ABSTRACT
              Currently it is recognized that psychology of people
may involve both an implicit theory of interpersonal warmness and the
personality trait of warmness. Just as the trait of dominance depends
on the relative strengths of interactants, so may perceivers expect
the trait of warmness to derive its meaning from an interpersonal
context. Elements of the warm-cold schema, specifically giver-output,
giver-resistance, receiver-input, and receiver-resistance, were
investigated to test the hypotheses that low resistances on the part
of the giver, the receiver, and their relationship would be
associated with higher warmness judgments, and that high
giver-output, high receiver-input, and relationship potential would
correspond to higher warmness judgments. College students (N=48)
rated the warmness of the giver, the receiver, and their relationship
after twice reading each variation of a brief story. Results
supported both hypotheses. Resistance varied inversely with warmness:
output and input varied directly with warmness. (Author/HLM)

(1) <u>Title</u>. An implicit psychology of warm and cold interpersonal relations.

(2) <u>Authors</u>. Charles J. Walker and Randy Sarteschi, St. Bonaventure University

(3) <u>Sponsor</u>. NA

(4) A proposed model of a warm-cold social schema was tested. Subjects judged the warmth of a giver and a receiver that varied in their resistance to interact, or judged them when the giver's product and the receiver's need varied. Consistent with the model, relation resistance and potential predicted warm-cold inferences.

(5) <u>Topical Session Preference</u>.

> Interpersonal Relations
>
> Attribution
>
> Social Cognition

(6) Slides will not be used.

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(1) <u>Title of Paper</u>. An Implicit Psychology of Warm and Cold Interpersonal Relations.

(2) <u>Topical Session Preference</u>. Interpersonal Relations; Attribution; Social Cognition.

(3) <u>Problem</u>. It is surprising that the implicit psychology research on the warm-cold variable (Asch, 1946; Kelley, 1950; Schneider, 1973; Wegner & Vallacher, 1977) has only recently begun to view warmness as an interpersonal phenomenon (Wiggins, 1979). Currently it is recognized that the naive psychology of people may involve an implicit theory of interpersonal warmness as well as the personality trait of warmness. Just as the trait of dominance depends on the relative strengths of interactants, so may perceivers expect the trait of warmness to derive its meaning from an interpersonal context. Certainly people do not expect themselves and others to be equally warm in all their interpersonal relations. However, as obvious as this point may seem, the characteristics of a warmness social schema remain to be defined and to be tested through systematic research. The present investigation offers a new model of interpersonal warmness and reports the results of the first empirical tests of its propositions.

An inspection of the traits that correlate with warmness (generous, appreciative, etc.) and coldness (cruel, hardhearted, etc.), Asch, 1946; Wiggins, 1979, and a review of how these terms are used as metaphors in language suggest that the following four elements are aspects of a warm-cold schema:

<u>Giver Output</u> (O): The quantity and quality of any giver controlled product relevant to the input state of a receiver.

<u>Giver Resistance</u> (R_o): The intentional reluctance or openness of a giver to output a product to a receiver.

<u>Receiver Input(I)</u>: The quantity and quality of an input state of a receiver relevant to the output of a giver.

<u>Receiver Resistance(R_i)</u>: The intentional reluctance or openness of a receiver to input a product from a giver.

Furthermore, it is offered that the following element relations are associated with warmness inferences:

<u>Giver Warmness-Coldness</u>

$$W_g = O/R_o$$

<u>Receiver Warmness-Coldness</u>

$$W_r = I/R_i$$

<u>Giver-Receiver Relationship Warmness-Coldness</u>

$$W_{rel} = (O + I)/(R_o + R_i)$$

Consistent with the above model, two experiments were done to test the hypotheses that 1) low resistances on the part of the giver, the receiver and their relationship will be associated with higher warmness judgments and 2) high giver output, high receiver input and relationship potential (O + I) will correspond with higher warmness judgments.

In the first experiment giver and receiver resistance was manipulated with output and input held constant. Effects of the level of output and input were assessed in the second experiment while resistance was held constant.

(4) <u>Subjects</u>. A total of 48 subjects participated; 24 students volunteered for each experiment. Students received extra credit points in the psychology courses for their participation.

(5) <u>Procedure: Stimulus Materials</u>. Brief stories were written to represent each cell of two, 2 x 2 within-subject designs. For the first experiment, a high output giver was always described as interacting with a high input receiver, then, either a high or a low resistance giver was paired

with either a low or a high resistance receiver. Stories for the second experiment depicted the giver and receiver as being always open to interaction (low resistance), however, either a low or a high output giver was matched with either a low or a high input receiver. To determine the effect that story content itself had on warmness judgments, four different story content areas were represented: professional service, informal helping, friendship and love. Within a story content area all details were held constant, eg. the name of the person acting in the giver position. Only details related to the independent variable were varied. In both experiments, story content area was viewed as a replication variable.

Procedure: Warmness Rating. Subjects rated the warmness of the giver, the receiver and their relationship after twice reading each variation of a story. Subjects indicated their rating on a ten point semantic-differential-format scale. The scale poles were labeled "very cold" (1) and "very warm" (10). For both experiments, subjects received all four treatment conditions and each replication. Therefore every subject had to rate three targets after reading each of 16 possible stories. Subjects were run in groups of eight. The order of presentation of a story content area was randomized, and within a content area, the order of condition presentation was randomized.

(6) Results: Resistance Effects. The exactness of the experimental hypotheses for experiments 1 and 2, permitted planned within-subject t-test comparisons to be done on selected means. Furthermore, two 2 x 2 x 4 analyses of variance revealed that there were no significant second or third order interactions with the four areas of story content. Therefore, four scores were recorded for each subject for each condition.

Displayed in Table 1 and at the top of Table 3 is evidence highly supportive of the hypothesis of Experiment 1. Low resistance was rated

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as significantly warmer than high resistance for all three rating targets, ie., giver, receiver and their relationship.

Results: Output-Input Effects. As can be seen in Table 2 and the bottom of Table 3, results were obtained that are highly consistent with the hypothesis of Experiment 2. Without exception, a high output product giver was rated warmer than a low output product giver, a high input state receiver was rated warmer than a low input receiver, and a high potential (O + I) relationship was rated warmer than a low potential relationship. All of these effects were significant at $p < .001$.

(7) Implications. It appears that the warmness model offered in the present study is predictive of individuals' warmness judgments. Resistance varies inversely with warmness, and output and input vary directly with warmness. However, our conclusions based on only two experiments must be viewed with a certain amount of skepticism. The model tested has a rational origin (structurally like Heider's Balance Theory, 1958) rather than an empirical origin. A program of research is needed to more confidently support or challenge the model's assumptions, and to address other questions concerning its heuristic value.

Nevertheless, our results suggest that individuals may possess a social schema about the warmth of interpersonal relations. The elements of this schema appear to be about events that pervasively influence the ebb and flow of a relationship and its hedonic direction. A warm relationship is one that is expected to become open for more pleasant giving and receiving. In contrast, individuals expect a cold relationship to be on the decline, a relationship closing off to unpleasant giving and receiving. Research in our lab is currently exploring these other implications of the existence of a warm-cold social schema.

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Table 1
Resistance Manipulation Effects on the Warmness Ratings
of the Giver, Receiver and the Giver-Receiver Relationship

	Rating Target					
	Giver		Receiver		Relationship	
	Receiver Resistance		Receiver Resistance		Receiver Resistance	
Giver Resistance	Low	High	Low	High	Low	High
Low	8.17	7.64	8.07	4.41	8.05	·4.70
High	1.76	2.94	6.82	4.12	2.41	2.38

Table 2
The Effects of Input-Output Manipulations on the Warmness Ratings
of the Giver, Receiver and the Giver-Receiver Relationship

	Rating Target					
	Giver		Receiver		Relationship	
	Receiver Input		Receiver Input		Receiver Input	
Giver Output	Low	High	Low	High	Low	High
Low	6.51	7.07	5.40	6.74	5.94	6.87
High	8.13	8.33	5.13	6.39	6.65	7.49

Table 3
Planned Comparisons of Condition Means[a]

Target	AB	CD	AC	BD	AD	BC
	Table 1 Cell Comparisons: Resistance					
Giver	--	--	19.164*	14.505*	--	--
Receiver	12.354*	8.979*	--	--	--	--
Relationship	--	--	--	--	20.025*	--

Target	AB	CD	AC	BD	AD	BC
	Table 2 Cell Comparisons: Output & Input					
Giver	--	--	8.556*	7.794*	--	--
Receiver	8.992*	6.171*	--	--	--	--
Relationship	--	--	--	--	8.289*	--

[a]Tables 1 & 2 display three 2x2 designs, one for each of the three rating
targets, in the form:

A	B
C	D

*$p < .001$, df = 95