The Effects of Seating Arrangements on Small Group Leadership Emergence

Juliann Morris

Small group researchers have long pondered if seating arrangements have any effect on leadership emergence in small groups. However, it is important to take into account that small group researchers were not the first to question whether this link existed. One of the most famous examples in history regarding this link is King Arthur's roundtable. He believed that seating arrangements did indeed affect an individual's status within a group, and therefore introduced a new seating arrangement, the roundtable, which was designed to create greater equality between group members than the traditional rectangular table (Round Table). Thus, modern small group researchers have not discovered a new theory in regards to proxemics and group member status, but have rather researched a theory that has been present for centuries in order to discover if it has validity. The scholarly literature and research regarding the question of proxemics and leadership emergence suggest that seating arrangements play a role in determining who has the greatest chance of emerging as a group leader.

Small group researchers have put great effort into finding an ideal seating arrangement that creates equality between group members. Two types of seating arrangements that have been discussed in such studies are rectangular and circular seating arrangements. Both rectangular and circular seating arrangements seem to have their own advantages and disadvantages in terms of creating equality between group members and predetermining leadership emergence. The purpose of this paper is to review and analyze the scholarly literature that addresses whether or not seating arrangements play a role in leadership emergence.

Literature Review

A large quantity of literature has been produced in the past century that discusses the various effects that seating arrangements have on the emergence of leaders in small groups. Most of these scholars have come to similar conclusions regarding the "power seats," or the seats that leaders are more likely to occupy, in each seating arrangement. However, in some of the articles evaluated below, there are contradictory conclusions that complicate the process grasping the complexity of the relationship between seating arrangement and leadership. The following sections will review the research of rectangular and circular seating arrangements, evaluate the research, and discuss the contradictions that are present.

Rectangular Seating Arrangement

The rectangular seating arrangement has been the subject of quite a few studies, as it is one of the most commonly used arrangements throughout the world and thus of great importance. Sommer's (1961) study discovered that leaders tend to emerge from either the end positions or middle positions of a rectangular table in groups that consisted of 3-6 members. When the perceived leader occupied the head position at a rectangular table, group members tended to sit closer to the leader rather than far away, which Sommer found to be the result of the limit at which comfortable conversations can occur. Strodtbeck & Hook's (1961) study of twelve-man juries found similar results to Sommer's (1961) study, as their study also concluded that group leaders tend to emerge from the head positions of rectangular tables.

However, there were differences between the two studies in regards to the second best position. Sommer (1961) found the middle of the rectangular table to be the second most frequent "power seat", while Strodtbeck & Hook (1961) concluded that the corner seats were the second most frequent "power seats" (See Appendix A). However, when taking into account the size of the groups used in each study, the issue begins to dissipate. As previously stated, Sommer (1961) used a group size of three to six members, while Strodtbeck & Hook (1961) used a group size of twelve members. Sommer (1961) reported that in groups of three members there was no consistent seat that leaders emerged from, however in groups of four to six, the leaders tended to emerge from the end positions. Thus, group size is an issue when comparing the contradictory aspects of Sommer (1961) and Strodtbeck & Hook (1961). However since both studies found that the end positions of rectangular tables produced the highest number of leaders, it should be noted that the end positions appear to be related to leadership emergence, with the likelihood increasing in groups that consist of four to twelve members, and decreasing in groups with fewer than four members.

The reasoning behind Sommer's (1961) conclusion, that group members who occupy the end positions at a rectangular table are more likely to emerge as leaders, is due to the fact that the end positions allow group members to have higher participation rates in group discussions. By contributing a greater number of comments than other group members, the member that occupies the end position is able to have greater influence over the group, and thus has a greater chance of emerging as the group's leader. Hare & Bales (1963) take this idea a step further in their study, "Seating Position and Small Group Interaction," which concludes that group members often occupy the end seats at rectangular tables because it is a centralized seat, which allows them to not only participate but to dominate the group discussion. A single member's ability to dominate the group discussion determines his or her status in the

group as either a leader or a follower. Thus, there is great importance in gaining a central location at a rectangular table.

The question that arises when looking at these studies is: What makes the end of rectangular tables different from other seats at the table? Lott and Sommer (1967) answered this question when they concluded that the member who sits at the head of the table gains visual access to all of the other group members, and thus has a greater ability to engage in conversation with more of the group members than any other member. The second idea brought up concluded that the majority of individuals who are given the first choice of seating at a rectangular table choose one of the end positions. The third idea that Lott and Sommer (1967) brought up in their study on "Seating Arrangement and Status" was that the rectangular table allowed those who occupied the head or end of the table a greater quantity of space, which can contribute to other group members perceiving them as the leader. Howells & Becker (1962) provided the foundation for this idea in their study as they instructed five group members to sit at a six-by-three-foot table. Each group member was placed two feet apart; two of the five members sat on the three-foot side of the table, and the other three members sat on the six-foot side (Howells & Becker, 1962). Howells and Becker's (1962) study found that leaders were more likely to emerge from the shorter side of the table, where the two members sat than from the long side of the table, where the three members sat; fourteen leaders emerged from the shorter side of the table, while only six leaders emerged from the longer side of the table, which provides confirmation to the idea that group members who are allotted more space, are more likely to emerge as leaders.

Lastly, after reviewing the scholarly literature on rectangular seating arrangements, it appears to be safe to conclude that the head of a rectangular table is the most powerful position for group members to occupy and that either the middle or the corner is the second most powerful position. It is also safe to suggest that the ends of the table produce more leaders than any other position due to the larger quantity of space that they provide, as well as increasing the member's ability to communicate with other group members, and thus producing the tendency to have a dominant voice in group discussions. However, further research on the matter should be conducted in order to confirm these conclusions and determine how a group's size can affect the determination of which position at a rectangular table is most likely to produce the group's leader.

Circular Seating Arrangement

Circular tables are often thought to provide a sense of equality and reduce the emergence of hierarchy among group members. Thus, leadership emergence in circular seating arrangements has proven to be difficult to predetermine. Leavitt (1951) compared the leadership emergence of four different seating arrangements. He determined who each group's leader was by asking each group member who he or she had perceived to be the leader of the group. Leavitt's study concluded that in the circular seating arrangement, there was no specific "power seat" that was consistently chosen by group members. This was also confirmed in Minton, Steger & Smrtic's (1968) study, which found that group members who met at circular tables were less likely to be persuaded into decisions by another member when compared to group members who met at rectangular tables. This conclusion suggests that circular tables allow greater equality between group members, and thus supports the idea that there is not a prevalent "power seat" at circular tables.

Looking at the Paris Peace Accords, one can see an important historical instance in which a circular seating arrangement was used to conduct a group meeting where all parties wished to be viewed as equal. The Paris Peace Accords were eventually established in order to end the United States involvement in the Vietnam War, however before this could be accomplished there was a great debate, between the involved parties, over the table that would be used at the conference (Journourd & Menétrey-Monchau, 2012). South Vietnam wanted to use a rectangular table to include only the North and the South in negotiations, while North Vietnam wanted to use a circular table to include all of the involved parties in negotiations. Eventually, the two settled on sitting at a circular table and having all of the other parties involved sit at square tables around them. This historical event represents society's perception of circular tables as an optimal seating arrangement that provides all group members with a sense of equality in the conversation.

There are alternative opinions to this conclusion, which suggest that there are "power seats" even in circular seating arrangements. Steinzor (1950) found that "the greater…the expressive stimulus value a member of a group has for others the more nearly opposite he sits from one in a circle" (p. 554), meaning that the more a group member wants to engage in conversation or argument with another group member, the more opposite the first group member will sit from the other. Steinzor's (1950) study also suggested that group members who have greater seating distance from other group members are more likely to be seen as leaders at circular tables. The study concluded that group discussion occurs across circular seating arrangements rather than around it, thus contributing to the idea that there is a "power seat" even at circular tables. This conclusion is based on the fact that members who have more space on their side of the circular arrangement are sitting across from a greater number of individuals than any of the other group members. This, in turn, increases their ability to communicate and allows them to make more comments during a discussion to a larger number of group members, thus having a more dominant opinion.

There is contradictory evidence present when researching leadership emergence in circular seating

arrangements, just as there was in rectangular seating arrangements, which suggests that more research needs to be conducted in order to determine whether or not there is a "power seat". However, it is important to note that the scholarly literature previously discussed agrees on the fact that using a circular seating arrangement provides greater equality among group members when compared to using a rectangular seating arrangement. It is also important to note that Steinzor's (1950) conclusion, regarding the presence of "power seats" in circular seating arrangements, suggests that the group members are not equally spaced out. Instead, it appears that one person in the group had more space than the rest of the members seated at the table, which can cause discrepancies within the study's results. By taking this variable of proxemics into account, one can evaluate more conclusively the accuracy of assuming that there is indeed a "power seat" in circular seating arrangements as Steinzor suggested.

Discussion

It has been shown in the scholarly literature analyzed above that a centrally located group member is most likely to emerge as the leader. This is primarily due to the fact that occupying a central position in the group's seating arrangement increases a member's likelihood to engage in discussion with other group members (Hare & Bales, 1963). The ability to occupy a central location and have a dominant voice in small group discussions is an advantage that leads to group leadership according to Bass (1949). This is a direct result of the *Steinzor Effect*, which essentially states: in leaderless groups, group members are more likely to interact with the individuals sitting across from themselves than they are likely to communicate with those sitting right next to them (Hearn, 1957).

In the rectangular seating arrangement, the most central locations were the ends of the table (See Appendix A). Thus, there is an advantage for individuals who occupy those seats to gain a leadership position in the group, as they have a greater rate of interaction with other group members. In circular seating arrangements, every member has a central location if equally spaced out (Leavitt, 1951); however, if group members are not equally spaced out, one seat may become the more central seat (Steinzor, 1950). For instance, if one group member pushes back from the circular seating arrangement and thus changes the spatial factor, that member may become the group's leader.

In addition, Hutte and Cohen (Sommer, 1969) conducted a study, which evaluated the individual's perception of others in regards to the space that they were allotted. They had the individual's watch short, silent films in which there was a man seated at a desk, and then another man would enter the room. The film that portrayed a man entering the room and approaching the desk led the individuals, who were evaluating the

subordination of the man to determine that the man became less subordinate the closer he approached the desk. This conclusion leads to the idea that individuals of power are allotted more space, and thus if another individual enters that space they must be of equal or greater importance. This finding also contributed greatly to the spatial factors that the literature above discussed, as it provides evidence to the idea that the seating position that occupies the most space is more powerful than the other positions. There are many elements, which contribute to the determination of "power seats" in seating arrangements. However, the space that each group member occupies was a prevalent topic in the scholarly research on both circular and rectangular arrangements and could be one of the major causes of inconsistencies between studies.

Conclusion

The literature and research that has been produced thus far have led to the deduction that seating arrangements play a major role in the process of leadership emergence. In order for small group researchers to determine which seating arrangement is most appropriate for a particular type of small group, they must take into account the task that the group is to accomplish. If the group has been developed for creative purposes, then the circular seating arrangement may be the ideal arrangement, as it allows equality between group members. This increases the participation rate of each group member, which in turn leads to more brainstorming within the group and allows a greater number of creative ideas to form. However, if a group has a more organized task to complete and a strong leader is needed, than the rectangular seating arrangement would be a more effective way of strategically placing group members. A rectangular seating arrangement would provide the group with more structure, as well as increase the likelihood that group members all agree on who their leader is.

It is also important to note that there are variables within seating arrangements that can lead to results that are different than what was determined by research. The variables, which have been evaluated, include the spacing present between group members and the number of people in the group. It is also important to note that there are inevitably other variables that exist between studies that cannot be determined by those who were not present during research.

Given the contradictory findings between various researchers' results, it appears that in order to accurately evaluate the relationship between leadership emergence and seating arrangement, a more organized format of comparative research should be conducted on the subject. Further research on this relationship should maintain a standard of variables such as group size and spacing. It should also have greater consistency in regards to the research methods used to avoid repeating the inconsistencies that past research has presented.

These changes are necessary in order to accurately confirm or disprove the assumptions made in previous research and build upon them.

In conclusion, the relationship between seating arrangements and leadership emergence is undeniable. People have acknowledged the relationship's effect on small groups for centuries, however, understanding the reasoning behind the relationship has proved to be more complicated than originally anticipated. The inconsistencies between studies allow for incorrect assumptions regarding this relationship to be made, and thus should be taken into account until further studies are able to provide credible answers. Lastly, it is evident after evaluating the scholarly literature that has been produced thus far that further research is needed on the subject before definitive conclusions regarding the relationship between leadership emergence and seating arrangement can be made.

References:

Bass, Bernard M. (1949). An Analysis of the Leaderless Group Discussion. *The Journal of Applied Psychology*, 33(6), 527-533.

Hare, P., & Bales, R.F. (1 63). Seating Position and Small Group Interaction. *Sociometry*, 26(4), 480-486.

Hearn, Gordon. (1957). Leadership and the Spatial Factor in Small Groups. *The Journal of Abnormal and Social Psychology*, 54(2), 269-272.

Howells, L.T., & Becker, S.W. (1 62). Seating Arrangement and Leadership   Emergence." J*ournal of Abnormal and Social Psychology*, 64 (2), 148-150.

Journoud, P., & Menétrey-Monchau, C. (Eds.). (2012). International Issues, Volume 17: Vietnam, 1968-1976 : Exiting a War. Bruxelles, BEL: Peter Lang AG.

Leavitt, H. J. (1951). Some Effects of Certain Communication Patterns on Group Performance. *The Journal of Abnormal and Social Psychology*, 46(1), 38-50.

Lott, D.F., & Sommer R. (1 67). Seating Arrangement and Status. *Journal of Abnormal and Social Psychology, 7*(1), 90-95.

Minton, H. L., Steger, J. A., & Smrtic, G. R. (1 68). Group Opinion Change as a Function of Circular vs. Rectangular Seating Arrangements. *Psychonomic Science, 12*(8), 357-358.

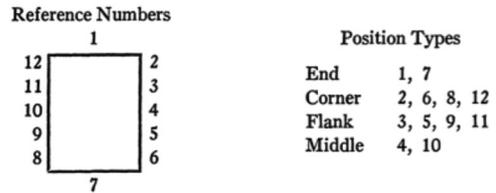Round Table. *Encyclopedia Britannica*. Retrieved April 2, 2016, from   http:// www.britannica.com/topic/Round-Table-Arthurian-legend

Sommer, Robert. (1961). Leadership and Group Geography. *Sociometry, 24*(1), 499-   510.

Sommer, Robert. (1969). Personal Space: The Behavioral Basis of Design. *American Anthropologist*, 72(3), 625-626

Steinzor, B. (1950). The Spatial Factor in Face to Face Discussion Groups. *The Journal of Abnormal and Social Psychology, 45*(3), 552-555.

Strontbeck, F.L., & Hook, L.H. (1 61). The Social Dimensions of a Twelve-Man Jury Table. *Sociometry, 24*(4), 397-415.

Appendix A

Reference Numbers

		Position Types	
1			
12	2	End	1, 7
11	3	Corner	2, 6, 8, 12
10	4	Flank	3, 5, 9, 11
9	5	Middle	4, 10
8	6		
7			

In terms of these types, the foreman is most frequently selected from one of the two persons seated at the ends of the table. The distribution of foreman by position was as follows (14):

Distribution

		Average	
17			
5	5	End	—16.0
4	1	Corner	— 5.5
3	2	Flank	— 2.5
2	3	Middle	— 2.5
5	7		
15			