FEMALE DATING STRATEGIES AS A FUNCTION OF PHYSICAL ATTRACTIVENESS AND OTHER SOCIAL CHARACTERISTICS OF MALES

by

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Chapter I

INTRODUCTION

The present study uses a human judgment approach to the study of judgments about dates. A date is defined here as an individual of the opposite sex with whom one is considering one-to-one social interaction. By using the human judgment approach, a more precise description of each S's dating judgment strategy is possible. This allows examination of some long standing issues raised by previous investigators as well as several other issues of importance to the study of dating.

This initial introduction will briefly summarize previous dating research followed by a brief discussion of the goals and advantages of the present study.

Traditional Dating Research.

Most of the research on dating has been concerned with the "matching hypothesis" introduced by Walster, Aronson, Abrahams, and Rottman (1966). The matching hypothesis predicts that when making a dating choice, people will attempt to maximize the social desirability of their date, and minimize their chances of rejection. This can be done by choosing or matching up with a date approximately equal in social desirability to themselves. Studies concerned with testing the matching hypotheses have been characterized by highly inconsistent and contradictory findings. There is no clear-cut evidence that matching occurs, and the

proposal that expectancy of rejection mediates matching is quite tenuous. Thus, our understanding of the psychological processes underlying dating choice is currently unsatisfactory.

A number of limitations in the previous research may partially account for this lack of progress. First, these studies have been preoccupied with the influence of physical attractiveness to the exclusion of other types of information. For example, although social desirability is determined by physical attractiveness, level of social skills, intelligence, material resources, and possession of other socially valued characteristics, only physical attractiveness has been used as a measure of the date's social desirability. Studies which have been successful in examining one or two variables in addition to physical attractiveness, such as attitudinal information (Byrne, Ervin, & Lamberth, 1970; Byrne, London, & Reeves, 1968; Stroebe, Insko, Thompson, and Layton, 1971) or personality information (Lampel & Anderson, 1968) suggest that the importance of physical attractiveness may interact with other information. Therefore, these studies suggest that a satisfactory understanding of dating judgments necessitates examination of other information in addition to physical attractiveness.

However, even the studies which have attempted to incorporate other information into the judgment task have been inadequate. In most cases they have not provided a close representation of the <u>types</u> of information available in actual dating situations (Lampel & Anderson, 1968). On the other hand, the present study examines dating judgments when a <u>variety</u> of

information is provided about the date. In contrast to previous studies which have either ignored other information or provided arbitrarily chosen information (e.g. high, medium, or low valued personality traits) this study provided information which preliminary Ss indicated to be relevant in the dating situation.

A second limitation of previous research is the lack of concern with the cognitive processes underlying dating choice. These processes concern the way Ss value, weigh, and combine multiple pieces of information into a final judgment. In contrast, the present study uses human judgment techniques to explicitly describe the cognitive processing mechanisms underlying dating choice. This approach has been successful in a variety of situations. Examples are stockbroker's decisions (Slovic, 1969); clinical judgments (Anderson, 1972; Slovic, Rorer, and Hoffman, 1968); preferences between lunches (Shanteau & Anderson, 1969); and gambling judgments (Anderson & Shanteau, 1970; Shanteau, 1975).

Finally, most dating studies are based on group analyses. Many of the predictions regarding matching, however, depend on individual differences, e.g. S's physical attractiveness. Yet, previous studies have generally been insensitive to differences among Ss. The present approach, on the other hand, emphasizes the importance of analyzing the decision making strategy for each S. This allows maximum sensitivity to issues involving individual differences. Since our present understanding of dating is incomplete, this new approach seems worth exploring.

A study by Shanteau and Nagy (1974) clearly illustrates the advantage of the human judgment approach over previous

approaches to dating choice. These investigators examined the usefulness of a utility model to describe dating judgments (as detailed below). The utility model predicts that in any decision making situation the individual will attempt to maximize rewards and minimize costs. Thus, in the dating situation the individual would be expected to maximize the attractiveness of the date and minimize the chances of rejection. If these two variables are inversely related then "maximum utility" could best be accomplished by choosing a date of similar physical attractiveness. (This is merely a re-statement of the matching hypothesis in judgment terms.) The approach used by Shanteau & Nagy (1974), however, has the advantage that precise techniques have been worked out to examine the utility model, whereas the methods used by Walster and her colleagues have been insensitive to the cognitive processes which mediate matching.

Purposes and Goals of the Present Study.

The basic goal of this study was to quantitatively describe each subject's dating strategy when a variety of information was given about the date. Thus, a major concern was to provide a representative sample of the types of information typically available in the dating situation.

Specifically, female Ss were asked to evaluate the dating desirability of males described by a photograph and a dating characteristic. For example, S was asked to evaluate the following date:

Very wealthy

John

The names corresponded to photographs selected to vary in physical attractiveness. The dating characteristic was one of several characteristics chosen on the basis of extensive pilot work. Later, Ss made choices between two dates described in a similar manner.

In order to derive a quantitative description of each Śs dating strategy from the Śs judgments, three major steps must be taken in turn.

First, the integration function or the combination rule which S uses to combine the information into a single overall judgment must be examined. The integration function can best be evaluated using the information integration theory developed by Anderson (1974 a,b). Integration theory uses simple algebraic models to describe S's integration function. This provides a sensitive indication of the interrelationships among pairs of cues, and is particularly useful in examining possible interactions or configuralities in cue usage.

Second, each S's weighting policy must be examined. Regression analysis can be used to describe the weighting policy by looking at the importance S places on each piece of information. Thus, the issue of whether a few cues, such as physical attractiveness, dominate S's judgments can be examined.

Finally, the integration function and weighting policy are incorporated into a single equation to provide a quantitative description of each S's decision making strategy. The final step is to validate each S's decision strategy by determining the accuracy with which the subsequent choices can be predicted from

it. This provides a crucial test of the validity of the decision strategy in a judgment task different from the one used to derive the predicted strategy.

A supplementary goal was to examine matching in a broader sense than was done in the previous dating studies. Since social desirability is composed of a number of variables in addition to physical attractiveness, Walster's hypothesis implies that Ss should match on these characteristics also. In addition, the principle of similarity, introduced by investigators of marital choice (see Berscheid and Walster, 1969, Chap. 6 for a review) predicts that people with similar personalities are attracted to each other. Although these hypotheses appear similar on the surface, the latter hypothesis does not assume that expectency of rejection mediates the similarity effect. The present experiment examined both of these possibilities. Specifically, a number of variables within the date-evaluation task were varied in several levels so that S's precise point of preference along the dimension could be determined. S's point of preference was then compared with S's own perceived standing on the dimension.

In addition to providing a sensitive test of many important issues in dating, this study also has some implications for human judgment research. In order to describe each S's dating judgment, a combination of integration theory and regression techniques were used. Most frequently, investigators using these techniques have taken quite divergent viewpoints. In this case, however, a joint application of these techniques proved quite fruitful and may lead to joint application of these techniques in future research.

The remainder of this presentation will be divided into four major parts. The first section is a review of previous dating literature. The second will be a brief review of human judgment literature specifically concerning information integration and regression approaches. The third section will include a presentation of the previous work which has examined dating judgments via human judgment. The last section will be a presentation of the present experiment.

Chapter II

TRADITIONAL DATING LITERATURE

The traditional dating literature may be classified into three bodies of research, each of which will be reviewed within this section. The first is concerned with the question, "Do Ss match in terms of social desirability?". The second is concerned with the issue, "Why do Ss match?", and has tested the proposal that expectancy of rejection mediates the matching effect. The third body of research has been concerned with the influence of physical attractiveness when other information is also provided about the date. Although this last body of research is outside the mainstream of the "matching" studies it is important because it suggests the need to consider other information in addition to the physical attractiveness of the date.

Do Ss Match in Terms of Social Desirability?

Two different procedures have been used to test the hypothesis that Ss match in terms of social desirability. The first involves conducting experiments to determine whether Ss prefer dates of similar physical attractiveness to themselves. The second involves observing "real-life" dating couples within naturalistic settings and assessing them in terms of similarity on the physical attractiveness dimension.

The experimental paradigm. The matching hypothesis was initially introduced by Walster, Aronson, Abrahams, and Rottman (1966) who formally derived their prediction from Level of Aspiration Theory (see Lewin, Dembo, Festinger, and Sears, 1944). Based on Level of Aspiration Theory, Walster et al. proposed that dating choices are determined by the same factors which influence level of aspiration in any other situation: the desirability of the goal and the expectancy of failure or rejection. The expectancy of failure or rejection is, in turn, determined by two factors. First, since the attractiveness of the goal and the expectancy of rejection are usually positively correlated, the goal persons can expect to attain is usually less attractive than the one they would desire to attain. To this Walster et al. added the second assumption that the expectancy of rejection varies with the individual's self-perceived social desirability.

On the basis of these assumptions Walster and her colleagues proposed that not everyone would be expected to prefer the most socially desirable dates. More likely, individuals would attempt to maximize the social desirability of the date and minimize chances of rejection by choosing a date of similar social desirability to themselves.

To test their prediction Walster et al. randomly paired Ss within a "Computer Dance". They hypothesized that Ss who obtained, by chance, dates of their own social desirability level (whether high or low) would like their dates more. Also, they would be more likely to date them again than those Ss who received dates whose social desirability levels were inferior or superior to their

own. Physical attractiveness was used as the major indicator of S's social desirability because it could be easily assessed and because it correlated .31 (males) and .42 (females) with S's perception of his/her social desirability. Questionnaires administered mid-way through the dance served as the measure of liking.

The matching hypothesis was not supported. The only determinant of whether the date was liked and subsequently asked out again was the physical attractiveness of the date. The more physically attractive the date the more he/she was liked. The S's own physical attractiveness did not make a difference. In addition, attempts to find additional factors which might predict liking failed. In no case did the S's intellectual achievement (high school percentile rank) have a significant relationship to the liking the date expressed for him/her. Personality measures (MMPI, and Berger's Scale of Self-Acceptance) were also very inadequate predictors. On the basis of these findings Walster and her colleagues concluded that "sheer physical attractiveness appears to be the overriding determinant of liking" in the dating situation, (Walster et al., 1966, pg. 514).

The validity of these conclusions, however, is uncertain. There are a number of problems in the study which may account for both the singular importance of physical attractiveness and the failure of the matching hypothesis.

The overwhelming influence of physical attractiveness may be due to the fact that Ss were only allowed to interact a short time (2 1/2 hrs.) in a situation not very conducive to conversation prior to filling out the questionnaires. Whereas physical

attractiveness is obvious from the start, characteristics such as intelligence and personality traits may require longer contacts to influence S's judgments. A direct implication, from this author's viewpoint, is that Walster's measure of these characteristics (high school percentile rank; MMPI) may not have been representative of the information that Ss actually received about their partners. If this is the case, then a low correlation between these measures and liking would be expected.

The failure of the matching hypothesis may also be due to flaws in the experimental procedure. One explanation for the failure of the matching hypothesis is that the possibility of rejection was not apparent in the computer dance situation. An underlying assumption of the matching hypothesis is that unattractive individuals feel that they are likely to be rejected when they approach an attractive individual. Walster et al., (1966), however, had Ss evaluate dates who did not have the opportunity to reject S. Thus, S's consideration of rejection was probably minimal.

Another major problem with the Walster study, which was originally pointed out by Moss (1969), has to do with the sole use of physical attractiveness to estimate S's social desirability. Although social desirability consists of a number of components only physical attractiveness was used. Furthermore, in the Walster et al. study the correlation between the physical attractiveness of S and S's estimate of his/her social desirability was fairly low (.32 males; .46 females) suggesting that other components need to be considered.

Moss (1969) controlled for these problems in a subsequent study. Moss had high and low socially desirable male Ss choose a dating partner from among a group of pictures of females. The S's social desirability was determined by S's estimate of his own social desirability rather than a normative rating of S's physical attractiveness. Moss reasoned that since S is the one making the dating choice, his perception of his own social desirability should be a more sensitive predictor of his choices than an outside observer's rating of S's physical attractiveness. In addition, the physical attractiveness ratings for the potential dates were determined by S. This change also makes sense in light of the poor reliability of the attractiveness ratings used in Walster et al. (1966). In that study the physical attractiveness ratings of Ss by four judges intercorrelated only .49-.58. Finally, Ss were told that they would be required to phone their dating choice during the experimental session and ask for a coffee date. The purpose of this manipulation was to make Ss believe that they would have to personally ask their choice for a date and, thus, risk rejection.

Moss did not support the original formulation of the matching hypothesis; both high and low socially desirable Ss choose dates more attractive than themselves. Contrary to the Walster et al. study, however, Moss did observe a tendency towards matching. High socially desirable Ss choose more attractive dates than low socially desirable Ss.

Moss' fear of rejection manipulation may not have been totally effective, partially accounting for the weakness of the

matching effect. When S made his dating choice, he was not told that the potential dates would know how physically attractive he was. Thus, unattractive Ss would have no reason to expect rejection from an attractive date moreso than attractive Ss.

In addition, although Moss made a special effort to use self-evaluated social desirability because it would be a more sensitive predictor of the individual's choice, he used group analyses to examine the matching effect. The group analysis may have, in part, washed out the effect of matching on the individual level. An individual S analysis of the data might have revealed stronger results.

A study by Stroebe, Insko, Thompson, & Layton (1971) found a significant tendency towards matching in support of Moss' findings. In addition, they found matching only when self-perceived physical attractiveness was used; when S's physical attractiveness was independently assessed by judges no matching was found. This latter finding suggests that the crucial manipulation in the Moss study was the use of a self-evaluative measure of S's social desirability.

However, Huston (1973) found results which are inconsistent with both the Moss (1969) and Stroebe et al. (1971) studies. Huston used self-evaluated physical attractiveness as the measure of S's social desirability and found no evidence for matching.

In summary, the experimental studies have yielded a series of rather contradictory findings concerning the matching issue. None of the studies have supported the original formulation of the matching hypothesis that Ss should choose dates who are approximately their equal in social desirability. Some of

the studies suggest, however, that the matching hypothesis may be a tenable one (Moss, 1969; Stroebe et al., 1971). There appears to be some tendency for high socially desirable Ss to choose more attractive dates than low socially desirable Ss.

Observation of matching among "real-life" couples. In view of the inconsistent results of the experimental studies presented above, a number of investigators turned to examining matching among already existing "real-life" couples. These investigators argued that, since realism is of major importance in the dating situation, matching would be more likely to occur among real-life couples.

Silverman (1971) examined the degree of similarity in physical attractiveness between members of dating pairs observed in naturalistic dating situations. Observers went to typical dating habitats (i.e. bars, dances, etc.) and rated the opposite-sex partner of each dating pair on a 5 point physical attractiveness scale. This was done independently and without the knowledge of the ratings made by other observers. Silverman found a very high degree of similarity in the physical attractiveness ratings of the dating partners. The partners in sixty per cent of the couples were not separated by more than one-half scale point.

Berscheid and Walster (1974), however, point out several difficulties with the Silverman study. Although observers did not know how the other observers rated the attractiveness of the other member of the dating couple, they did see the other member. Thus, it's possible that seeing the other partner influenced the observer's perception of the individual he was rating and, thus,

produced artifactual similarity in the dating pairs. This is particularly likely in view of a finding by Sigall & Landy (1973) that the favorability of an overall impression a man makes on an outside observer is influenced by the physical attractiveness of his dating partner. In addition, Silverman did not attempt to determine whether the degree of similarity he observed was significantly greater than that expected by chance.

Murstein (1972) conducted a similar study but attempted to control for both of the problems presented above. Murstein had photos taken of 99 couples who were either engaged or going steady. Judges then rated each of the members of each couple without knowing which partner went with whom. The degree of similarity exhibited by the dating couples was then compared to a control group of couples which were formed by randomly pairing the physical attractiveness ratings of the 99 men and women with each other.

Murstein found evidence for the matching hypothesis: The physical attractiveness ratings for the engaged or steadily dating couples were significantly less discrepant than for the randomly paired couples.

Although the Murstein (1972) study provides support for the matching hypothesis, it does not give any indication as to why matching occurs. The next category of research was conducted to examine this issue.

Why Do Ss Match?

Walster et al., (1966) hypothesized that Ss would prefer dates of similar social desirability to themselves because they

would expect rejection from dates of superior social desirability. Two basic assumptions underlie this proposal. The first is that the desirability of the date and the S's expectancy of acceptance by the date are negatively correlated; thus, the more socially desirable the date the more S expects rejection. The second assumption is that S's expectancy for acceptances varies with S's self-perceived social desirability; thus, low socially desirable Ss should expect rejection more so than high socially desirable Ss.

Berscheid, Dion, Walster, & Walster (1971) conducted two separate laboratory studies to examine the proposal that expectancy of rejection mediates the matching effect. They hypothesized that matching would be especially likely when the possibility of being rejected by the date was stressed.

In both studies saliency of rejection was manipulated by telling half of the Ss that their dating choice would have the opportunity to accept or reject them after meeting S. The other half of the Ss were informed that potential dates were told that they must accept whomever chooses them in order to participate in the experiment. In the first study (Walster & Walster, 1971) the S's perception of the desirable qualities in a date were measured; in the second study (Berscheid & Dion, 1971) Ss were required to actively choose a date from a sample of pictures. The physical attractiveness of the pictures were determined by normative ratings.

Neither study supported the matching hypothesis in it's strict sense. Subjects did not express a desire for, nor choose, dates similar to their own level of attractiveness. Physically

attractive dates were preferred by everyone. There was, however, a trend towards matching: both unattractive men and women expressed a desire for, and chose, slightly less attractive dates than did attractive Ss. However, in both studies the tendency towards matching occurred regardless of the saliency of rejection condition.

The results of the Berscheid et al. (1971) study imply that people are less concerned with rejection in the dating situation than was previously believed. However, several investigators have expressed doubt as to the effectiveness of the saliency of rejection manipulation. In both studies it's possible that Ss who were told that their choice would be required to go out on the date actually anticipated a more personal rejection than Ss in the high saliency of rejection condition who would be rejected indirectly through the experimenter. There were indications of this possibility in the Berscheid & Dion experiment where the greatest tendency towards matching occurred in the non-salient rather than the salient condition.

The Huston (1973) study, which was cited previously, was also concerned with the influence of expectancy of rejection on dating choice. Huston had both attractive and unattractive male Ss (as determined by their self-ratings of physical attractiveness) choose between photos under one of two conditions. In one condition (low saliency of rejection condition) S chose from dates with the understanding that each of the dates had already expressed a desire to date him. The purpose of this manipulation was to eliminate the possibility that S would anticipate rejection by his

choice after meeting her. In the other condition acceptance was left ambiguous. Subjects in the ambiguous condition were also asked to rate the pictures on the probability that each would accept a date with him if he approached her.

Huston did not find evidence for matching under either condition contrary to the results of Berscheid et al. (1971). There were no differences between the choices of attractive and unattractive Ss under either the high or low saliency of rejection conditions.

Huston, however, did show evidence that Ss were concerned with the possibility of rejection in the high saliency of rejection condition. When Ss were asked to estimate the probability that each of the pictured dates would accept them, physically attractive women were rated significantly less likely to accept them than moderately or unattractive women. In addition, S's self-rating of his own physical attractiveness was related to perceived probability of acceptance; unattractive Ss estimated their chances of acceptance significantly lower than those who considered themselves attractive.

As a supplementary part of his study, Moss (1969) also had Ss estimate their chances of being accepted by potential dates. Moss'. results corroborate with Huston's results. Moss found that the higher the social desirability of S, the greater the expectancy of being accepted. In addition, the difference in the expectancies for acceptance between high and low socially desirable Ss increased as the physical attractiveness of the date increased. The low socially desirable Ss lowered their expectancy

for acceptance while the expectancies of high socially desirable Ss remained relatively unchanged.

In summary, the Huston (1973) and Moss (1969) studies suggest that expectancy of rejection is important in the dating situation. Both studies provide evidence that (1) the desirability of the date and the expectancy for acceptance are negatively correlated, and (2) that S's expectancy for acceptance varies with S's own social desirability. These are the basic assumptions proposed by Walster et al. (1966); however, the specific conditions under which these relationships influence dating judgments remains unclear.

The Influence of Physical Attractiveness Relative to Other Information.

With few exceptions (e.g., Walster et al., 1966; Stroebe et al., 1971) the only characteristic of the date which has been explored in the matching studies is the physical attractiveness of the date. This is despite the fact that when individuals typically make dating judgments they have much more information available than a mere picture of the date.

Studies which have attempted to provide other types of information about the date have demonstrated that the influence of physical attractiveness depends, in large part, on the other information with which it is paired. A study by Byrne, London, and Reeves (1968), although not a dating study, has some bearing on this issue. These investigators examined the influence of physical attractiveness on S's liking for an opposite-sexed individual (liking was measured by the Interpersonal Judgment Scale).

The experiment consisted of two conditions: (1) a photo was the only information provided, (2) the photo was paired with attitudinal information. In condition one, Ss were given the photo and were instructed to indicate their liking for the person. In condition two, Ss received an attitudinal questionnaire supposedly completed by the person and were instructed to "form an opinion of the person on the basis of his or her attitudinal responses". In this condition physical attractiveness was manipulated by attaching a photo to the top of the questionnaire.

These investigators found, as expected, that both similarity and physical attractiveness significantly influenced S's liking for the date. The influence of physical attractiveness, however, was less when it was paired with attitudinal information than when presented alone. When physical attractiveness was the only information available it correlated .29 with liking. When both physical attractiveness and attitudinal information were given, the correlation between physical attractiveness and liking dropped to .15. This difference was not tested for statistical significance.

These findings suggest that physical attractiveness may have it's most potent influence prior to the availability of other information. These conclusions may be unwarranted due to several factors in the Byrne et al. study, however.

First, the dependent measure of attraction was liking rather than a desire to go out with the date. In this author's viewpoint it's possible that the context of a dating choice emphasizes physical attractiveness whereas a judgment of liking does not. This is especially probable in view of the finding by Stroebe

et al., (1971) that physical attractiveness has a greater effect when desire to date rather than liking was used as the dependent measure of attraction.

Two additional problems have been pointed out by Berscheid and Walster (1974). The marginal influence of physical attractiveness, even when it was presented alone, may have been due to a failure to create enough difference between the two levels of physical attractiveness used. In addition, Ss were explicitly instructed to base their impressions on the attitudinal responses perhaps implying that they should ignore the physical appearance of the stimulus person.

A study by Byrne, Ervin, and Lamberth (1970) examined the influence of attitude similarity and physical attractiveness in a "real-life" dating situation. Couples were formed to go out on a "Coke Date" on the basis of maximum or minimum similarity of responses on an attitude questionnaire. Two measures of the S's physical attractiveness were used: (1) ratings by the experimenter when the Ss first arrived, and (2) ratings by each S of his or her dating partner after interaction. Attraction was determined by responses to the Interpersonal Judgment Scale. In contrast to Byrne et al. (1968) an additional item concerning dating desirability was included in the scale.

Although the relative influence of physical attractiveness and attitude similarity was not determined, Byrne and his colleagues did find that attraction was significantly related to both attitudinal similarity and physical attractiveness. This was true when both desirability as a date and liking were used as the measure of

attraction. Whether or not physical attractiveness influenced both measures to the same degree was not determined. The most positive response was towards attitudinally similar attractive dates; the least positive response was towards attitudinally dissimilar unattractive dates.

Stroebe, Insko, Thompson, & Layton (1971) also examined the influence of physical attractiveness and attitudinal similarity on liking for a possible date. As in Byrne, London, & Reeves (1968) a questionnaire, which varied in terms of similarity with S's attitudinal responses, was presented to S. Attached to the questionnaire was a photograph which had been previously rated by pilot Ss as high, medium, or low on physical attractiveness. After reading the questionnaire Ss were asked to indicate their liking for the date and their desire to go out with the date.

The results of Stroebe et al. essentially confirmed those of Byrne et al. (1971). Both similarity and physical attractiveness significantly influenced S's responses to both the liking and dating desirability items. In addition, some sex differences were observed. The effect of physical attractiveness on the dating desirability measure was stronger for males than for females. More interesting however, is that a graphical analysis of female's dating desirability judgments revealed an interaction between physical attractiveness and attitudinal information. Females appeared to be influenced by attitudinal similarity more when the physical attractiveness of the date was high than when it was low. This interaction was not tested for statistical significance for females alone, however.

A study by Lampel & Anderson (1968) provides evidence that physical attractiveness may also interact with information about the date's personality. These investigators had Ss rate the "dateableness" of individuals described by a photo and two personality trait adjectives.

The results indicated an interaction between the photographs and adjective descriptions. The nature of the photo-adjective interaction was such that the adjectives had a greater influence when combined with an attractive photo than with an unattractive one. This was interpreted as implying a differential-weighted averaging model whereby an unattractive photo was given more weight relative to the adjectives than an attractive photo (as detailed below).

On the basis of the studies reviewed within this section, it appears that a satisfactory understanding of dating judgments requires examination of other variables in addition to physical attractiveness. Even the studies which have attempted to incorporate other information into the judgment task have failed in terms of providing a close representation of the types of information available in actual dating situations. For instance, Lampel and Anderson (1968) provided the Ss only with arbitrarily chosen high, medium, or low valued personality adjectives in addition to the photograph. Pilot experiments, however, suggest that other characteristics such as the date's sexual aggressiveness, may be important aspects of dating choice. Thus, the present study used "adjectives" in a broader sense than has been done in the past. In addition to personality traits (as listed in Anderson, 1968),

several characteristics (sexual aggressiveness, income, style of dress, and intelligence) which pilot Ss rated as important in the dating situation will be included in combination with the photos.

Chapter III

HUMAN JUDGMENT

Human judgment techniques will be used to describe each S's judgment strategy. To describe S's strategy two questions must be asked: 1) What is the integration function or composition rule which describes the manner in which S combines the information into a single judgment?, and 2) What is S's weighting policy or the relative importance S places on each piece of information?

Although answering one of these questions requires making assumptions about the other, different approaches have generally stressed one of these over the other. Whereas information integration theorists have generally stressed the integration function, those taking the regression approach have been more concerned with the weighting policy of S. The present study will borrow from both information integration theory and the regression approach to provide a more complete description of S's judgment strategy.

Information Integration Theory

Information integration theory is generally concerned with the integration function whereby individuals combine a number of pieces of information into a single overall judgment. In it's general form integration theory looks at judgment as a combination of independent pieces of information each of which is represented by a scale value, s, and a weight, w. The scale value represents

the location of the stimulus along the dimension of judgment. In most cases, the scale value is assumed to be unaffected by any other information with which it is combined. The second parameter, weight, is concerned with the salience or importance of the information. Generally, estimation of scale value and weight are of less importance than examination of S's integration function.

The integration function (composition rule) used to combine the information into a single overall judgment has been examined within integration theory by means of simple algebraic models. These models usually fall into one of two categories. Within the first category are members of the general additive models which includes adding, subtracting, and simple averaging models. The second category involves multiplicative models which includes both multiplying and dividing models.

Additive models. The most general form of the additive model is:

$$R = \sum w_i s_i \qquad (1)$$

where the response (R) is taken to be a weighted sum. The summation is over all relevant stimuli; and the contribution of a single stimulus is equal to it's weight times it's scale value. If several pieces of information are varied according to a factorial design, this model makes the very simple prediction that the data should plot as parallel lines.

Averaging versus Adding Models. Both an averaging model with equal weighting and an adding model are forms of the more general additive model presented above. At the same time, while

both models predict additivity, they also imply quite divergent psychological processes. However, they can be differentiated by qualitative tests (see Anderson, 1974a; Levin et al., 1974). Such tests will be employed here.

Multiplicative models. Both multiplying and dividing models have been examined in a variety of judgment tasks. Generally, the multiplying process implies that one variable acts by modulating the effect of a second variable. For example, in the present experiment an adverb will be used to tell S "how much" of a certain characteristic the date possesses and, thus, should reveal a multiplying operation. If the multiplying model is correct, then plots of the data should reveal a family of diverging straight lines. Deviations from this pattern would disconfirm the model (see Shanteau, 1974).

ANOVA as a model-testing technique. In addition to graphical tests of the model the analysis of variance can be used to determine whether or not significant discrepancies from the model exist. This provides a more powerful test of the model than a correlation between observed and predicted responses which is frequently used as the test of fit in human judgment research. With this in mind, the present experiment will use the ANOVA technique to examine S's integration function along with the graphical tests outlined above.

Subjective values. In the process of validating the model subjective values for the information can be derived. If a simple algebraic model is supported then the stimulus values can be estimated directly from the marginal means of the factorial design.

Information integration theory has been successfully applied to a variety of judgment tasks. Shanteau and Anderson (1969) supported a subtractive model for preference judgments. It has also been successful in examining information acquisition (Shanteau and Anderson, 1972), inference judgments (Shanteau, 1970, 1972), and risky decisions (Anderson & Shanteau, 1970; Shanteau, 1974). Studies on risky decisions have shown that S's evaluation of a single bet with a probability and a payoff can be described by a multiplying model. This approach has been extended to risky decisions other than gambling judgments. Shanteau & Nagy (1974) found support for the multiplying model when Ss made preferential choices between dates described by a photo and a probability of accepting S.

In addition, integration theory has been particularly useful in describing person impressions where the averaging model has acquired considerable support. (See Anderson, 1974b for a review of person perception literature.).

In the present study each S's integration function will be described via information integration theory. However, to have a complete account of S's decision making strategy S's weighting policy must also be considered. In the present study each S's weighting policy will be examined using the regression approach.

Regression Approach.

Within the regression approach S's judgments are described by using the standard multiple regression model. This model is

formally equivalent to the additive model used in information integration theory. The regression model may be written as:

$$Y_s = \sum_{i=i}^{k} b_{is} x_{is} \qquad (2)$$

where, Y_s is S's predicted response; b_{is} is the weight of the information, X_{is} is the objective value of the information.

Generally, the problems with which the regression approach can deal are limited because these objective values must be known apriori, that is, the stimulus dimension must be objectively quantifiable at least to the extent of a 0-1 coding. This reliance on apriori stimulus values can be misleading as shown by Birnbaum (1973). In addition, individual differences in the values Ss place on stimuli are not taken into consideration. Therefore, the present approach will determine subjective scale values for each S by incorporating a scaling sub-task into the judgment task. In most cases, if the scaling task and judgment task are integrated within the experiment, and other experimental precautions are also taken, these direct estimates of subjective scale values are good estimates (Shanteau, 1974; Levin, 1974).

Once the subjective scale values have been estimated, Equation 2 can be "fitted" to each S's judgments by solving for the weights. This provides a complete quantitative description of each S's decision making strategy.

Previous studies, although they have used objective rather than subjective stimulus values, have found considerable support for the standard multiple regression model (Equation 2) in a variety of judgment situations. In nearly all of these

situations, the correlation between S's observed judgments and the predicted judgments derived from the regression equation ($\hat{Y}_s$) have been high, usually between .7 and .9. In view of these results a number of investigators have concluded that the standard regression model can account for all but a small amount of the predictable variance in a wide variety of judgment tasks. (See Slovic & Lichtenstein, 1973 for a review.)

However, this overwhelming support for the linear model may be, in part, a result of serious misuse of the regression approach. For example, these investigators have typically not employed an adequate test of discrepancies from the model. The correlation between predicted and observed responses, since it measures the amount of agreement between the data and the model, is usually inappropriate for model testing. Even though the correlations have been high in the studies supporting the linear model, the model may not be valid because there can still be significant discrepancies.

In addition, besides lacking a powerful test of fit, these investigators have not attempted to cross-validate their model derived from one set of judgments by predicting a second set of judgments in a different judgment task. Split-half reliabilities are often taken within the same set of data but this is a very weak form of cross-validation.

Because of these problems, deviations from linearity can often be overlooked using the regression approach. In addition, when a linear model is supported, this approach cannot discriminate between different forms of a linear model (i.e. adding vs.

averaging). On the other hand, information integration theory provides straight-forward graphical and statistical tests of deviations from the linear model. Because of this advantage, information integration theory will be used to test the validity of the linear (additive) model.

If the linear model is found valid, and subjective rather than objective stimulus values are used, Equation 2 can be used to provide a description of Ss' strategy. The weights within this equation, when transformed into standard score form, provide an indication of the relative importance of each piece of information. This will allow comparison of the importance Ss place on physical attractiveness versus the other dating characteristics.

Also, by using subjective rather than objective scale values individual differences in both the way Ss weight and value information are incorporated into the decision strategy.

Finally, this strategy can be cross-validated by predicting judgments made in a different judgment task. In the present experiment S's actual choices will be predicted.

Chapter IV

HUMAN JUDGMENT ANALYSIS OF DATING CHOICE

Overview.

The matching hypothesis, stated in judgment terms, leads to a subjectively expected utility (SEU) model for dating choice. Shanteau and Nagy (1974) examined the SEU model for Ss' preferences between pairs of dates which varied in physical attractiveness, and the probability they would accept S as a date. Results supported the SEU model. A second experiment also supported the utility model when the probability was left up to S to define. This section will review the utility model and discuss the findings of Shanteau & Nagy (1974).

Subjective Expected Utility.

Subjectively expected utility theory (SEU), (Edwards, 1961) predicts that Ss will choose an alternative which, on the average promises the greatest rewards. The SEU approach is typically used to describe gambling choices and is formally written as a multiplicative function of subjective probability S(P), and the subjective value (utility) of some monetary value U($):

$$SEU = S(P) \times U(\$) \qquad (3)$$

This equation can be simplified to a simple multiplicative model from information integration theory,

$$R = \underline{w} \times \underline{s} \qquad (4)$$

where R is the S's rating response; $\underline{w}$ is subjective probability;

s is subjective value (utility). This model predicts a simple multiplicative model for S's judgment of each alternative.

SEU and Dating Choice.

Equation 4 can predict matching given two assumptions: (a) expected probability of acceptance is negatively correlated with the attractiveness of the date, and (b) S's expectancy for acceptance varies with S's own physical attractiveness. These are the same assumptions proposed by Walster et al., (1966).

Shanteau and Nagy (1974) conducted two experiments to examine the usefulness of the utility theory approach to dating judgments. In the first study, 15 female Ss made preferential choices between two dates which were described by (a) a photo, and (b) a verbal phrase giving the explicit probability that the date would accept S. For example, S might be required to make a preference judgment between the alternatives,

Fairly Likely	Unlikely
Tom	Joe

The names corresponded to pictures of males which varied in terms of physical attractiveness.

Based on equation 4 it was expected that a multiplicative model would describe the photo-probability combination for each date. A functional measurement analysis revealed that the model fit quite well for each S. A group plot of the multiplicative interaction is presented in Figure 1. The plot reveals the predicted fan of diverging straight lines.

The first experiment supported the multiplicative model when probability of being accepted was explicitly presented to S.

Figure 1. Mean preference responses for dates described by a photo and an explicit statement of probability. Points are averaged over alternative dates. High positive values indicate a strong preference for the listed date; zero indicates no preference; negative values indicate a preference for the alternative date. Probabilities are spaced along the horizontal according to their subjective spacing; photograph names are listed as curve parameters. Multiplying model predicts that curves should form a fan of diverging straight lines; both graphical and statistical analyses support the model. From Shanteau & Nagy (1974).

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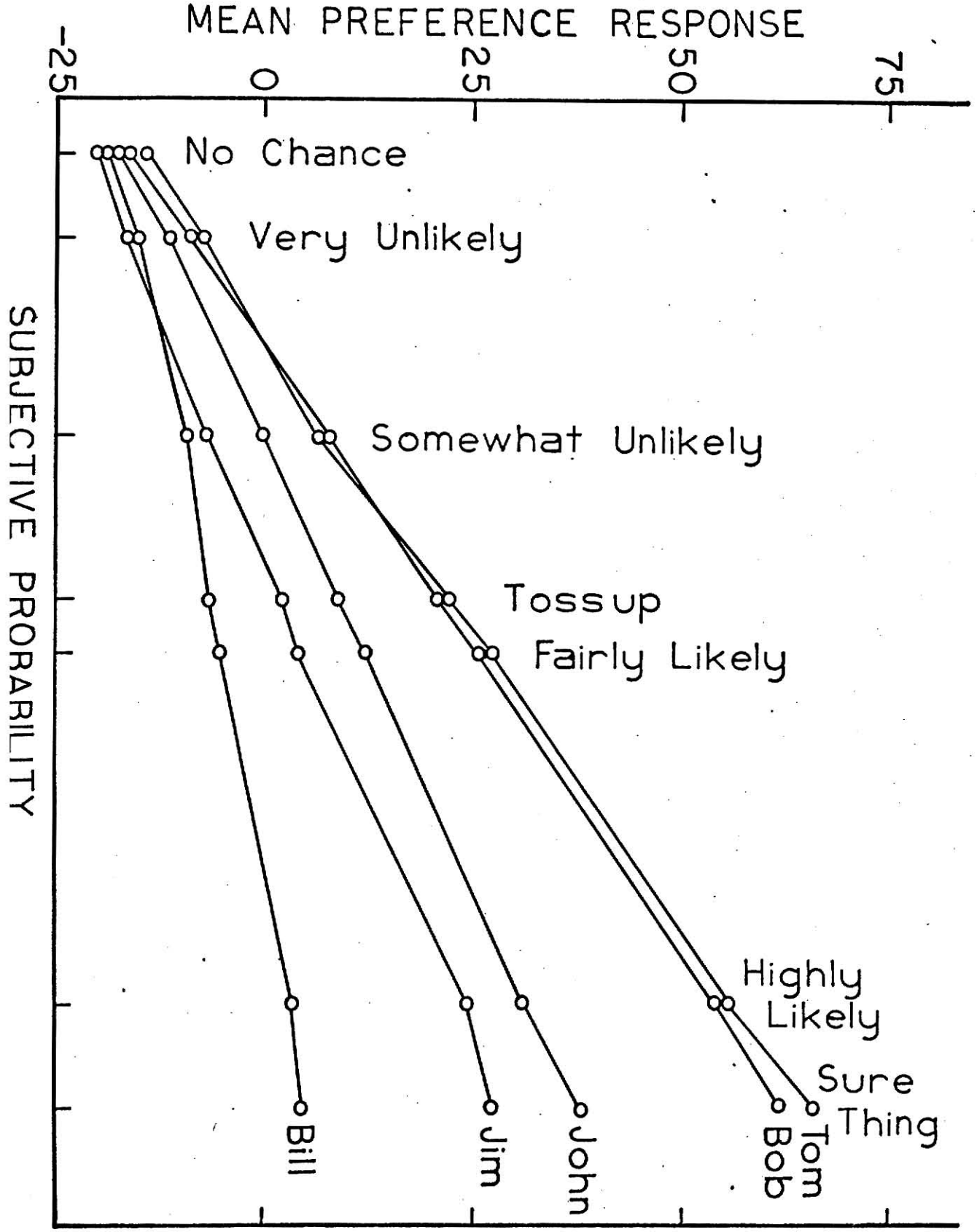

MEAN PREFERENCE RESPONSE
-25
0
25
50
75
SUBJECTIVE PRORABILITY
No Chance
Very Unlikely
Somewhat Unlikely
Tossup
Fairly Likely
Highly Likely
Sure Thing
Bill
Jim
John
Bob
Tom

A second experiment was conducted to examine the model when probability of acceptance was left up to S to implicitly define. The same fifteen Ss made choices and then rated their degree of preference between 21 pairs of dates which were described by photos alone. Ss also estimated the probability of being accepted by each date, and rated each date on a scale of physical attractiveness.

A comparison of each S's preferences to S's physical attractiveness ratings for each of the dates revealed several decision strategies. Of particular interest, 11 of the 15 Ss preferred dates whom they considered to be of intermediate physical attractiveness consistent with matching. The remaining 4 Ss preferred dates which they considered to be the most attractive.

Each S's decision making strategy was described by a linear regression equation where S's response equals the weighted sum of physical attractiveness, probability and physical attractiveness times probability, or:

$$R = b_1 \text{ (Physical attractiveness)} + b_2 \text{ (Probability)} + b_3 \text{ (Physical attractiveness x Probability)}$$

The b_i is the weight of the information; the values within parentheses are subjective stimulus values which were provided by S's physical attractiveness and probability ratings for each of the dates. As pointed out previously, because subjective values incorporate individual differences into the S's strategy equation, they have several advantages over objective values usually used in the regression approach.

Results of these analyses revealed that the 11 Ss who preferred dates of intermediate physical attractiveness showed a significant weight for the physical attractiveness x probability term in support of the multiplicative model in Equation 4. Six of these Ss also relied significantly on the physical attractiveness of the date. The four Ss who chose the most attractive date showed a singificant weight for physical attractiveness as expected. Two of these Ss also showed a marginally significant weight for physical attractiveness x probability probably because it could account for small irregularities in the S's observed preferences.

Based on each S's decision strategy equation predicted responses were computed for each of the 21 preference pairs. Seven Ss revealed significant discrepancies of predicted from observed.

Finally, each S's decision strategy was validated by predicting S's choices. An average of .19 out of 21 choices were predictable from the regression equation used to describe each S's strategy. This latter finding must be interpreted cautiously, however. The choices were from within the same set of data used to derive the predicted strategy of each S. Because they are qualitative judgments they are not guaranteed predictable from S's strategy. However, the fact that they are not independent judgments weakens their power to cross-validate. The present study will avoid this drawback by cross-validating the S's judgment strategy by predicting choices which are made independent of the judgments used to derive the predicted strategy.

In addition, the Shanteau and Nagy study has another important drawback which must be considered. In this study Ss were given a very limited amount of information about the date, i.e. a photo. The present study will provide S with a variety of information about the date. This will extend the results of the Shanteau and Nagy (1974) study as well as allow examination of several new issues of importance to the study of dating choice.

Chapter V

PRESENT EXPERIMENT

The purpose of the present study was to quantitatively describe each S's decision strategy when a variety of information was provided about the date.

The procedure involved presenting S with a number of dates where each date was described by a photo and one of several dating characteristics. This information was varied in a factorial design and was given to S via a written presentation. For example, S was asked to evaluate the following date,

Very Sexually Aggressive

Joe

The name identified a photograph.

Each subject's dating strategy was then described by following 3 discrete steps.

First, S's integration function or the way S combines the information into a single overall judgment was examined using information integration theory. In this experiment Ss were required to integrate three pieces of information: 1) an adverb, 2) a dating characteristic and 3) a photograph. The adverbs are expected to define "how much" of a certain characteristic describes the date; they should act as quantifiers very similar to numbers, and thus, define location along the character dimension. This implies that the adverb-characteristic combination should be described by a multiplying model. This multiplying operation

combines the adverb and characteristic into a single piece of information which, in turn, must be integrated with the photo. This photo and adverb-characteristic combination is expected to follow a simple averaging model. Thus, the expected integration function was,

$$R = \frac{W_1 \text{ (adverb x photo)} + W_2 \text{ (photo)}}{W_1 + W_2} \quad (5)$$

where R is S's rating response, and W_i is the weight of the information.

The simple averaging model in equation 5 predicts additivity and can, therefore, be tested via the ordinary analysis of variance. A significant interaction between the photo and modified dating characteristic implies a non-linear integration function. Graphical and statistical analyses of the data may then be used to help isolate the form of any discrepancy. Thus, the present technique is sensitive to interrelationships among cues, in contrast to previous studies.

The second step was to examine each S's weighting policy. Regression techniques were used to determine the relative importance of the information. Since previous studies have concluded that physical attractiveness is the primary determinant of dating choice (e.g., Walster et al., 1966), examination of the importance of other information relative to physical attractiveness is of utmost importance. Previous studies concerning dating judgments have either ignored the influence of information relative to

physical attractiveness, or have not controlled for the influence of the other information. Consequently, whether or not physical attractiveness dominates S's dating judgments remains unclear.

The third step was to examine the validity of each S's decision strategy by predicting S's choices made in a separate part of the study. This is different from many previous human judgment studies which have used correlational statistics as their sole test of fit and have used split-half reliabilities taken within the same set of data to validate the model. In contrast, this study will cross-validate the model derived from S's date-evaluations by predicting judgments made in a new task, i.e. choices. In addition, both graphical and statistical tests of fit of the model will be used.

As stated previously, a supplementary goal of the present study was to examine matching in a broader sense than has been done in previous dating studies. These studies have generally been concerned with matching only on the physical attractiveness dimension. There is also the possibility that Ss match on a broader range of characteristics such as intelligence, income, or amount of affection they express. There are two theoretical sources for this possibility. First, since social desirability is determined by a number of variables, the matching hypothesis predicts that Ss should match on these characteristics also. Second, the similarity principle for marital choice suggests that individuals should also match on some personality traits. The present experiment examines both of these possibilities from the framework of human judgment methodology.

Additional Points of Interest.

Individual differences.

It is important to emphasize again that the use of the human judgment approach involves a quantitative description of each S's judgments. By examining each S's judgment strategy separately, individual differences in the way Ss combine and weight information are made explicit. In addition, when subjective scale values are used in the regression equation, individual differences in the way Ss value information are taken into consideration. The fact that Ss place quite different values on the same stimulus was shown by Shanteau and Nagy (1974) where S's ratings of physical attractiveness varied considerably. By using subjective scale values these individual differences are incorporated into S's judgment strategy.

Because of this ability to handle individual differences in value the present approach has considerable promise in examining issues such as matching. Matching is essentially a question concerning the relationship of S's own characteristics to the values she/he places on information about the date. For example, a S of intermediate intelligence is expected to place a higher value on a date of intermediate intelligence than would a highly intelligent S. The present approach is designed to make these differences clear.

Stimulus range.

In order to examine S's weighting policy or the relative importance of a stimulus dimension, the subjective stimulus range must be the same for each characteristic in the design. Otherwise the weight of the characteristic is confounded with the stimulus range, and any large effect for the characteristic might reflect

either a large weight or a large range in scale value. To provide a simple example, consider age: age would appear to be considerably more important in the dating situation if it ranged from 10-90 years rather than 18-22.

This experiment will use a technique for dealing with this problem suggested by Anderson & Lopes (1974). Each factor in the design will be defined by a single characteristic, and the levels of the factors obtained by attaching adverb modifiers to each of the characteristics. For example the characteristic humorous was varied in three levels; very humorous, moderately humorous, and not very humorous.

With the above manipulation it is assumed that the characteristic for a given factor defines a single information dimension, and the adverb levels of the characteristic specify location on the characteristic dimension, which, therefore, define the scale values. It is assumed that these adverbs have the same proportionate locations along the different characteristics, meaning that the extremity of the scale values across the different characteristics should be constant. This will be tested in the present study as detailed below.

Method

Subjects.

Ss were 25 female undergraduates given course credit for their participation in three 1 hour sessions. Ss were run for one group meeting devoted to instruction and collection of background information, and two individual experimental sessions.

Design and Procedure.

The two experimental sessions involved (1) a date-evaluation condition in which Ss evaluated the dating desirability of single dates, and (2) a date-choice condition in which Ss made preferential choices between two dates.

Date-Evaluation Condition. In the date-evaluation condition Ss evaluated the dating desirability of single dates which were described by 1) a photograph and/or 2) some other dating characteristic. For example, Ss were asked to evaluate the following date,

Not very humorous

John

The name identified a photograph.

Three stimulus designs were used in the date evaluation condition.

Model-testing design. This design was constructed to examine the weighting policy and integration-function of each S. Each date was described by 1 of 6 dating characteristics modified by 1 of 3 adverbs and paired with 1 of 3 photographs. This resulted in a 6 x 3 x 3 factorial design and a total of 54 dates. The photographs of male Caucasian undergraduates were selected on the basis of pilot work to cover a broad range of physical attractiveness values and to have fairly consistent values across Ss. The verbal stimuli consisted of 6 characteristics which were chosen on the basis of extensive pilot work. First, 15 characteristics were chosen for consideration on the basis of questionnaire data. In the questionnaire Ss (1) rated

approximately 60 characteristics in terms of how much she would like to have the information prior to making a dating decision, (2) gave free form response to the question, "What information would you consider important before making a dating judgment?", and (3) rank ordered several general characteristics (e.g., personality, race) in order of their importance. The 15 characteristics chosen on the basis of the questionnaire were then systematically varied (along with a photo) in a pilot study. Five characteristics were then chosen on the basis of fairly large shifts in S's evaluation of the date as their levels changed. In choosing these, there was the additional restriction that 3 be personality characteristics (humorous, interesting, and mature) as listed in Anderson (1968) and the remaining two characteristics be of some other type, (sexually aggressive, stylish dresser). The sixth characteristic was wealthy and was included for two reasons: (1) I wanted to have an adequate representation of characteristics in addition to personality traits, and (2) because previous investigators had suggested that this might be important for females. The adverb modifiers (very, moderately, and not very) were used to manipulate the levels of each of the dating characteristics. This was done following previous investigators (Anderson & Lopes, 1974).

Matching design. This design was constructed to examine matching on characteristics other than physical attractiveness. The design consisted of 42 dates from a 2 x 7 x 3 factorial. Each date was described by 1 of 2 dating characteristics modified by 1 of 7 adverbs and paried with 1 of 3 photographs. Three different photographs were selected as before. Two dating characteristics were chosen which in pilot work appeared to have

their most positive effect when moderate adverbs were presented. This was done to maximize the possibility of finding matching. In addition, one of the characteristics (intelligent) was chosen because it had been defined as a component of social desirability in past dating research (Walster, et al., 1966). A broad range of adverbs (maximally, very, fairly, moderately, slightly, not very, and minimally) were used to provide a finely graded series of steps for each characteristic.

Single stimulus design. This design was included to provide a test between the adding and averaging model for each S, and to provide subjective scale value estimates to be used in the regression analysis. The design involved 53 dates and consisted of separate presentation of all photos and all characteristics (in both their modified and unmodified form) which appeared in either the model-testing or matching design. Thus, the design involved 6 photos, 39 modified characteristics, and 8 unmodified characteristics.

Procedure. Each date was typed on an index card and all cards were randomly intermixed. The modified characteristic was typed on a card along with a name identifying the photo; the photos appeared on a nearby display board. The information was presented with the photo "name" last to control for a possible primacy effect of the photograph. For those dates described by only 1 piece of information either a name or a characteristic was centered on the stimulus card. Common names were selected from the most frequent part of Battig and Montague's (1969) list and were randomly assigned to the photos.

E started each trial by presenting S with a card. The S

was instructed to rate each date in terms of how much she would want to go out with him. Ss were told that in some cases only one piece of information would be available and in these cases they would base their ratings only on that piece of information.

The rating response was made by sliding a marker along an unmarked bar. The E recorded the S's response from the rear face of the scale which was divided into 100 equal intervals of 4mm. To prevent response scale distortions, the boundaries of the scale were defined by anchor stimuli. The left boundary was defined by an extremely unattractive photo with the words "extremely undesirable date". The right boundary was defined by an extremely attractive photo with the words "extremely desirable date".

The stimuli for the date-evaluation condition were presented for two successive replications within one 1-hour session and were randomly intermixed within each replication.

Date-Choice Condition. In the date-choice condition, Ss made preferential choices between two dates which were described by a photograph and a dating characteristic. For example, S was shown the following two dates and was asked to make a choice,

Not very humorous	Very intelligent
John	Tom

This condition was included to serve as a validating instrument for the decision strategy derived from the date-evaluation condition.

Choice design. The choice pairs were constructed by pairing one of the dates from the model-testing design (which was a 6 x 3 x 3 design) with one of the dates from the matching design (which was a 2 x 7 x 3 design). Two adverb levels (minimally and maximally) were omitted from the matching design for constructing

the preference pairs. In addition, another adverb level (no adverb) was added to the matching design. This resulted in 27 choice pairs from a (6 x 3 x 3) x (2 x 6 x 3) fractional replication (see Addelman, 1962, plan 8, pg. 38, for the specific design used). A balanced design was used in order to maintain statistical independence between stimuli. This gave an adequate sample of all possible choices while minimizing difficulties in interpreting the choice data.

Procedure. Each pair of dates was typed on an index card and the cards were randomly intermixed. The S was instructed to "compare the two dates and make a choice as to which you would prefer to go out with".

S responded by telling E the name of her choice. S then indicated the degree of her preference for the chosen date over the alternative by using the unmarked scale. The left boundary was defined as "no preference", whereas the right boundary was defined as "an extremely strong preference". The right boundary was also described by an anchor stimulus as before; it was defined as S's preference for the extremely attractive anchor photo with the words "extremely desirable date," over the extremely unattractive anchor photo with the words "extremely undesirable date". On the left end anchor appeared the words "no preference". Ss were instructed not to move the marker to this point "unless you have absoutely no preference between the two dates".

The choice stimuli were presented for two replications in the second experimental session.

General Procedure.

In addition to the specific details outlined above for the date-evaluation and date-choice conditions, the Ss were run through the following general procedures.

Preliminary Group Session.

A group meeting consisting of 2-3 Ss was arranged which was devoted to instructions, practice, and collection of background information. First, the Ss were read instructions for the date-evaluation condition and were required to make practice judgments. These practice stimuli were composed of photos and characteristics which were not included in the experimental set of dates. During the practice judgments E checked S's responses for proper understanding of the date-evaluation task. When it was clear that S understood the date-evaluation task this procedure was repeated for the date-choice task. After the practice choice judgments were completed a questionnaire was administered. This questionnaire consisted of 1) background information, 2) a slightly modified version of Moss' (1969) social desirability scale, and 3) questions asking S to rate herself on the same characteristics which would later be used to describe the dates. These responses were needed to assess matching on these characteristics. After the Ss completed the questionnaire their photos were taken and individual sessions for the remainder of the experiment were arranged.

Individual Sessions.

In the first individual session instructions for the date-evaluation condition were briefly reviewed. S then made practice

judgments. After this practice, S explained the date-evaluation task in her own words. When it was clear that S understood the task, the experimental set of stimuli for the date-evaluation condition was presented. For the second individual session a similar procedure was followed for the date-choice condition. After completion of the choice task, S answered questions about her judgment strategy. S was then debriefed and the experiment was terminated.

Results

The Decision Making Strategy.

S's Integration Function.

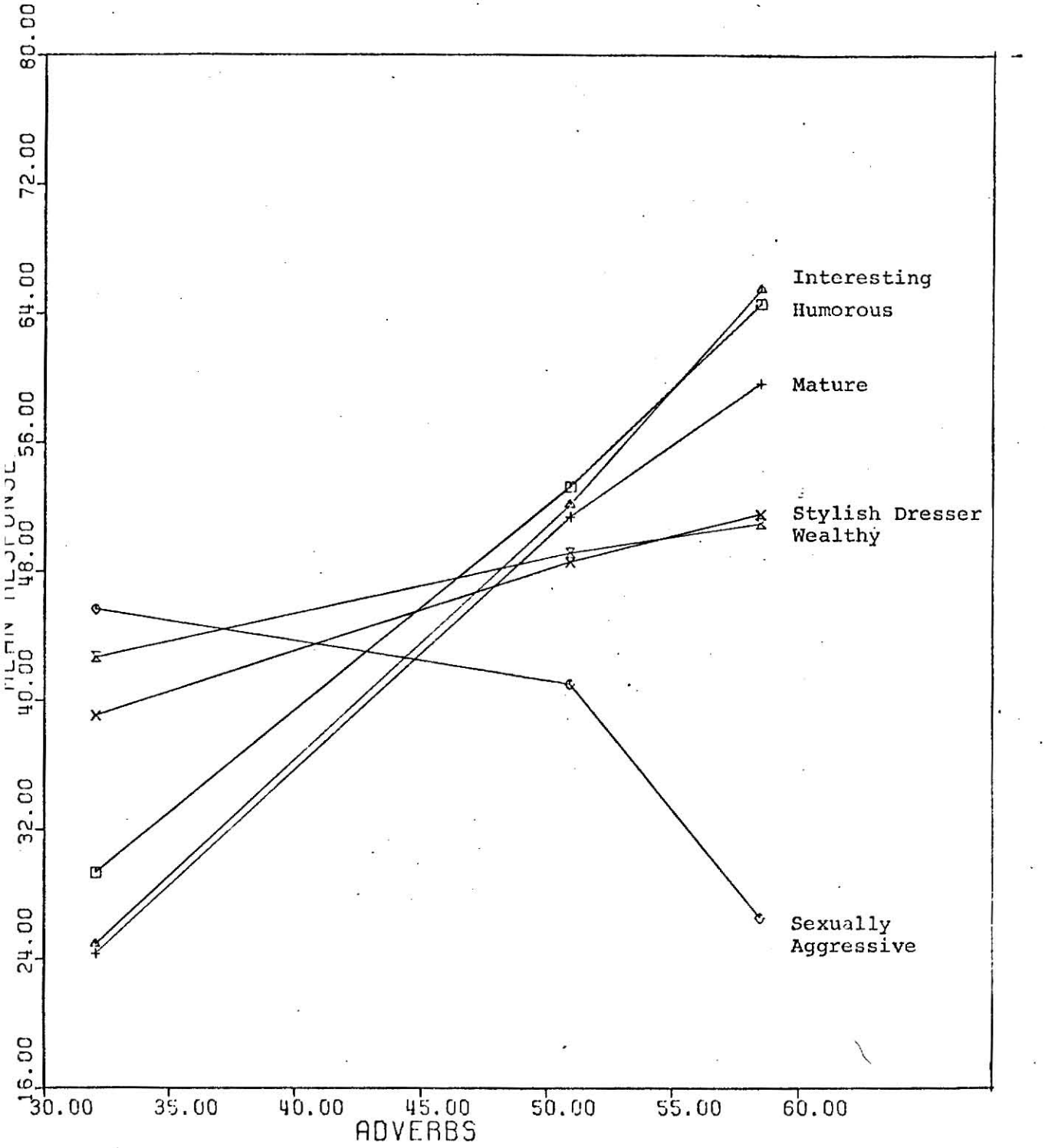
Ss were required to integrate 3 pieces of information about the date into an overall judgment: 1) an adverb, 2) a characteristic, and 3) a photograph.

The adverbs, since they define "how much" of a certain characteristic describes the date, were expected to combine with the characteristics according to a multiplying operation. The adverb and characteristic were expected to combine to form a single piece of information which, in turn, combines with the photo. The combination of adverb-characteristic and photo was expected to follow an averaging model (see Lampel & Anderson, 1968).

Adverb-Characteristic Combination. Figure 2 presents the group plot for the adverb-characteristic combination. The 6 curves in figure 2 represent the 6 dating characteristics from the model-testing design. The marginal means for the adverbs are spaced along the horizontal axis. This maximizes the linearity of

Figure 2. Mean judgments for the adverb-characteristic combinations. Adverbs are spaced along the horizontal according to their subjective spacing; characteristics are listed as curve parameters. A multiplicative model predicts that the curves should be linear. With the exception of Sexually Aggressive the curves are linear and support the model. The nonlinearity of the Sexually Aggressive curve suggests that it may be qualitatively different from the other characteristics.

ADVERB X CHARACTERISTIC



the 6 curves. If the multiplicative model is correct then the 6 curves should form a fan of diverging straight lines. As can be seen in Figure 2 the curves, with the exception of sexually aggressive, show a clear multiplicative pattern with a cross-over between Moderately and Not very. The Sexually Aggressive curve, however, is clearly non-linear. One possible explanation for this is that Ss showed their most negative response to Sexually Aggressive when it was modified by Very. This is in contrast to other characteristics where Very resulted in the most positive response. Another possibility is that there may be an intermediate ideal point for Sexually Aggressive (Coombs, Dawes, & Tversky, 1970); in contrast, the other characteristics appear to have extreme ideal points. As pointed out by Anderson (1974a) the multiplicative model would not be expected to apply to characteristics with intermediate ideal points.

Statistically, the multiplying model implies a significant adverb by characteristic interaction in the analysis-of-variance. Furthermore, the interaction should be concentrated in it's Linear x Linear component and the residual interaction should be insignificant. Results of these analyses including sexually aggressive for each S are presented in columns 1 and 2 in Table 1. Only 2 Ss passed the tests-of-fit outlined above. Four of the remaining 23 Ss did not have a significant adverb-characteristic interaction (column 1). The other 19 Ss revealed significant residual interactions (column 2).

A further analysis of the data suggests that these discrepancies were, in part, due to the sexually aggressive

Table 1

Tests of Fit for Multiplying Model for Adverb-Characteristic Combination: F-ratio and Residual Interaction With and Without "Sexually Aggressive" Included

Subjects	With "Sexually Aggressive"		Without "Sexually Aggressive"	
	F-ratio: Adverb x Characteristic Interaction df = 10/54	Residual Interaction df = 9/54	F-ratio: Adverb x Characteristic Interaction df = 8/45	Residual Interaction df = 7/45
1	2.20		3.11*	3.43*
2	27.04*	25.85*	7.56*	2.13
3	10.84*	11.88*	8.61*	7.05*
4	15.88*	16.45*	20.45*	22.46*
5	14.55*	2.61	7.70*	2.97
6	1.81		.56	
7	15.40*	3.03*	4.86*	2.90
8	20.59*	11.78*	5.71*	1.89
9	13.65*	11.99*	14.56*	16.03*
10	15.62*	8.60*	5.26*	4.80*
11	28.65*	15.00*	37.27*	10.38*
12	234.17*	186.78*	39.46*	37.27*
13	8.36*	8.94*	6.60*	3.83*
14	24.72*	8.92*	15.85*	4.79*
15	10.49*	1.46	5.18*	1.14
16	2.81*	2.94*	1.58	
17	11.24*	12.27*	9.57*	10.81*
18	.99		.65	
19	5.88*	9.22*	3.37*	3.30*
20	17.82*	13.68*	9.51*	7.44*
21	13.78*	6.36*	9.53*	8.98*
22	8.98*	9.10*	4.31*	2.90
23	6.35*	6.12*	.64	
24	4.98*	5.13*	3.27*	3.50*
25	2.07		2.42	

*p<.01

characteristic. Individual S analyses omitting sexually aggressive are reported in columns 3 and 4 in Table 1. Although only 6 Ss passed the tests-of-fit, discrepancies for the majority of Ss were smaller than when sexually aggressive was included.

(Adverb-Characteristic) and Photo Combination. The adverb-characteristic was expected to combine with the photo according to an averaging model. If the averaging model is equal-weighted then the assumption of additivity should hold and plots of both the adverb by photo interaction, and the characteristics by photo interaction should reveal parallelism. Figure 3a represents the adverb by photo interaction. The three solid lines in figure 3a represent the three levels of adverbs and are plotted against the photos along the horizontal axis. As can be seen in figure 3a the lines are very close to parallel. In addition, similar plots of the adverb by photo interaction for each characteristic in the model-testing design revealed a clear pattern of parallelism. Figure 3b represents the characteristic-photo interaction. Although deviations are apparent, the data seem to follow a general pattern of parallelism.

A statistical test of deviations from parallelism is provided by the analysis-of-variance. If the S's judgments can be described by an equal weighting averaging model then both the adverb and characteristic should be independent of the photograph, and all two-way and three-way interactions involving the photo should be insignificant. A group analysis-of-variance supported the additivity prediction. The characteristic by photo interaction was not significant, F (10, 240) = 2.12, $p > .01$ as were the

Figure 3. Mean judgments of dates described by a photo and adverb-modified characteristic. The left panel represents the adverb by photo interaction (averaged over characteristics); the 3 solid lines correspond to adverbs and are plotted against the subjective values for photos spaced along the horizontal. The right panel represents the characteristic by photo interaction (averaged over adverbs) with the 6 characteristics plotted against the photos. Both plots are close to parallel and support additivity. The dotted lines represent the mean response to the photos alone. In both panels the dotted line is steeper than the other curves and supports the averaging model.

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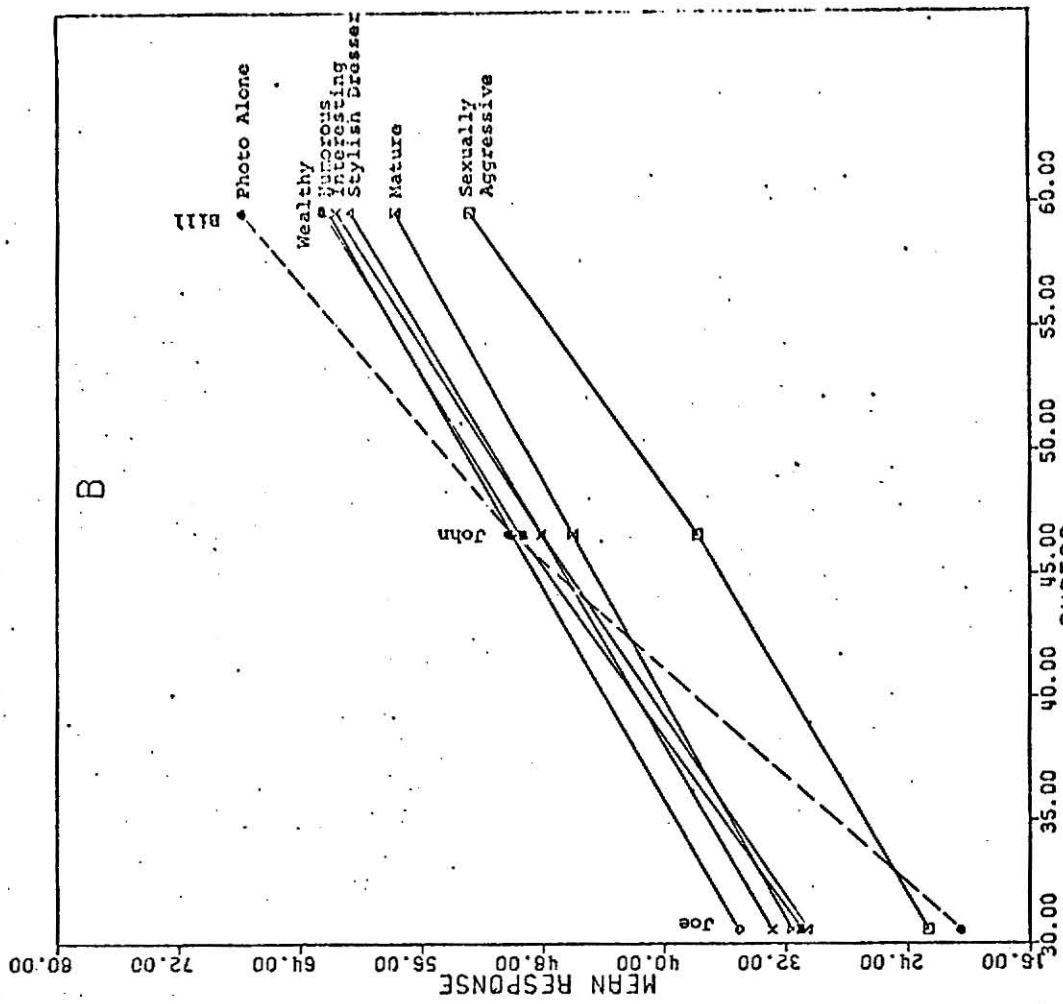
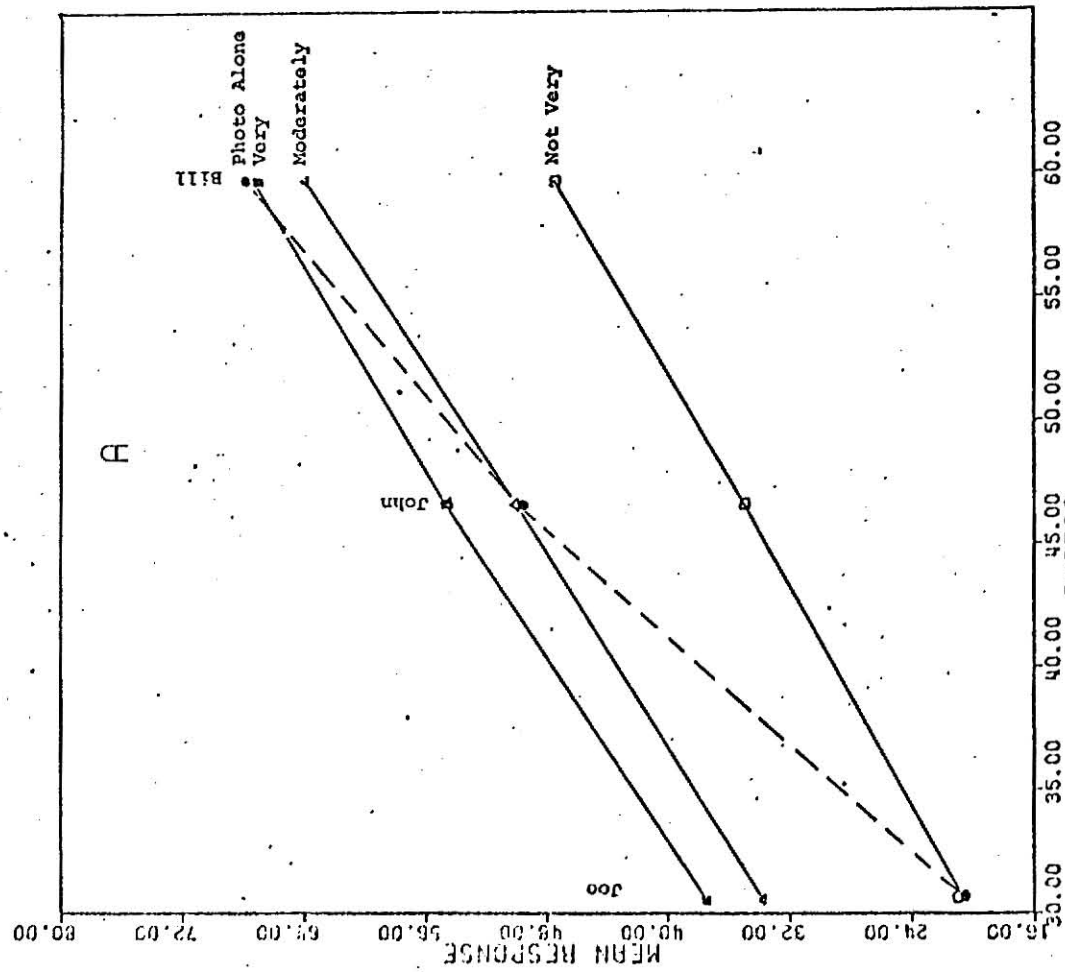


PHOTO X ADVERB



adverb by photo, F (4, 96) = 1.95, $p>.01$, and adverb by characteristic by photo, F (20, 480) = 1.34, $p>.01$, interactions.

Since this study is primarily concerned with describing the integration function of each S, a group analysis alone does not provide an adequate test of the model. It's possible that individual Ss showed significant deviations which are hidden in the group data. Columns 1, 2, and 3 of Table 2 summarize the single S analyses. Only 4 Ss revealed a significant interaction; in all 4 cases the interaction was between the photo and adverb. A further analysis revealed that the photo x adverb interaction for 3 of these 4 subjects was multiplicative; for these 3 Ss the interaction was concentrated in it's Linear by Linear component. Furthermore, plots of the adverb against the photos revealed a divergence of the adverbs as the photos became less attractive. This is consistent with data reported by Lampel and Anderson (1968). These authors interpreted this pattern as a differential-weighted-averaging model, with the weight of other information (in their case adjectives) varying inversely with the weight of the photo. Since negative information (e.g. an unattractive photo) typically carries more weight than positive information, a divergence towards the unattractive photo is expected. In summary, with the exception of these 4 Ss, additivity was supported at the individual S level.

Adding versus Averaging. The previous graphical and statistical tests support additivity; however, both averaging and adding models predict additivity. Therefore, an additional test is necessary to discriminate between these two models.

Table 2

Tests of Fit for Adding Model for (Adverb-Characteristic) and Photo Combination

Subjects	Characteristic x Photo Interaction df = 10/54	Adverb x Photo Interaction df = 4/54	Adverb x Characteristic x Photo Interaction df = 20/54
1	.63	1.25	1.11
2	1.32	.21	.99
3	1.74	3.20	1.03
4	2.63	5.13*	1.02
5	1.04	2.88	1.48
6	.70	2.77	.78
7	1.11	1.42	1.33
8	2.28	4.96*	1.57
9	1.24	1.19	1.68
10	1.39	.15	1.46
11	1.21	.80	.73
12	.61	1.29	.58
13	1.14	4.16*	1.10
14	.35	.40	.94
15	.49	.47	.76
16	1.03	1.44	.87
17	.97	.73	.79
18	.48	1.51	.49
19	.69	1.66	.57
20	1.86	2.68	1.06
21	.96	.87	.74
22	1.03	.79	1.02
23	.95	12.29*	1.88
24	1.28	2.05	.54
25	1.30	1.19	.72

*$p < .01$

The blackened points in figure 3a provides a critical test between the adding and averaging models. The blackened circle represents Ss' mean responses to the attractive photo (Bill) alone. The blackened square represents Ss' mean responses to the same photo when positively valued information (i.e. very) is combined with it. If the appropriate model is an adding one then Ss' responses to the attractive photo should become more positive when positively valued information is combined with it. On the other hand, an averaging model would predict that Ss' responses to the attractive photo would decrease when positively valued information is added. Since the point for the photo-characteristic (blackened circle) is below the point for the photo alone (blackened square), the averaging model was supported. The averaging model was also supported for the adjective-photo combination in figure 3b.

The slope of the dotted line provides a general statistical test between adding and averaging models. Adding implies that the dotted line should be parallel to the solid lines whereas averaging predicts the dotted line should be steeper. As shown in Figures 3a and 3b, averaging is clearly supported for the combination of photos with both adverbs and characteristics.

Ss' Weighting Policy.

Support for the equal-weighted averaging model allowed the use of regression analyses to examine each Ss' weighting policy. Results of this analysis are presented in Table 3. Columns 1-3 report the (1) relative weight, (2) beta weight, and (3) proportion of variance for the photograph dimension. Columns 4-6 report

Table 3

Relative Weight, Beta Weight, and Proportion of Variance for Photo vs. Characteristic

Subjects	Photo			Characteristics		
	Relative Weight	Beta Weight	Proportion of Variance	Relative Weight	Beta Weight	Proportion of Variance
1	.45	.50*	.25	.55	.61*	.37
2	.33	.41*	.17	.67	.84*	.71
3	.48	.59*	.35	.52	.63*	.40
4	.24	.26*	.07	.76	.81*	.66
5	.58	.75*	.56	.42	.54*	.29
6	.54	.51*	.84	.46	.44*	.06
7	.48	.61*	.37	.52	.67*	.44
8	.41	.52*	.26	.59	.75*	.57
9	.13	.12	.01	.87	.80*	.64
10	.46	.52*	.27	.54	.61*	.37
11	.38	.48*	.23	.62	.79*	.63
12	-.02	-.02	.00	1.02	.99*	.98
13	.71	.89*	.78	.29	.37*	.13
14	.01	.01	.00	.99	.96*	.91
15	.52	.68*	.46	.48	.93*	.39
16	.85	.93*	.86	.15	.94*	.03
17	.50	.65*	.42	.50	.91*	.41
18	.53	.55*	.31	.47	.73*	.23
19	.43	.52*	.27	.57	.85*	.46
20	.32	.39*	.15	.68	.92*	.70
21	.56	.70*	.38	.44	.62*	.24
22	.37	.45*	.20	.63	.77*	.59
23	.89	.98*	.96	.11	.13*	.02
24	.67	.86*	.74	.33	.42*	.16
25	.78	.92*	.85	.22	.25*	.06
$\bar{X}$			.39			.42

*p=<.01

complimentary data for the adverb-modified-characteristics. A comparison of the relative weights for the photo vs. characteristics reveals widespread individual differences in the weighting policies of subjects. In general, however, it appears that physical attractiveness did not dominate Ss' judgments as expected. Twenty-three Ss showed a significant weight for the photos, t (50), $p < .01$. All Ss showed a significant weight for the characteristics, t (50), $p < .01$. The mean proportion of variance accounted for by photos was .39; for the characteristics it was .42. This difference was nonsignificant, t (25) = .26, $p > .01$.

Weights for each of the dating characteristics were also determined for each S. The number of Ss who showed significant weights for each characteristic and the mean proportion of variance accounted for by each of the characteristics are presented in Table 4. These results suggest that personality descriptions are the most important information in the dating situation, whereas descriptions of the dates material assets are the least important.

Isolation of Weights from Stimulus Range. Interpretation of these weights requires care. In order to make any conclusion about the importance of a characteristic the subjective spacing of the adverbs must be the same for each characteristic. Otherwise, the extremity of the adverb range is confounded with the weight, and any influence of the characteristic on the S's judgment may reflect either weight or adverb range.

Because of this possible confounding, the assumption that the subjective range for the adverbs is constant across the

Table 4

Number of Subjects with a Significant Weight and the Mean Proportion of Variance for Each Characteristic

Characteristic	Number of Subjects with Significant Weight	Mean Proportion of Variance
Mature	20	.58
Interesting	22	.52
Humorous	21	.52
Sexually Aggressive	12	.28
Stylish Dresser	10	.19
Wealthy	4	.15

different characteristics was tested using the following technique. For each of the dating characteristics the adverb marginal means within each replication were rescaled by assigning arbitrary values to the zero and unit of the scale. In this case, 10 was assigned to the highest adverb mean and 0 was assigned to the lowest. Since an additive model was supported these values provide valid subjective scale values for the adverbs. These scale values were then compared across the characteristics for significant differences. An insignificant main effect supports the constancy of the adverb range. Only two S showed a significant main effect for the rescaled adverb values. Since this test was satisfied the adverb scale values were compared to the direct estimates of the adverbs which were used in the regression analysis to determine the weights. These direct estimates were rescaled in the same manner as with the scale values. If there is no difference between the two sets of adverb values then the main effect for METHOD used to scale should be insignificant. In addition, the interaction between METHOD and levels of the CHARACTERISTICS should be insignificant. All but one S satisfied this test. Thus, the estimates of weights appear to be valid estimates of the importance S placed on the information for 23 of the 25 Ss.

Choices.

The choice pairs were constructed by pairing dates from the model-testing and matching designs. These choices were predicted using the following procedure. Predicted responses for each of the stimulus combinations in the model-testing and matching designs were determined by entering into S's strategy

equation the appropriate weights and scale values for that stimulus combination. For example, the predicted response for the date,

Very wealthy

Joe

was determined by the following equation,

R = (weight "photo")(scale value "Joe") + (weight "wealth")(scale value "very wealthy")

These predicted responses were then combined to correspond to the choice pairs in the choice design. The date with the highest response was S's predicted choice.

Table 5 presents the results for each S and the means for the group. An average of 19/24 choices or 79% were correctly predicted from each S's strategy. Furthermore, an average of 1.72 of the choices not accounted for by S's strategy were no preferences which could not be predicted from any model. Taking these into consideration, 87% of the predictable choices were correctly predicted from S's decision making strategy.

More detailed analyses revealed that errors were generally small in magnitude. Most errors occurred when the S's model predicted a slight preference for one date while S actually showed a slight preference for the other. Also, response reversals across the 2 replications often accompanied this situation.

Matching.

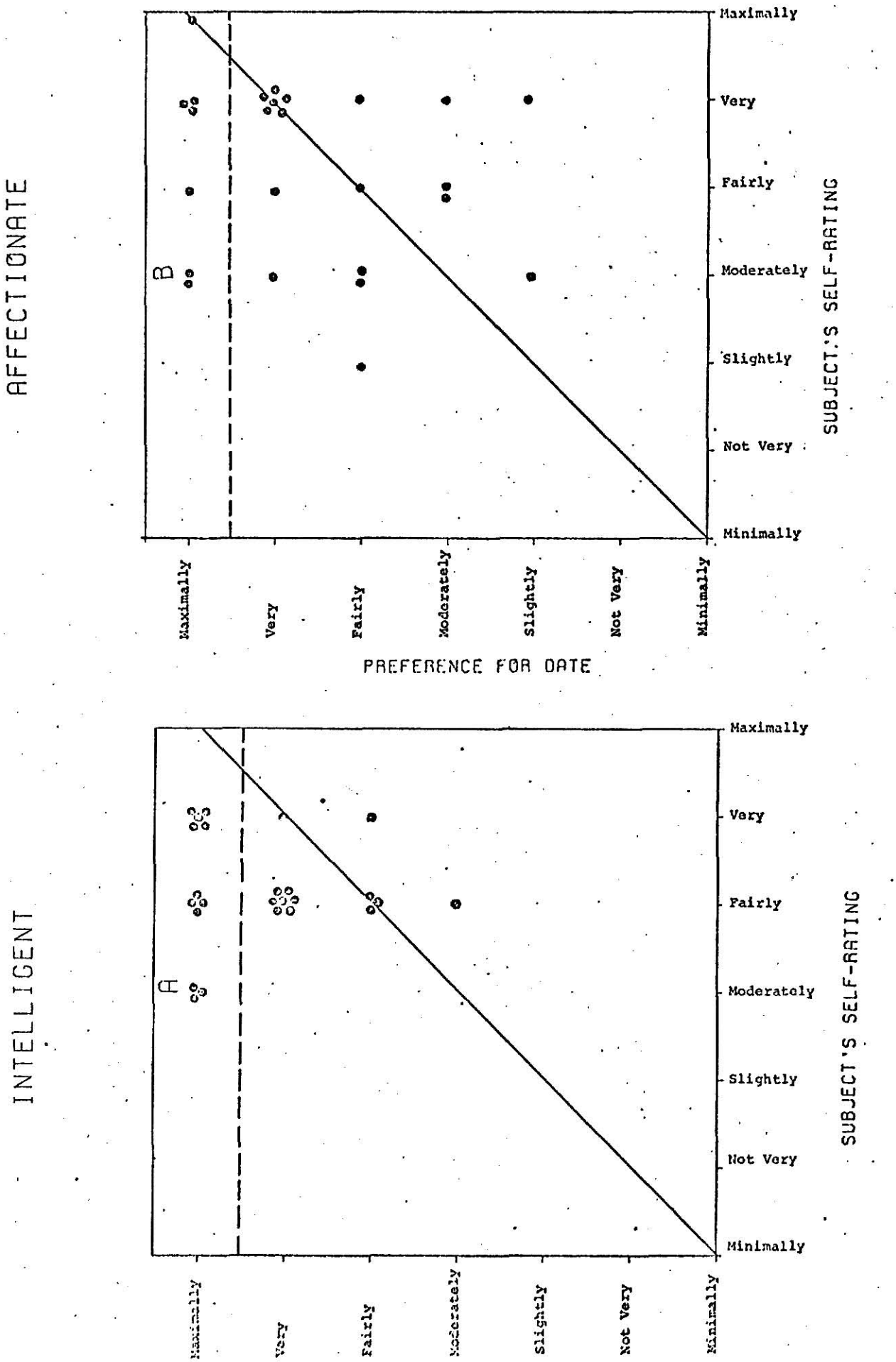
The matching results are presented in Figures 4a and 4b. These figures plot S's maximum point of preference along each characteristic against her rating of her own standing on that characteristic. As the points below the horizontal dotted line

Table 5

Number of Correct Predictions, No Preferences, and Incorrect Predictions for Each Subject

Subjects	Correct Predictions	No Preferences	Incorrect Predictions
1	23	0	1
2	16	3	5
3	20	2	2
4	20	1	3
5	21	0	3
6	21	0	3
7	20	0	4
8	19	3	2
9	20	0	4
10	21	0	3
11	15	3	6
12	21	0	3
13	18	0	6
14	21	1	2
15	18	1	2
16	17	5	2
17	16	4	4
18	17	6	1
19	18	4	2
20	20	0	4
21	15	3	6
22	16	6	2
23	21	2	1
24	19	0	5
25	22	1	1
$\overline{X}$	19.00	1.80	3.20
%	.79	.075	.135

Figure 4. Subject's maximum point of preference along the intelligence dimension (left panel) and affectionate dimension (right panel) plotted against the subject's self-rating along each dimension. Points below the dotted line represent subjects who did not prefer dates described as maximally intelligent or maximally affectionate. The diagonal line represents the predicted responses of subjects if they preferred dates of equal intelligence or equally affectionate to themselves. Plots show that subjects generally did not prefer dates of identical standing on the characteristics. However, most subjects preferred dates equal to or more intelligent or affectionate than themselves.


AFFECTIONATE
B
Maximally
Very
Fairly
Moderately
Slightly
Not Very
Minimally
SUBJECT'S SELF-RATING
PREFERENCE FOR DATE
INTELLIGENT
A
SUBJECT'S SELF-RATING

show, 13 out of 25 Ss preferred dates of less than maximal intelligence and 18 out of 25 Ss preferred dates described as less than maximally affectionate. However, these cases did not appear to be strictly related to Ss' standing on the characteristics. If Ss prefer dates of identical standing on the characteristics to themselves then these points should lie on the diagonal line. Only 4 cases of strict matching occurred for intelligence, and 8 cases for affectionate. However, one point of interest is that Ss generally preferred dates of equal to or slightly more intelligent or affectionate than themselves. Only 2 Ss preferred dates less intelligent as shown by the two points below the diagonal. Six Ss preferred dates less affectionate then themselves.

Discussion

The Decision Making Strategy.

S's Integration Function.

A compound multiplying and averaging model was expected to describe each S's integration function. The adverbs were expected to combine with the characteristics according to a multiplying operation to form a single piece of information. This value was predicted to combine with the photograph by an averaging model.

With the exception of sexually-aggressive, the adverb-characteristic combination appeared to be multiplicative. Although it's not totally clear why "sexually-aggressive" caused problems for the multiplying model, there is some indication that it was due to (1) a negative slope for this characteristic, and/or (2) an intermediate-ideal point. In either case deviations from the multiplying model would be expected.

The averaging model for the adverb-characteristic and photo combination fared quite well. Two kinds of evidence supported an equal-weighted averaging model. First, the prediction of additivity was supported by the parallelism of the data. Second, the averaging model was supported by the qualitative tests presented in figures 3a and 3b. Thus, both quantitative and qualitative support was found for the averaging model.

The emphasis of the present approach on S's integration function is new to the area of dating research. Previous dating studies have been relatively unconcerned with the cognitive processing mechanisms underlying dating choice. On the other hand, the present approach takes the viewpoint that many issues cannot be examined independently of the S's cognitive processes. For example, only if S's integration function is known can reliable estimates of S's weights (i.e., the importance of various types of information) be determined. Otherwise, the weight of the stimulus may be confounded with it's subjective range.

A study by Lampel and Anderson (1968) clearly illustrates the need to consider S's integration function in the dating situation. These authors supported a differential-weighting-averaging model for S's integration function when a photo and two personality traits described the date. According to this model, the weight S placed on the photo varied inversely with the value of the photo. Thus, if S considered the date to be extremely unattractive the weight for the photo was large. Consequently, the weight placed on the personality information paired with it was small. In other words, the weight of the

adjective depended on the photo with which it was paired. This provides a clear indication of the need to examine S's integration function in the dating situation. The present study did not find evidence for differential weighting, but, there were numerous differences between the two studies which could account for this discrepancy. For instance, Lampel and Anderson used only group analyses which may not have reflected the strategy of many Ss.

In general, the success of the present approach provides additional support for the theoretical principle that a variety of social judgments follow simple algebraic models. The approach also has considerable promise for examining other issues of importance concerning dating judgments. For example, since Ss gradually acquire information in the dating situation, the present approach could be extended to dating judgments when information about the date is presented in successive steps rather than simultaneously.

S's Weighting Policy.

Examination of each S's weighting policy revealed several interesting findings. Of particular importance was that physical attractiveness did not dominate S's judgments as suggested by Walster et al. (1966). These results must be viewed cautiously, however. Whereas this study used photos of the date, acutal face-to-face contact in the dating situation may increase the potency of physical attractiveness. However, results by Byrne et al. (1970) suggest otherwise. These authors found a significant influence for both attitudinal information and physical attractiveness after S's were allowed to interact on an "Coke Date".

On the basis of the results of the present study one might speculate that physical attractiveness is most important in the initial stages of interaction prior to the acquisition of other relevant information. This issue could be further clarified by allowing S's to ask for information which they consider important. If the above statement is correct S's should ask for physical attractiveness first, but it's influence should decrease as other information is acquired. In effect, this procedure would provide a laboratory simulation of the steps S goes through while making a dating judgment. The present approach could be used to examine S's weighting policy.

An analysis of the weights for each of the dating characteristics showed additional findings of interest. For example, descriptions of the dates maturity, humor, and how interesting he is had a much greater influence on S's judgments than descriptions of the date's material assets (wealth and style of dress). This is interesting in view of results by Coombs and Kenkel (1961) which showed that females have more rigid standards than males that their dates possess socially desirable characteristics such as fraternal membership, campus leadership, and style of dress. These results were interpreted as reflecting the female's concern over dating as a means to marriage. However, the present findings show that wealth has relatively little influence on S's dating judgments and suggests that speculations as to why females desire more socially desirable dates than males may be overlooking the small influence of these characteristics for both sexes in the first place.

Choices.

Analyses of S's integration function and weighting policy provided a quantitative description of each S's decision making strategy. In general, the S's decision making strategy was successful in predicting S's choices. This provides support for the S's decision making strategy in predicting judgments made independently of the ones used to derive the predicted strategy.

The success of the present approach in predicting S's judgments is, in part, due to the ability of this approach to handle individual differences. By examining each S's judgments, differences in the way Ss integrate, weight, and value information are made explicit. This is in contrast to previous studies which have pooled individual differences into error, thereby, weakening their power.

Not only do these individual differences require special consideration when describing S's strategy, they also imply that considerable care should be taken concerning the selection of stimuli. As was done in the present study, extensive pilot work will generally be needed to ensure an appropriate range of stimuli for each S. In some cases, a preliminary session for stimulus selection for each S may be desirable.

One further point deserves mentioning concerning the success of the present study in predicting S's choices. This implies that the combination of information integration theory and the regression approach may be extremely useful in a variety of situations where the explicit description of S's decision strategy is desirable. The present study which drew from the strengths of

both approaches implies that they are not necessarily opposing in nature and the joint application of these techniques may be fruitful in future research.

Matching.

For "intelligence" a weak tendency towards matching occurred. Only 4 S's preferred dates equally intelligent to themselves as predicted by the matching hypothesis. However, in most cases Ss did prefer dates either equally or more intelligent than themselves.

The lack of a clearer relationship between the date's intelligence and the self-perceived intelligence of S may be the result of trunkated sampling. College students, because they are generally the more intelligent members of the dating population, would be expected to prefer dates of high intelligence even though matching. If a broader range of Ss had been used a greater matching effect may have occurred.

A slightly stronger trend towards matching was observed for the affectionate dimension. S's placed quite different values on the different levels of affection which described the date. Although Ss did not always choose dates equally affectionate to themselves, there was some indication that S's self-rating was related to her judgment. As with intelligence, Ss preferred dates either equally or slightly more affectionate than themselves. Thus, the present results, although they do not support the strict interpretation of matching, do provide evidence of a tendency towards matching on these characteristics.

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FEMALE DATING STRATEGIES AS A FUNCTION OF PHYSICAL ATTRACTIVENESS AND OTHER SOCIAL CHARACTERISTICS OF MALES

by

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ABSTRACT

A human judgment approach was used to examine female dating strategies when a variety of information was provided about potential dates. Previous studies have generally failed to explicitly provide information other than the date's physical attractiveness. In cases where other information was provided either, 1) appropriate techniques were not used to isolate it's influence, or 2) the information was not representative of information typically available in the dating situation. In contrast, this study provided information which pilot Ss indicated to be important in the dating situation.

Additionally, previous studies have not examined the cognitive processes underlying dating choice. A human judgment approach, however, allows explicit description of these processes.

Specifically, the major goal was to quantitatively describe each S's decision strategy. This required 3 steps to be taken in turn. First, the integration function or the way S combines information into a final judgment was examined. Second, S's weighting policy was examined by looking at the importance placed on each piece of information. Finally, the integration function and weighting policy were incorporated into a single equation to describe S's decision strategy, and was validated via the accuracy with which it could predict S's subsequent dating choices.

A supplementary goal was to examine the hypothesis that Ss prefer dates of similar social desirability to themselves, (Walster, Aronson, Abrahams, & Rottman, 1966). Whereas previous stuides have examined matching only on physical attractiveness, the present study examined matching on other characteristics as well.

Procedure. Twenty-five female Ss were run individually through two conditions.

Date-Evaluation condition. Ss rated the desirability of dates described by (1) a photo, and (2) an adverb-modified characteristic. For example,

John

Very Wealthy

The name referred to a photo; all stimuli were selected on the basis of pretesting. Responses were made on a continuous unmarked rating scale. This condition consisted of 2 major designs: 1) The model-testing design which consisted of a 6x3x3 factorial with 6 characteristics modified by 3 adverbs combined with 3 photos. This allowed the use of functional measurement and regression analyses to describe the integration function and weighting policy of each S. 2) The matching design which consisted of a 2x7x3 design with 2 characteristics modified by 7 adverbs combined with 3 photos. This design allowed examination of matching on the 2 characteristics.

Date-Choice condition. Ss made choices between 27 pairs of dates which were constructed by pairing dates from the model-testing and matching designs. This allowed validation of S's

strategy in a task different from the one used to derive the strategy.

Results. Ss were required to integrate 3 pieces of information: 1) an adverb, 2) a characteristic, and 3) a photo. A two-step integration function was supported in which Ss first multiplied the adverb and characteristic together and then averaged this combination with the photo. Psychologically, this implies that Ss modified the characteristic by the adverb and then balanced this result against the photo.

The weighting policy revealed some intersting findings. Contrary to previous studies physical attractiveness did not dominate S's judgments. The weights for the characteristics and photo were approximately equal.

The choice analysis revealed some promising results; an average of 87% of Ss' choices were predictable from the decision strategy equations.

Finally, in agreement with the matching hypothesis, a number of Ss showed preference for intermediate levels of the 2 characteristics. However, this was not always related to S's standing on these characteristics.

Conclusions. The human judgment approach was found to be a useful approach to the study of dating. In contrast to previous techniques, this approach was able to quantitatively describe each S's strategy. Additionally, these quantitative descriptions were able to predict dating choices made in a separate part of the study. In all, this provided encouraging support for a human judgment approach to dating choice.