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Notes

The Pairing Game: A Classroom Demonstration of the Matching Phenomenon

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This article describes 2 versions of an in-class simulation that allows students to directly experience the matching phenomenon and explore issues concerning mate selection, social exchange, and related psychological concepts. Students are randomly assigned a value (either a numerical value or a list of adjectives), which they place on their forehead so others can see it but the student cannot. The goal is to pair off with another student with as high a value as possible. The simulation, called the Pairing Game, illustrates how matching on similarity can occur, even in the absence of knowledge of one's own value and merely by seeking the highest value possible in a partner. Students in Development Psychology courses responded favorably to the simulation on an anonymous survey.

One of the clearest trends to emerge from the literature on human mate selection is that romantic partners tend to resemble each other, both in overall attractiveness (Feingold, 1988; Murstein, 1986) and on a wide array of specific charac-

teristics, including physical traits, age, education, race, religion, mental abilities, personality traits, and social attitudes (Buss, 1985). This pairing of individuals based on similarity is referred to by behavior geneticists as *assortative mating* and by social psychologists as *the matching phenomenon*. Although similarity is a known product of mate selection, the actual processes that generate the matching phenomenon remain a subject of debate.

There are at least two different mate selection strategies that could result in matching (for an extended discussion, see Kalick & Hamilton, 1986). First, individuals could pursue equalization strategies when selecting mates; that is, people may actively seek others who are about as attractive as they are. Second, individuals could pursue maximization strategies when selecting mates; that is, people may seek to associate with the most attractive partner they can find (regardless of their own attractiveness). Interestingly, maximization strategies can also lead to matching on overall attractiveness through the process of elimination. If everyone in a given population pursued a maximization strategy, the most desirable individuals would be in the greatest demand and thus receive the most overtures from others. Under these market conditions, the most attractive individuals will pair off together first, leaving the next most attractive ones to pair off next, and so on down the line until the least attractive individuals are left to each other by default. Although each person's motive is to obtain a maximally attractive partner, the cumulative result of everyone pursuing their own interests is matching on overall attractiveness.

The purpose of this article is to describe a brief in-class simulation—The Pairing Game—that involves the entire class in a test of the matching phenomenon. The simulation demonstrates (a) how matching on overall social value can occur even in the absence of knowledge of one's own value and merely by seeking the highest value possible in a partner (the maximization strategy) and (b) how individuals can discover their own social value through interaction with others. The Pairing Game enables students to directly experience the matching phenomenon and provides a springboard for discussion of issues concerning social exchange, mate selection, and related psychological concepts.

Version 1: Matching By Numbers

The Pairing Game works best with groups of about 18 to 25 people but can also be used in somewhat larger or smaller groups. The simulation involves a lot of walking around, so make sure to clear plenty of space in the room. We typically push the desks aside and have students stand in a circle around the perimeter of the room. We suggest recruiting a couple of people to help as student observers.

Procedure

In Version 1 of The Pairing Game, a student's "social value" is represented numerically. Each individual is randomly assigned a number. These numbers are distributed haphazardly over some range, such as 1 to 30. Each person's

number is secretly written on an index card, is handed to the person so he or she can not see it, and the person holds the card against his or her forehead with the number plainly in view for other persons. Thus, at the beginning of the process, each person can see the numbers of others, but cannot see and does not know his or her own number. The following instructions are then given:

1. Do not at any time look at your own number or tell anyone else what their number is.
2. Your task is to pair off with another student. You will receive a reward for this (usually candies or imaginary monetary values). The amount of your reward is equal to your partner's number.
3. The offer to form a pair is made by extending your hand to another person, as if to offer a handshake. That other person can then choose either to accept or reject your offer.
4. If your offer is accepted, then stand together with your partner at the edge of the room.
5. If your offer is rejected, then continue looking until you have formed a pair.

The signal is given for the pair formation process to begin. The process proceeds very rapidly and vigorously. Under ideal conditions, student observers keep track of who made and received offers and the order in which pairs formed. (The perspective of the student observers can make a valuable contribution to class discussion.) One can understand the broad outline of the formation process: At first, many people approach the one or two persons with the highest numbers and those persons select partners with the highest numbers. Then, a similar process occurs with the remaining persons, with the higher numbered ones being approached and their selecting the higher numbered partners. This process is repeated until finally, only a few people with low numbers are left and they "settle" for each other.

When the pair formation process is completed, students should be standing with their partners in a circle around the edge of the room. Before they have looked, each person guesses out loud what they think their number is. (If one wishes to collect data on the exercise, then record each person's actual and estimated number as well as the numerical pairings for each dyad.)

Version 2: Matching By Adjectives

In Version 2 of The Pairing Game, a student's social value is represented by adjectives. The procedure is the same as for the numbers version, except that each student is given an index card with a set of three adjectives (instead of a number). These adjectives range from unambiguously positive (e.g., smart, social, spirited) to unambiguously negative (e.g., angry, annoying, apathetic) with various gradations in between. The 36 sets of adjectives that we developed for this exercise appear in Table 1. We found that the simulation works best if the mix of adjectives is somewhat tilted toward having more cards with positive than negative content.

Table 1. Thirty-Six Cards for the Adjectives Version of The Pairing Game

Strongly Positive	Moderately Positive	Moderately Negative	Strongly Negative
Smart	Insightful	Happy	Angry
Social	Intelligent	Helpless	Annoying
Spirited	Bad breath	High maintenance	Apathetic
Respectful	Jealous	Lazy	Abrasive
Romantic	Joyful	Self-confident	Aggressive
Secure	Lively	Self-centered	Airhead
Efficient	Logical	Extroverted	Bitchy
Bold	Loud mouthed	Unfaithful	Boring
Creative	Loving	Fanatical	Bull headed
Powerful	Imaginative	Gifted	Callous
Beautiful	Warm	Grumpy	Catty
Proud	Neurotic	Gutless	Close minded
Warm	Plucky	Neglectful	Cocky
Well mannered	Playful	Nymphomaniac	Confused
Wise	Pompous	Optimist	Controlling
Self-assured	Manipulative	Loyal	Depressed
Sensual	Artistic	Horny	Derisive
Sharp witted	Communicative	Low self-esteem	Deviant
Witty	Athletic	Fascinating	Cowardly
Worldly	Smart	Fearful	Cruel
Zany	Bald	Gloomy	Crude
Spunky	Versatile	Dull	Agitated
Strong	Voluptuous	Dumpy	Aimless
Stylish	Vindictive	Educated	Aloof
Quick witted	Interesting	Egotistic	Bad attitude
Refined	Irresponsible	Elegant	Bad tempered
Relaxed	Jovial	Neurotic	Bigoted

In this version of The Pairing Game, students are told to find their ideal partner for life. We emphasize the need to choose one's partner carefully, but at the same time that if one is rejected to continue looking until a partner is found. Instructions are given to ignore gender and focus only on the information given on the index card.

Class Discussion

Whether using numbers or adjectives, The Pairing Game is an excellent tool for teaching principles of mate selection and social exchange. A quick survey of the class usually reveals that most partners are reasonably well matched on exchange value (whether in numbers or adjectives). If you are using the numbers version, then you can demonstrate the matching phenomenon empirically by computing an intraclass correlation between the paired values (we typically get a correlation of about .70). We point out that the results of this simulation are similar to what we see in real life. This matching phenomenon is of natural interest to students, and there are several directions the ensuing discussion may take:

1. *Maximization versus equalization.* We begin by interviewing students about how they arrived at the pairing with their partner. Some students describe the use of a maximization strategy, whereby they started off pursuing the most attractive people and continued searching until, through the process of elimination, they found a partner who would accept them. Others students described an equalization strategy: They learned almost immediately from the reaction of others that their own value was low (someone may have looked at their traits and laughed out loud), so they sought another person of

low value who would accept them. A goal of the discussion is to show that different underlying strategies (i.e., equalization vs. maximization) as well as a combination of these strategies, can lead to the same result: matching on social value.

2. *Individual motives versus collective outcomes.* In conducting The Pairing Game, one of our objectives is to get people to think about individual motives, the collective consequences of those motives, and how we can be misled by interpreting or labeling individual motives on the basis of collective outcomes. The Pairing Game demonstrates that a seemingly fair and equitable distribution of matching on overall desirability can result from the efforts of a collection of people who, at the individual level, are all selfishly trying to obtain the most attractive partner they can find. Although people often interpret the matching phenomenon as providing evidence that individuals prefer to mate with others who are similar to themselves in overall attractiveness, the matching phenomenon per se does not require that people are, motivationally, "matchers."

3. *Self-esteem.* Finally, we discuss the implications of The Pairing Game for understanding the development and function of self-esteem. When playing the numbers version, students often have an "Aha" experience when they attempt to guess their own number and then look to see how accurate they were (we typically obtain a correlation of about .65 between students' estimates and actual assigned values). This leads to a discussion of self-esteem: Do people in real life have a "value" that they carry around with them? Do individuals have some perception of what that value is? How does this perception develop through social interaction? (See Leary, Tambor, Terdal, & Downs's 1995 model of self-esteem

as an internal monitor of levels of acceptance and rejection by relevant others.) One goal of this discussion is to get students to think about how development of realistic self-perceptions may hasten the matching process by guiding individuals toward obtainable partners (see Kenrick, Groth, Trost, & Sadalla, 1993): those whose social value is similar to one's own.

Comparison of the Two Versions

Like most class simulations, both versions of The Pairing Game are abstractions from real life. As such, they focus on different features of the information that people may have available to them when they select partners. The two versions thus lend themselves to somewhat different instructional uses and discussion topics.

The numbers version symbolizes the global valuations that people (with some degree of consensus) place on each other. The numbers simulate the differences in popularity among acquaintances that are revealed by sociometric choices and the range of generalized feelings of self-worth that is revealed by measures of self-esteem. The numbers version permits quick calculation of the degree of matching between partners as well as the accuracy of students' estimates of their own value. These empirical tests enable teachers to demonstrate, in the context of an engaging classroom experiment, how psychological data can address questions of personal relevance to students' lives. Finally, the numbers version tends to focus discussion on the matching phenomenon in its simplest form—as covariation between partners in overall attractiveness—that is also the form that it has been demonstrated in research.

The adjectives version of The Pairing Game symbolizes the more differentiated information about other people that individuals have available to them when they form pairs: information from observation, hearsay, and direct contact. This information is differentiated qualitatively and, in contrast to the consensual information represented by the numbers, lends itself to idiosyncratic evaluation and, therefore, occasional eccentric bases of pair formation. Eccentric pairings are akin to those in real life based on similarity of attitudes and values (about which there may be little consensus) and on complementarity of needs. The results of the adjectives version are often instructive about deviations from matching that reflect the unique preferences that particular individuals and pairs may have. Because of the greater complexity of information, the adjectives version slows down the pairing process and leads to more contemplation and negotiation between students.

Student Evaluations

Students in two sections of an Applied Human Development course (n = 37) who participated in the adjectives ver-

sion of The Pairing Game and students in two sections of an Adolescent Development course (n = 39) who participated in the numbers version of The Pairing Game completed an evaluation questionnaire. Student response was very positive to both versions of the simulation. On a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree), students indicated that they found The Pairing Game to be interesting and informative (for numbers, M = 5.9, SD = .98; for adjectives, M = 5.9, SD = 1.09), that it was a worthwhile use of class time (for numbers, M = 6.1, SD = 1.10; for adjectives, M = 6.1, SD = 1.30), that they would recommend playing The Pairing Game again in this type of course (for numbers, M = 6.3, SD = .80; for adjectives, M = 6.2, SD = 1.32), and that playing The Pairing Game aided their understanding of why similar people end up together (for numbers, M = 5.7, SD = .90; for adjectives, M = 5.4, SD = 1.34) and of how self-esteem develops through social interaction (for numbers, M = 5.6, SD = 1.08; for adjectives, M = 5.5, SD = 1.12).

In summary, The Pairing Game provides students with a lively introduction to concepts of mate selection and social exchange. We have used it both as an ice breaker on the first day of class and as a teaching tool in courses on social psychology, personality psychology, introductory psychology, close relationships, human development, and psychology of gender. Students enjoy The Pairing Game, and their personal involvement should facilitate understanding of the processes that underlie the matching phenomenon.

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