

## Short Report

## Becoming Friends by Chance

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May the development of friendship be due to chance? Since the days of the ancient Greek philosophers, friendship has been conceived of as an intentional choice based on common values and interests (cf. Blieszner & Adams, 1992). However, contemporary experimental psychological research has shown that many choices are not exclusively made on the basis of intentional and controllable processes, but are also influenced by superficial situational factors and automatic processes (e.g., Bargh & Chartrand, 1999; Dijksterhuis, Bos, Nordgren, & van Baaren, 2006; Pelham, Carvallo, & Jones, 2005). This might also hold true for the social choices that people make in everyday life. The famous actor Sir Peter Ustinov (1979) lent his support to this view when he stated, “Contrary to general belief, I do not believe that friends are necessarily the people you like best, they are merely the people who got there first” (p. 93).

It has, in fact, been demonstrated that mere similarity of age, marital status, or ethnic background influences the development of friendships (e.g., AhYun, 2002; Newcomb, 1961). Moreover, mere proximity (e.g., living nearby—Festinger, Schachter, & Back, 1950; Latané, Liu, Nowak, Bonevento, & Zheng, 1995; Nahemow & Lawton, 1975), as well as mere assignment to the same group (e.g., being in the same work unit—Hogg & Tindale, 2001; Segal, 1974), increases the likelihood of becoming friends. Do these involuntary factors also have an influence when they are restricted to initial encounters, rather than persisting over a longer period of time? This study examined whether randomly determined physical proximity and group assignment during an initial encounter are each sufficient to influence the likelihood of a friendship developing in a real-life context.

## METHOD

## Subjects

We assessed a group of psychology freshmen ( $N = 54$ ) when they encountered one another for the first time and again after their first year of study. Participants were 36 female and 18 male students from various places of origin in Germany. Their average age was 22.22 years ( $SD = 4.57$ ).

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## Procedure

The first measurement occasion took place at the beginning of an introductory session for freshmen studying psychology. Students received a randomly assigned seat number when entering the room and took their assigned place. They were then requested to individually step forward, beginning on the right-hand side of each row, and briefly introduce themselves. These self-introductions ranged in length from 4.00 to 21.30 s ( $M = 7.51$ ,  $SD = 3.27$ ). Immediately after each introduction, the other freshmen rated the person (from 0 to 5) on two scales (“How likeable do you find this person?” and “Would you like to get to know this person?”). Following the evaluation, the students in that row all moved one seat to the right, and the evaluated participant took the empty seat at the far left-hand side of the row. This procedure was repeated, row by row, until all students had been rated. During the experiment, each dyad in the sample ( $N = 54 \times 53/2 = 1,431$ ) sat in neighboring seats (proximity), sat in the same row but not in neighboring seats (same group), or sat without any perceivable physical relation to one another (control).

One year later, we obtained friendship ratings in individual laboratory sessions. Participants were given photographs of their fellow students and asked to indicate the intensity of their friendship to each, using the following four items: “I like this person,” “This person likes me,” “I know this person well,” and “I am friends with this person.” Ratings were made on scales ranging from 0, *not at all*, to 5, *very much*.

## Computation of Attraction and Friendship Measures

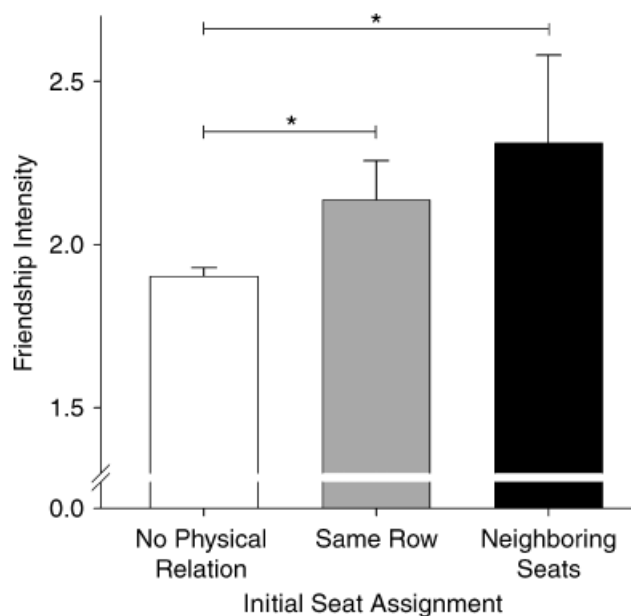
Aggregate measures of attraction and friendship intensity were computed by averaging the ratings made at the first and second measurement sessions, respectively. According to Kenny’s (1994) social relations model, interpersonal perceptions (e.g., attraction) may be decomposed into three independent components (plus error): a perceiver effect (e.g., harshness of the perceiver), a target effect (e.g., popularity of the target), and a relationship effect (after controlling for perceiver and target effects; e.g., relational attraction to a person). Analyses of our round-robin data indicated that our aggregate measures of attraction and friendship intensity contained significant amounts of perceiver variance (16.44% and 14.94%, respectively), all  $t(53)s > 4.29$ ,  $ps < .01$ ; target variance (10.75% and 6.42%,

respectively), all  $t(53)s > 4.28$ ,  $ps < .01$ ; and relationship variance (51.76% and 65.63%, respectively), all  $t(53)s > 27.09$ ,  $ps < .01$  (Bond & Lashley, 1996).

## RESULTS AND DISCUSSION

We first tested whether proximity and group assignment influenced initial attraction ratings. To do this, we performed a multilevel analysis for dyadic data, using SAS proc mixed (Kenny, Kashy, & Cook, 2006). To examine effects on relational attraction, we included perceiver and target as random effects at Level 1. Sitting in neighboring seats and sitting in the same row were fixed-effects predictor variables at Level 2. Compared with dyads who had no perceivable physical seating relation ( $M = 2.99$ ,  $SD = 0.55$ ), those who sat in neighboring seats ( $M = 3.87$ ,  $SD = 0.65$ ) and those who sat in the same row ( $M = 3.20$ ,  $SD = 0.62$ ) had higher initial attraction scores,  $F(1, 1378) = 75.69$ ,  $p < .01$ , and  $F(1, 1379) = 11.97$ ,  $p < .01$ , respectively.

Might pure chance also influence the formation of friendships? To answer this question, we performed another multilevel analysis. Results are presented in Figure 1. Sitting in neighboring seats as a result of randomly assigned seat numbers, compared with sitting in seats with no perceivable physical relation, led to higher ratings of friendship intensity 1 year later,  $F(1, 1380) = 5.06$ ,  $p < .05$ . Sitting in the same row also led to higher ratings of friendship intensity than did sitting in seats



**Fig. 1.** Mean friendship intensity as a function of randomly assigned seating at the first encounter a year earlier. Friendship intensity was rated on a scale from 0 to 5. Error bars represent standard errors of the means. Asterisks indicate significant differences between conditions,  $p < .05$ .

with no perceivable physical relation,  $F(1, 1383) = 4.84$ ,  $p < .05$ . The effects of random seat assignment on friendship persisted in an additional analysis controlling for initial attraction at Level 1,  $F(1, 1382) = 3.42$ ,  $p = .06$ , for sitting in neighboring seats and  $F(1, 1370) = 4.20$ ,  $p < .05$ , for sitting in the same row.

To conclude, coincidentally being near another person or being in the same group with him or her during an initial encounter may promote the development of a friendship with that person. In a nutshell, people may become friends simply because they drew the right random number. Thus, becoming friends may indeed be due to chance.

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