Most models of marital choice are attempts to explain choices within the field of available eligibles. The essence of compatibility testing is that people select their mates by evaluating the match between psychological characteristics after sorting the available field on the basis of social characteristics. A compatibility model seems to require that either perceived compatibility in itself increases commitment, or that actual compatibility provides a higher proportion of rewarding interactions and thus increases commitment. However, the compatibility testing models require more dating experience than most people have. Data from the Pennsylvania State University PAIR Project, a longitudinal study of 168 newlywed couples, supports this argument. Couples were interviewed regarding their dating history for the 5 years prior to dating their spouse exclusively. Results showed husbands reported an average of 2.6, and wives reported an average of 2.21 more-than-casual dating partners other than the spouse. Over half of the subjects had two or fewer regular dating partners other than the spouse, compared to the 11 dating partners suggested by the compatibility testing model. Results cast doubt on the image of compatibility testing as involving a wide search through a field of available eligibles. (JAC)
TESTING "COMPATIBILITY TESTING"

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Abstract

Theoretical issues underlying compatibility testing models of mate selection are examined. Cognitive and behavioral versions of compatibility testing are differentiated. It is argued that compatibility testing models require more dating experience than individuals usually have had. Dating history data from the Penn State PAIR Project, a longitudinal study of 168 newlywed couples, are presented in support of this argument. Husbands reported an average of 2.6, and wives an average of 2.2, more-than-casual dating partners other than the spouse. These figures are inconsistent with the notion of a wide search through the field of eligible spouse candidates.
This paper examines some theoretical issues underlying the notion of compatibility testing in marital choice. The term "compatibility" comprises both similarity and complementarity, and it refers to psychological characteristics as contrasted with social ones.

Virtually all comprehensive models of marital choice (e.g., Murstein, 1976; Adams, 1979), are now attempts to explain choices within the field of available eligibles. This is because a great many studies on the social characteristics of American marriage partners have demonstrated high rates of homogamy on such characteristics as age, social class, religious affiliation, socially-defined race, and educational attainment (see Burchinal, 1964 and Kerckhoff, 1974 for reviews). These results have been interpreted as demonstrating the effects of both endogamous norms and propinquity on marital choice (see Kerckhoff, 1974), with their effects working in combination and difficult if not impossible to disentangle.

Besides this similarity found in social characteristics, a common finding has been that spouses show a modest but not negligible degree of similarity on certain psychological characteristics such as attitudes, preferences, and values; and there have been studies attempting to discover complementarity of personality attributes as well, with mixed results (see Burchinal, 1964 and Murstein, 1976 for reviews). Several authors (e.g., Bolton, 1961; Burchinal, 1964; and Udry, 1966) have pointed out that psychological attributes may be differentially associated with social characteristics, and that it is therefore
unclear whether selection on the basis of psychological attributes is actually occurring. But for the most part, the results showing a modest degree of psychological compatibility have been taken as implying that people select their mates by evaluating the match between the two partners' psychological attributes after they have sorted through the field of available others on the basis of social characteristics. This is the essence of the compatibility testing notion.

It may be worthwhile to draw a contrast between compatibility testing and two other conceptions of marital choice. A second orientation to mate selection can be called the nonrational motivated choice model. This approach is psychoanalytical; it stresses the importance of attraction to potential mates who exhibit physical or psychological attributes of one's opposite-sex parent (see Murstein, 1976 for a review), or who provide a replication of one's birth order and the relationship dynamics this implies.

A third orientation to marital choice can be called the interpersonal process model; as do the other models, it comes in a variety of forms. Like the compatibility testing model, the interpersonal process model accepts the operation of endogamous norms (supplemented by other sources of attraction) early in the relationship, but minimizes the importance of compatibility testing later in the relationship. Instead, progress toward dyadic commitment is seen as resulting from the operation of each person's subjective processes, the accumulation of rewarding interpersonal events, the couple's definition of themselves as a pair, and environmental reinforcement of "couple-ness." Complex theories of dyadic commitment and marital choice, such as those proposed by Lewis (1972), Murstein (1976), and Adams (1979) include aspects of both compatibility testing and interpersonal process. So we can consider
compatibility testing either as a model of marital choice in its own right or as a component of more complex models.

What we want to do here is to look closely at some of the forms that a compatibility testing notion can take, and then to examine a key assumption underlying these forms of compatibility testing. This discussion is based on a review of the theoretical and empirical literature bearing on compatibility testing (especially Winch, 1958; Kerckhoff & Davis, 1962; Levinger, Senn, & Jorgensen, 1970; Murstein, 1970, 1976; Lewis, 1972, 1973; Hill et al, 1976), as well as a review of some conceptual critiques of compatibility testing and of the evidence that has been brought to bear on it (Rubin & Levinger, 1974; Huston & Levinger, 1978; Huston et al., 1981; Levinger, 1983).

Compatibility testing notions can be characterized as adopting one, or the other, or both of the following two perspectives. The first involves the conscious assessment of compatibility. It is presumed that people choosing a mate consciously evaluate their partner's psychological characteristics and the proceed to make a series of judgments about the degree of matching between the two partners' attributes (Huston et al., 1981). These judgments are based on information obtained through the partner's verbal disclosures, inferences made from observation of the partner's behavior and information obtained indirectly such as from kin and friends. As information indicating the existence of compatibility becomes increasingly available, commitment and progress toward marriage are thought to result. Thus, if the partners do not perceive indications of matching, the relationship is more likely to be discontinued or to stop progressing. The correspondence between perceived and actual compatibility presumably increases as the relationship continues; and people are seen as motivated to perceive accurately, so that they can choose rationally.
The second perspective involves the consequences of compatibility for the couple's interaction. Here, the presumption is that actual compatibility exerts an influence on the interaction process regardless of whether the partners have any thoughts about whether their characteristics match. Compatibility is viewed as facilitating the coordination of interpersonal behavior so that more compatible partners experience a more favorable ratio of rewarding to punishing interactions than do less compatible partners. They are therefore more motivated to continue the relationship and develop commitment, because they are more likely to experience the relationship as rewarding.

A compatibility testing model seems to require at least one of these two versions of the commitment process—that perceived compatibility in itself increases commitment, or that actual compatibility provides a higher proportion of rewarding interactions and thus increases commitment—and the model can certainly include both possibilities. Whether the researcher holds one or the other, or both, of these positions ought to determine whether perceived compatibility, actual compatibility, or both are focused on.

Both versions of compatibility testing imply a process that is not usually a rapid one. The first version requires relatively high levels of intimacy and self-disclosure, so that information can be revealed about attitudes and values that are not likely to be evident in behavior early in the relationship. The second version implies a sufficient length of time for interaction so that the effects of compatibility may be perceived. Acquaintance, casual dating relationships, or what Levinger (1974) calls "surface contacts" are insufficient for these processes to occur. It follows that—to the extent that potential spouses differ in their psychological characteristics—compatibility testing requires that people attempting to choose a marriage partner must examine each potential mate in a sufficient degree of depth, or over a sufficient period of time, to allow the extent of their compatibility with each to emerge.
How many ongoing relationships or more than casual dating partners are enough to find a compatible mate? To our knowledge, this question has never been seriously considered in the mate selection literature. Instead, it seems that researchers have simply assumed that sufficient dating takes place for compatibility testing to operate.

For the sake of argument, let us choose just four characteristics that might apply to either version of compatibility testing—they might be attributes desired in the partner, they might facilitate interaction, or both. These four characteristics might be, for example, similarity to the other person in leisure interests, sex role attitudes, strength of religious belief, and empathy. Let us define "compatibility" for the moment as meaning only that the partner is on the desired or facilitative side of the median with respect to each attribute. Assume for the sake of simplicity that these attributes are uncorrelated. Since the probability of finding a match on each characteristic in each partner is .5, and the events are independent, the probability of any partner's matching on all four characteristics is .0625 or 1/16.

On the average, then, how many partners would be needed to find a match on all four attributes? Since the field of potential mates is theoretically large, the problem can be treated as one of sampling with replacement. Thus, taking 15/16, the probability of not finding a match with any given partner, to the nth power where n represents the number of partners, we find that 11 partners are required in order to have a 50-50 chance of finding one person on the correct side of the median on four characteristics.

Now we'd like to present some data on the number of dating partners that people who marry have had. The information comes from the Penn State PAIR Project, a longitudinal field study of 168 newly married couples, all of whom were in their first marriages. The data presented here were obtained during
the first phase of the project, which was carried out in the spring of 1981. Couples were recruited through public marriage license records kept in county courthouses. All English-speaking couples applying for marriage licenses in a four-county area of central Pennsylvania, entering into their first marriages between December, 1980 and June 1981, and planning to reside in the area for the next two years were invited to participate in the study. Forty-two percent of the eligible couples took part. The achieved sample consisted of about one-third middle class and two-thirds working and lower class respondents. Each couple was interviewed by a male/female interviewer team, with most couples being interviewed in their homes. In addition, a telephone behavioral self-report procedure (not reported on here) was carried out with each couple. Information was gathered separately and privately from each participant.

Regarding dating partners, each participant reported his or her "dating history" for the five years prior to dating the future spouse exclusively. The information obtained included a chronological list of each of the respondent's more-than-casual dating partners—those dated on a regular basis, those dated exclusively, and those with whom there was a commitment to marry.

Table 1 shows the percentages of men and women who had various totals of more-than-casual dating partners in addition to the spouse in the five years prior to first going steady with the spouse. Husbands reported an average of 2.64 regular dating partners other than the future spouse (SD = 2.15), and wives reported an average of 2.21 regular partners (SD = 1.46). More than 56% of the husbands and about 62% of the wives had two or fewer regular dating partners other than the spouse. According to the hypothetical demonstration presented earlier, only about one-sixth of the people dating three partners can expect to find a mate compatible on four characteristics. It is also
noteworthy that 12% of both husbands and wives had dated no one on a regular basis except the future spouse. And only 2% of the husbands, and none of the wives, had more than seven regular dating partners.

Perhaps, however, it is only necessary that one member of each couple has had extensive dating experience in order to compare potential mates. Table 1 also shows the percentages of couples' maximum number of dating partners. In other words, for each couple, the larger of the two scores was obtained and a frequency distribution made of these maximum scores. The mean maximum score for couples is 3.34 regular dating partners (SD = 1.98). In 64% of the couples, both partners had three or fewer regular dating partners other than the spouse; and there were almost 3% of the couples in which neither partner had dated anyone else regularly in the five years preceding their relationship.

We would like to draw two conclusions from these findings, one more specific and one more general. Specifically, these findings cast doubt on the image of compatibility testing as involving a wide search through a field of available eligibles. Because people do not in fact seem to date a great deal, it is difficult to maintain that such empirical covariation as is found between partners' psychological characteristics results primarily from a testing process. Instead, this covariation might result primarily from the differential association of psychological attributes with social characteristics. This question, along with several others, we are currently examining in our sample of couples. And more generally, the results may encourage us to look more carefully at the assumptions underlying the theories we use to explain relationship phenomena.
Table 1.

Husbands', wives', and within-couple maximum more-than-casual dating partners other than the spouse.

<table>
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<th>Number of regular dating partners other than spouse</th>
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*Roundoff error accounts for difference from 100%.
REFERENCES


