index of expressed affection.

Results

Hypothesis 1

Once again, Hypothesis 1 was not supported. Low self-esteem and high self-esteem subjects did not differ in how much they perceived they were liked by their date. In comparing how much subjects were actually liked by their date with how much they perceived they were liked, there was a general modesty effect for subjects of all self-esteem levels-subjects underestimated how much they were liked.

Low self-esteem subjects were *not* especially likely to underestimate how much they were liked.

Hypothesis 2

We expected low self-esteem individuals to have especially volatile relations with others. The evidence did not support our predication. First, we tested this hypothesis under the assumption that there are no individual differences in ability to correctly perceive how much one is liked by the other. We found that self-esteem and liking are not related as depicted in Figure 1. Second, when we examined how Subjects' self-esteem, Other's expressed liking, and Subject's perception of Other's liking interacted in determining Subjects's liking for the Other (as depicted in Figure 3), we also did not find support for the hypothesis. (See Table 4B.)

Nor is there support for Jackson's hypothesis that low self-esteem individuals will have more volatile relations than do high self-esteem subjects. The *extremity* (either positive or negative) of Ss' liking for Os was assessed *via* four questions. These scores were converted to extremity scores by the formula : $[\text{Log}_e (X - \bar{M}^2)]$. These converted scores were then summed to form an index of the extent to which Ss deviated from the norm in their liking or disliking for S. When we examine this index, we see that low self-esteem Ss with low self-esteem partners are not more prone to rate their partners extremely that are high self-esteem Ss with high self-esteem partners.

SUMMARY AND DISCUSSION

The purpose of the set of experiments was to test two interrelated hypotheses. First, we argued that low and high self-esteem individuals would differ in their perceptions of how much they are liked. In particular, it was predicted that people's perception of how much they were liked would be a joint function of their own self-esteem

and the liking the other expressed. Overall, this hypothesis was not supported. In general, there were no differences between low and high self-esteem persons in their perceptions of how much they were liked. There was some *suggestive* evidence, however, that women's self-esteem may influence their perceptions (see Experiments 2 and 3). Contrary to our expectations, the biggest determinant of men and women's perceptions of how much they were liked was "reality" — how much they were actually liked by the other.

Second, we predicted that low and high self-esteem individuals would differ in their reactions to expressions of liking or disliking. We expected that low self-esteem individuals would especially like those who liked them and especially dislike those who did not like them. This hypothesis also failed to be supported by the data. Subjects' self-esteem seemed to have no impact on how much they liked/disliked accepting or rejecting others. Low self-esteem subjects were not any more likely to dislike those who disliked them and like those who liked them, than were high self-esteem subjects. Once again, contrary to our expectations, the biggest determinant of the subjects' liking for the other seemed to be the other's actual liking for them. The more the other actually liked them, the more subjects expressed affection.

How should we interpret these findings ? Should we conclude that self-esteem does not have an effect on individuals' perceptions of how much they are liked ? Additionally, is it possible that self-esteem has no effect on how individuals react to others who either like or dislike them ?

Despite the fact that probably more research has been devoted to self-esteem than to any other aspect of the self (Wylie, 1961, 1974, 1978 ; or Wells & Marwell, 1976) it is still a little understood concept. In general, ways in which self-esteem influences behavior are not fully understood. In investigating the effects of global self-esteem on interpersonal behaviors and feelings, for example, the *relationship* among its various components needs to be understood. As Rosenberg (1979) has stated, "... global attitude is the product of an enormously *complex synthesis* of elements which goes on in the individual's phenomenal field. It is not simply the elements per se but their relationship, weighting, and coimbination that is responsible for the final outcome" (p. 21). In a recent study investigating the underlying dimensions of self-esteem, Fleming and Watts (1980) found three factors to the general construct of self-esteem : school abilities, self-regard, and social confidence. Shavelson, Hubner and Stanton (1976) have also discussed how general self-esteem can be separated into academic and nonacademic components, with the latter further divided into physical, emotional, and social aspects. Before understanding how a person's global self-esteem affects his/her behavior, the salience of each of the separate components in determining the overall self-assessment may have to be considered. Alternatively, situational self-esteem (in this case, self-esteem in the dating situation) may be more meaningfully predictive of behavior than the multidimensional construct of global self-esteem. Global self-esteem and situational self-esteem have been identified as two separate components (Leonard & Weitz, 1971 ; Dipboye, 1977 ; Rosenberg, 1979) with differential influences on various behaviors. This study consisted of four experiments designed to test the same hypotheses. Replication of a basic experimental design in slightly different settings allows for the opportunity to see an experimental effect (or lack of an experimental effect) is reliable and stable (Carlsmith, Ellsworth & Aronson, 1976). In these experiments, the effect of self-esteem was consistently found to be an unimportant influence on how much the Subjects perceived they were liked or disliked, and on how much affection they expressed for the Other. The effect that was found to be important *and* stable was that of "reality".

Testing the same hypothesis in different experiments also facilitates greater sensitivity to suggestive trends in the data that might be overlooked when only one experiment is conducted. Altough sex differences had not been predicted a priori, there was

a suggestion in the experiments that included both genders (Experiment 1 was conducted only with males) that self-esteem was slightly more important for females than for males. For example, the only clear support received for either hypothesis was found for Hypothesis 1 in Experiment 3 for females. In this experiment, the lower the women's self-esteem, the less they assumed they were liked.

This finding that self-esteem may have a greater effect for females than for males on their perception of whether they are liked (Experiment 3) makes some sense when it is considered that the *source* for self-esteem may differ for men and women. Above we discussed how self-esteem appears to be a multidimensional construct consisting of separate components. These separate components may be summed to arrive at a total self-regard in different ways for men and women in a way that reflects what is important to them. Social abilities and social competence may have greater weight for females, while athletic or academic abilities may be more important for males. This was suggested in research by Berger (1968), Rosenberg (1965), and Wiggins (1973).

If female self-esteem is based more on interpersonal aspects than male self-esteem, it would follow that self-esteem for females would be more predictive of behavior and feelings in an interpersonal context than would self-esteem for males. Furthermore, if the suggestive evidence from this study is compared with other research that has examined sex differences in the effect of self-esteem on various behaviors, this argument is further substantiated. For example, in other studies it has been found that only for males is self-esteem related to such behaviors as resistance to cheating and being confident in performance situations (Eisen, 1972).

In sum, while our original hypotheses did not receive much support, we find this lack of support interesting. Why wasn't global self-esteem more important in this context ? And when it was found to be important, why only for females ? Only further investigation will provide some answers.

(Reçu septembre 1981)

Abstract

Studied the hypothesis that men and women's self-esteem shoud affect their perception of other's liking for them, and consequently their liking for others. We criticize previous researchers who have assumed that men and women of various self-esteem levels will correctly perceive how much they are liked. We go on to speculate as to how self-esteem should affect liking for accepting and rejecting others. We present a series of mathematical models to predict (1) How Ss' self-esteem should affect their perception of O's liking ; (2) How Ss' perceptions of O's liking should affect Ss' liking for O ; and (3) as a consequence, how Ss' self-esteem should affect their liking for O. To test these models, we conducted four laboratory and naturalistic experiments. To our surprise, we found that previous theorists'naive assumptions appear to be correct ! Overall, the best predictor of Ss' perception of Os' liking for them was how much Os' actually liked them or said they liked them. The best predictor of Ss' liking for another was how much the other liked them.

Adler, A. *The Neurotic Constitution.* New-York : Dodd, Mead, 1926.

Berger, C.R. Sex differences related to self-esteem factor structure. *Journal of Consulting and Clinical Psychology,* 1968, *32,* 422-446.

Berger, E.M. The relation between expressed acceptance of self and expressed acceptance of others. *Journal of Abnormal and Social Psychology,* 1952, *47,* 778-782.

Berman, J.J. Factors affecting judgments and how much another likes us : A signal detection approach. *European Journal of Social Psychology,* 1978, *8,* 157-167.

Bowerman, W.R. Subjective competence : the structure, process and function of self-referent causal attributions. *Journal for the Theory of Social Behavior,* 1978, *8,* 45-75.

Carlsmith, J.M., Ellworth, P.C., & Aronson, E. *Methods of reseach in social psychology.* Reading, Mass. : Addison-Wesley, 1976.

Cohen, A.R. Experimental effects of ego-defense preferences on interpersonal relations. *Journal of Abnormal and Social Psychology,* 1956, *52,* 19-27.

Dipboye, R.L. A critical review of Korman's self-consistency theory of work motivation and occupational choice. *Organizational Behavior and Human Performance,* 1977, *18,* 108-126.

Dittes, J.E. Attractiveness of group as function of self-esteem and acceptance by group. *Journal of Abnormal and Social Psychology,* 1959, *59,* 77-82.

Eisen, M. Characteristic Self-esteem, Sex, and Resistance to Temptation. *Journal of Personality and Social Psychology,* 1972, *24,* 68-72.

Fleming, J.S., & Watts, W.W. The Dimensionality of Self-Esteem : Some Results for a College Sample. *Journal of Personnality and Social Psychology,* 1980, *39,* 921-929.

Fromm, E. Selfishness and self-love. *Psychiatry,* 1939, *2,* 507-523.

Gergen, K. *The Concept of Self.* New-York : Holt, Rinehart & Winston, Inc. 1971.

Hastorf, A. The creation of group leaders. In K.L. Gergen & D. Marlowe (Eds.), *Personality and Social Behavior,* Reading, Mass. : Addison-Wesley.

Heider, F. *The Psychology of Interpersonal Relations.* New-York : John Wiley & Sons, 1958.

Horney, K. *New Ways in Psychoanalysis.* New-York : Norton, 1939.

Jackson, D.J. Self-esteem and the reciprocation of interpersonal attraction. Unpublished Ph. D. thesis, University of Wisconsin, June 1971.

Jacobs, L., Berscheid, E. & Walster, E. Self-esteem and attraction. *Journal of Personality and Social Psychology,* 1971, *7,* 84-91.

Jones, E.E., & Davis, K.E. From acts to dispositions : The attribution process in person perception. In L. Berkovitz (Ed.), *Advances in Experimental Social Psychology. vol. 2.* New-York : Academic Press, 1965.

Jones, S.C. Self and interpersonal evaluations : Esteem theories versus consistency theories. *Psychological Bulletin,* 1973, 185-199.

Kelley, H.H. Attribution theory in social psychology. In D. Levine (Ed.), Nebraska Symposium on motivation, Nebraska : University of Nebraska Press, 192-240, 1967.

Leonard, S., & Weitz, J. Task enjoyment and task perseverence in relation to task success and self-esteem. *Journal of Applied Psychology,* 1971, *55,* 414-421.

McFarlin, D.B., & Blascovich, J. Effects of self-esteem and performance feedback on future affective preferences and cognitive expectations. *Journal of Personality and Social Psychology,* 1981, *40,* 521-531.

McGuire, W.J. Personality and susceptibility to social influence. In E.F. Borgotta & W.W. Lambert (Eds.), *Handbook of personality theory and research.* Chicago : Rand McNally, 1968, 1130-1187.

Rosenberg, M. *Conceiving the Self.* New-York : Basic Books, Inc. 1979.

Rosenberg, M. *Society and the Adolescent Self-Image.* Princeton, New Jersey : Princeton University Press, 1965.

Secord, P.F., & Backamn, C. Personality theory and the problem of stability and change in individual behavior : An interpersonal approach. *Psychological Review,* 1961, *68,* 21-32.

Shavelson, R.J., Hubner, J.J., & Stanton, G.C. Self-concept : Validation of construct interpretation. *Review of Educational Research,* 1976, *46,* 407-441.

Shrauger, J.S. Self-Esteem and reactions to being observed by others. *Journal of Personality and Social Psychology,* 1972, *23,*, 192-200.

Shrauger, J.S. Responses to evaluation as a function of initial self-perceptions. *Psychological Bulletin,* 1975, *82,* 581-596.

Shrauger, J.S., & Lund, A.K. Self-evaluations and reactions to evaluations from others. *Journal of Personality,* 1975, *43,* 94-108.

Stroebe, W. Interpersonal attraction and self-esteem. In S. Duck (Ed.), *Theories and Practices in Attraction.* Academic : London, 1977.

Stroebe, W., Eagly, A., & Stroebe, W. Friendly or just polite ? Effects of self-esteem on attributions. *European Journal of Social Psychology,* 1977, *7,* 265-274.

Thomas, R., & Burdick, R. Self-esteem and interpersonal influence. *Journal of Personality and Social Psychology,* 1954, *51,* 419-426.

Walster, E. "The effect of self-esteem on romantic liking". *Journal of Experimental Social Psychology,* 1965, *1,* 184-197.

Walster, E. Effect of self-esteem on liking for dates of various social desirabilities. *Journal of Experimental Social Psychology,* 1970, *6,* 248-253.

Walster, E., Aronson, V., Abrahams, D., & Rottman, L. The importance of physical attractiveness in dating behavior. *Journal of Personality and Social Psychology,* 1966, *4,* 508-516.

Wells, L.E., & Marwell, G. *Self-esteem : Its Conceptualization and Measurement.* Beverly Hills : Sage Publications, 1976.

Wiggins, R.G. Differences in self-perception of ninth grade boys and girls. *Adolescence,* 1973, *8,* 491-496.

Wylie, R. *The Self-Concept : A Critical Survey of Pertinent Research Literature.* Lincoln, Nebraska : University of Nebraska Press, 1961.

Wylie, R. *The Self-Concept : Revised Edition. Vol. 1. A Review of Methodological Considerations and Measuring Instruments.* Lincoln, Nebraska : University of Nebraska Press, 1974.

Wylie, R. *The Self-Concept : Revised Edition. Volume 2. Theory and Research on Selected Topics.* Lincoln, Nebraska : University of Nebraska Press, 1978.