Using Dance Cards to Facilitate the Sharing Phase in Sociometric Explorations

EVA V. SWENSON

ABSTRACT. The author considers sociometric explorations that, at some point, require each group member to share information with every other group member in sequence. In this sharing phase, a facilitator usually directs the group to form new pairs at the start of each time period, leaving it to the members to find their next partners. Moments of chaos often result in which members have to switch to new partners, creating anxiety for members who do not find a partner and increased completion time for the sharing phase. The author describes *dance cards,* a structure that can enable the formation of such sequences of pairs to occur in an orderly and efficient manner.

Keywords: dance cards, partners, sociometric exploration

A SOCIOMETRIC EXPLORATION (Hale, 1981), such as the sociometric test (Moreno, 1978) or the role-accessibility perception test (Hale, 1995), generally starts with the group picking a criterion that will form the basis of the exploration. After a criterion is picked, group members write down their choices of other group members on the basis of that criterion and then make perceptual guesses about choices others make for themselves on the basis of the same criterion. This *data-generation phase* is followed by a *sharing phase.* In the sharing phase, group members spend a specified amount of time in face-to-face dyads to directly and personally reveal their choice of one another and their perceptions. The minimum amount of time usually needed for each pairing, or time period, is 4–5 min. At the end of each time period,

everyone finds another partner with whom to share information. The sharing phase extends over a number of time periods until every group member has met in a dyad with every other group member.

In the sharing phase, a facilitator usually directs the group to form new pairs at the start of each time period, leaving it to the members to find their next partners. Common consequences of such randomly formed pairs are (a) periods of confusion at the start of each time period while everyone tries to find another partner, akin to what happens in musical chairs; (b) longer time periods to accommodate members' finding partners; (c) some members' forfeiting a time period while waiting to talk with the same individual; (d) more time periods to ensure that every possible pairing has occurred; and (e) more people's forfeiting one or more time periods because they have already shared with everyone or because the remaining persons with whom they need to share are paired with others. See Table 1 for two examples of outcomes of random pairings. I have participated in sociometric explorations in which the sharing phase was conducted in this way. It felt chaotic and out of control, and I experienced some anxiety each time I had to find another partner. I occasionally found myself competing with another member for the same person, and when I could not find a partner and had to sit out during a time period, I blamed myself for not being fast enough; I felt isolated.

A Better Way to Manage Sequential Pairings

In the field of discrete mathematics, there is an algorithm that can help with this situation. It specifies the pairings that should be formed in each time period so that the total number of periods can be kept to a minimum.

> Algorithm: Suppose there are an even number of people, $2k + 2$: $0, 1, \ldots, 2k$ and on to infinity (*inf*). In the first period, they meet as follows: (*inf*, 0), $(1, 2k)$, $(2, 2k - 1), \ldots, (k, k + 1)$. In the ith period, where $i = 2, \ldots, 2k + 1$, add $i - 1$ to each participant modulo $(2k + 1)$ when necessary, excluding *inf*, which does not change. If the number of people is odd, an optimal schedule is obtained from the previous one by removing *inf*. Then in each period, one person will be idle.

To spare the reader the necessity of struggling with the application of this algorithm, I have generated the calculations for groups of various sizes and have presented the results as templates that can be used to generate what I call *dance cards*. Dance cards originated in the 18th century and came into widespread use in Vienna in the 19th century. They were used by women to record with whom they would dance each successive dance at a formal ball. In a sociometric exploration, dance cards tell holders with whom they should meet in each time period.

If these dance cards were used, the group of five in Table 1 would need only five time periods, and each of the members would sit out only once. The group of

TABLE 1. Example Outcomes of Two Groups in Which Members Are Asked to Form Pairs With Every Other Member Without Further Instruction

Time period	Group of 5 people[a]	Group of 6 people[b]
1	A-C, B-E; D has no partner	A-B, C-D, E-F
2	A-D, B-C; E has no partner	A-C, B-D; C and F have no partners
3	A-E, B-D; C has no partner	C-F, D-E; A and B have no partners
4	A-B, C-D; E has no partner	A-D, C-E, B-F
5	C-E; A, B, and D have no partners	A-E, B-C, D-F
6	D-E; A, B, and C have no partners	A-F, B-E; C and D have no partners

[a]Six time periods are required; each group member has to sit out twice.
[b]Six time periods are required; each group member has to sit out twice.

TABLE 2. Template for Generating Dance Cards for a Group of Three

	Group member		
Time period	A	B	C
1	—	C	B
2	C	—	A
3	B	A	—

Note. A dash indicates that the group member sat out for that time period.

six in Table 1 would similarly need only five time periods, and no member would have to sit out. In general, if there is an odd number of group members, every person will not have a partner for one period. In groups with an even number of members, each group member will have a new partner for each time period. The number of time periods needed is the same as the number of group members, if that number is odd, and is the number of group members minus one, if that number is even. See Table 2 for the template for groups of three members and Tables A1–A7 in the Appendix for templates for groups with 4–10 members.

I used these cards at a recent sociometry workshop led by Ann E. Hale. Eighteen attendees participated in a role-accessibility perception test in which two criteria were explored. When a chime to mark the start of the next time period sounded, everyone switched partners speedily and smoothly because

each person knew who their next partner would be. Furthermore, group members knew at which period they would be without partners. This helped them to avoid the anxiety that can occur when one finds oneself without a partner. (Many people used this time as a washroom break.) Unless the point of the exercise is to discover one's feelings when trying to form pairs with others, using dance cards to organize sequential pairings reduces confusion and helps members to focus on the purpose of the sociometric exploration. Dance cards also help facilitators ensure that the sharing phase does not take more time than is necessary.[1] This was an important benefit to Anne Hale's sociometric-workshop group, given its size. Dance cards may be used in any group exercise that requires each group member to meet in pairs with every other group member to perform a specified action.

How to Generate Dance Cards for a Group

To produce dance cards, choose the table (see Table 2 and the Appendix) that matches the size of the group. Starting with the letter *A*, assign a letter to each member of the group and ask each to wear a tag with the letter prominently displayed. Then provide the person tagged *A* with a copy of the column in the table headed by the letter *A*. This is the dance card for Person A. Give the other members their dance cards (i.e., a copy of the column in the table headed by their respective letter tags). The dance cards tell the holders who their partners will be in each time period.

For example, to generate a set of dance cards for a group of three (Jane, George, and Leslie), start with the template shown in Table 2. Give Jane the tag with letter *A*, George the tag with *B*, and Leslie the tag with *C*. Then give Jane a card with a copy of the column headed *A*, give George a card with the column headed *B*, and give Leslie a card with the column headed *C*. Their dance cards are shown in Figure 1.

Jane's card	George's card	Leslie's card
A	B	C
1–no partner	1–C	1–B
2–C	2–no partner	2–A
3–B	3–A	3–no partner

FIGURE 1. Nonpersonalized dance cards for a group with three members.

As an alternative, you may personalize the dance cards. If so, you will not need to ask members to wear tags displaying their respective letters, but you will need to prepare the dance cards ahead of time. Starting with the letter *A*, assign letters to each participant. To generate the dance card for each participant, start with a copy of the column headed by the letter you assigned to that participant. Replace each letter in that column with the name you assigned to that letter. In this example, I have assigned *A* to Jane, *B* to George, and *C* to Leslie. Their dance cards are shown in Figure 2.

Jane	George	Leslie
1–no partner	1–Leslie	1–George
2–Leslie	2–no partner	2–Jane
3–George	3–Jane	3–no partner

FIGURE 2. Personalized dance cards for a group with three members.

Summary

In this article, I offered a tool that can be used by group facilitators to manage the sharing phase in sociometric explorations in an orderly and efficient manner. The tool enables a facilitator to give group members a dance card that tells them with whom they should meet in each time period of the sharing phase. I explained how a set of dance cards for a given group can be generated from the template that is specific to the size of the group and provided templates for groups of up to 10 members. Templates for groups with more than 10 members are available from the author.

NOTE

1. To calculate the amount of time needed for the sharing phase, multiply the number of minutes allotted per time period by the number of time periods that are needed. For example, for a group of 18, 17 time periods will be needed. If each pair is allotted 5 min to share, multiply 17×5. This means 85 min will be needed. If 1 min is desired between each sharing for people to locate their next partner and resettle, add 16 min. In large groups, facilitators might also want to add a 5-min break at the halfway point for everyone to relax on their own. The time for the sharing phase in this example would be $85 + 16 + 5 = 106$ min.

REFERENCES

Hale, A. E. (1981). *Conducting clinical sociometric explorations.* Roanoke, VA: Royal.

Hale, A. E. (1995, October). *Sociometric perception in terms of role accessibility.* Paper presented at the 3rd Internationale Konferenz, European Committee of the Psychodrama-Institut für Europa, Gelnhausen, Germany.

Moreno, J. L. (1978). *Who shall survive?* Beacon, NY: Beacon House.

EVA V. SWENSON has a PhD in applied mathematics and is a retired professor in computer science. She is a practicing *shiatsu* therapist and is training at the Associate Director level at the Toronto Centre for Psychodrama and Sociometry. She would like to thank Ann E. Hale, who allowed her to use dance cards for the first time in her workshop in July 2005 and who encouraged her to write this article. She also thanks her trainers, Susan Aaron, Donna Little, and the late Peggy Stamp and her colleague, Ron Hall, for helpful comments and suggestions on early drafts of this article. Her address is 458 Glenlake Avenue, Toronto, Ontario, Canada M6P 1G8, and her e-mail address is eva.swenson@sympatico.ca.

APPENDIX

DANCE CARD TEMPLATES FOR GROUPS WITH 4–10 MEMBERS

TABLE A1. Template for Generating Dance Cards for a Group of Four

	Group member			
Time period	A	B	C	D
1	D	C	B	A
2	C	D	A	B
3	B	A	D	C

TABLE A2. Template for Generating Dance Cards for a Group of Five

	Group member				
Time period	A	B	C	D	E
1	—	E	D	C	B
2	C	—	A	E	D
3	E	D	—	B	A
4	B	A	E	—	C
5	D	C	B	A	—

Note. A dash indicates that the group member sat out for that time period.

TABLE A3. Template for Generating Dance Cards for a Group of Six

	Group member					
Time period	A	B	C	D	E	F
1	F	E	D	C	B	A
2	C	F	A	E	D	B
3	E	D	F	B	A	C
4	B	A	E	F	C	D
5	D	C	B	A	F	E

TABLE A4. Template for Generating Dance Cards for a Group of Seven

	Group member						
Time period	A	B	C	D	E	F	G
1	—	G	F	E	D	C	B
2	C	—	A	G	F	E	D
3	E	D	—	B	A	G	F
4	G	F	E	—	C	B	A
5	B	A	G	F	—	D	C
6	D	C	B	A	G	—	E
7	F	E	D	C	B	A	—

Note. A dash indicates that the group member sat out for that time period.

TABLE A5. Template for Generating Dance Cards for a Group of Eight

	Group member							
Time period	A	B	C	D	E	F	G	H
1	H	G	F	E	D	C	B	A
2	C	H	A	G	F	E	D	B
3	E	D	H	B	A	G	F	C
4	G	F	E	H	C	B	A	D
5	B	A	G	F	H	D	C	E
6	D	C	B	A	G	H	E	F
7	F	E	D	C	B	A	H	G

TABLE A6. Template for Generating Dance Cards for a Group of Nine

	Group member								
Time period	A	B	C	D	E	F	G	H	I
1	—	I	H	G	F	E	D	C	B
2	C	—	A	I	H	G	F	E	D
3	E	D	—	B	A	I	H	G	F
4	G	F	E	—	C	B	A	I	H
5	I	H	G	F	—	D	C	B	A
6	B	A	I	H	G	—	E	D	C
7	D	C	B	A	I	H	—	F	E
8	F	E	D	C	B	A	I	—	G
9	H	G	F	E	D	C	B	A	—

Note. A dash indicates that the group member sat out for that time period.

TABLE A7. Template for Generating Dance Cards for a Group of Ten

	Group member									
Time period	A	B	C	D	E	F	G	H	I	J
1	J	I	H	G	F	E	D	C	B	A
2	C	J	A	I	H	G	F	E	D	B
3	E	D	J	B	A	I	H	G	F	C
4	G	F	E	J	C	B	A	I	H	D
5	I	H	G	F	J	D	C	B	A	E
6	B	A	I	H	G	J	E	D	C	F
7	D	C	B	A	I	H	J	F	E	G
8	F	E	D	C	B	A	I	J	G	H
9	H	G	F	E	D	C	B	A	J	I