Power in the Classroom [1]

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The stuff of leadership has been an elusive object for researchers. Because of the interest invested by laymen as well as by social psychologists, the qualities which distinguish the one whom others obey from those who obey him have often been the objects of speculation and scientific investigation. The lack of success of these investigations has been well documented in reviews of the literature such as Stogdill's in the *Journal of Psychology* (8) and Gibb's in the *Handbook of Social Psychology*. Gibb is forced to conclude that ". . . numerous studies of the personalities of leaders have failed to find any consistent pattern of traits which characterize leaders" (2). Cartwright and Zander in *Group Dynamics,* write, "On the whole, the attempt to discover the traits that distinguish leaders from nonleaders has been disappointing" (1).

In response to these failures, social psychologists have turned from what might be called "Great Man" theories of leadership, which are concerned with the traits of leaders, to *interactional* or *situational* theories; that is, theories which take into account not only the characteristics of the individual as they might equip him for leadership, but also the characteristics of the situation in which he might function as a leader, including the task to be accomplished, the characteristics of those who will function as followers, the structure of the group as a unit, and so on. But interactional theory poses a problem from the very first: how do we take into account *all* situational factors at once in order to distinguish leaders from followers? Do we consider each factor of equal importance or do we weight some factors more than others? What task-related variables should be considered? What about personality dimensions?

The research reported here is a first step toward the solution of this problem. It begins in an interactional theory of leadership and defines the "situation" broadly to include the abilities and attitudes of the individuals, the goals and structures of their group, and the material environment. Further, it proceeds on the assumption that the *values* in the group which is being

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studied are results of and encompass the important aspects of the situation which must be considered in discovering the characteristics of its leadership.

THEORY AND CONCEPTS

The theoretical scheme which guided this study has been outlined by Rosen, Lippitt, and Levinger in a forthcoming monograph (6). There are three major concepts involved: *power, property,* and *resource.*

1. The conception of *power* follows that of Kurt Lewin. By power is meant the *potential* ability of one person to get another person to behave in a certain way (3). This does not necessarily mean that the first person actually gets the second to behave in this way; the power concept refers to the likelihood that the second will behave in a certain way *if* the first attempts to get him to do so. When we speak of actualized power, we use the concept *influence.* Power is therefore potential influence.

The definition of *leader* rests upon this concept of power. By "leader" we mean that person who has relatively greater power—greater influence potential —in a relationship. Just as power is something that one possesses in degrees and in comparison to others, so also leadership exists in degree, and where it resides depends upon the relative power of the individuals considered. We will not refer to leaders in this report; rather, we will refer to high power and low power children. The operations by which these two groups are identified are detailed below.

2. A *property* is any characteristic attributed to an individual. It is to be taken in a very broad sense, so that it may include something as concrete as being wealthy as well as something as ambiguous as being temperamental. It may include being able to manipulate people as well as being able to fashion a paper doll.

3. A *resource* is a form of property, distinguished by the fact that it is *valued.* But since different people and different groups value different things, a property of a person which is a resource in one social context may not be a resource in another. Similarly, as the same group of people face different situations, different properties of members may be valued; that is, different characteristics of people may become resources for themselves, for others, for the group. However, there is evidence that the overwhelming majority of our social relationships are stable, so that what may be considered resources do not change. It is the rare crisis which alters values to any extent.

The theory which links the concept of resource with the concept of power states that a resource has the function of inducing those who value it to be influenced by one who possesses it. This is an economic theory essentially. On the one hand we have someone who possesses something the other wants

or wishes to avoid; on the other hand we have someone who wants or wishes to avoid it; and the coin of exchange is power.

But we find immediately that we must further qualify our concept of resource. For it is not enough in the economic scheme of things for a property to be valued that we consider it a resource; it must also be something that can be given. Even more, there must be the expectation that it might be given. For example, it is not enough that the property of money is valued in order that it be a resource. The person who has the money must be able and willing to give it away. Similarly, it is not enough for someone to be capable of being warm and friendly; he must be able to bestow this warmth and friendliness on another if it is to be considered a resource in the relationship.

METHOD

For the past three years a broad investigation of the social relationships among children in classroom groups has been conducted at the Research Center for Group Dynamics at the University of Michigan, supported by the National Institute of Mental Health. This study was a part of that research. The subjects were 152 boys and girls in the University Elementary School, the laboratory school supported by the University of Michigan. The children from kindergarten through the sixth grade—from about five to twelve years old—were included. These children are above average in intelligence and are exclusively from the middle class of a small city. There is little doubt that these characteristics of the children had some effect on the findings.

The study began with fairly lengthy interviews with 21 of the children, 3 from each grade, in which we talked with them about their activities and their friends in and out of school. From these interviews we gleaned 17 characteristics of children which appeared as matters of concern in the children's conversations with us. We then made up simple statements of these 17 items and put each on a card.

TABLE 1

17 Properties Selected from Pre-interviews

1. Smart at school	10. Doesn't start fights and doesn't tease
2. Has good ideas about how to have fun	11. Knows how to act so people will like him
3. Good at making things	12. Plays with you a lot
4. Good at games with running and throwing	13. Likes to do the same things you like to do
5. Knows how to fight	14. Nice looking
6. Strong	15. Has things you'd like to have
7. Acts friendly	16. Gives you things
8. A good person to do things with	17. Does things for you
9. Asks you to do things in a nice way	

Now, in our conceptual scheme, these 17 items represent possible properties of children. It is also true that since they all appeared in the responses of the children to broad questions, they must be of some importance to them, so to some extent they must be considered resources as well as properties.

We determined the power relations among the children by means of a near-sociometric technique, each child rating the others on how often he could get him to do something for him. There is a great deal of stability and consensus about the power structure of a classroom as measured in this way.

In order to find out, among other things, whether children who were seen by their peers as possessing certain types of resources would be higher in power than children who were not attributed such resources, we made up a pair of target children for each child in school. One member of each pair was somebody who could almost get the child to do something for him, the other, a child who could hardly ever get him to do something for him. In reality, two target pairs were made up for each child: a pair of boys and a pair of girls, with the same procedure followed for both.

The interviewer presented the pictures of the children in the target pair to the child. Then he read the 17 item-cards and had the child say which child in the target pair each item best described. The child could assign an item to one member of the pair or the other, or he could put the item aside if he could not distinguish the members of the target pair in terms of it. When the child had disposed of the 17 items, those he had assigned to either child were read off to him again, but this time he was asked to say whether the item was *important, sometimes important,* or *not important* when he had to decide whether or not he would do something for the other child.

By this procedure we get two kinds of information. By ranking the items by the proportion of times over all our subjects that they are assigned to the high power child, we can determine to what extent each is perceived as a characteristic of high power peers. By ranking them by the proportion of times they were considered important, we can determine their relative standings as resources, although, as has been pointed out, they must all be considered resources to some extent.

RESULTS

First, what properties do the children value most? It is important while asking this question and, in fact, while asking all the questions we ask of these data, that we control on the age of the children, their sex, and the sex of the target pair; we may expect that the values of older children differ from those of younger children, that boys have different values from girls, and that the values applied to boys and girls by either sex at any age differ. If we control on these three factors we generate eight experimental groups, younger boys

with male target pairs, younger boys with female target pairs, younger girls with male target pairs, and so on. The smallest group contained 24 children; the largest, 42.

We can group our 17 items into resource areas so that we tap social-emotional resources such as friendliness and gentleness of manner; expertness resources, such as being smart or good at games; coerciveness resources such as being strong and knowing how to fight; and associational resources such as playing with others a lot. Table 2 contains the rankings by proportion of

TABLE 2

Ranks of Items by Per Cent of Times They Were Rated "Very Important"

	School grade of subject:	K – 3rd				4th – 6th			
	Sex of subject:	Male		Female		Male		Female	
Items	Sex of target pair:	M	F	M	F	M	F	M	F
"Expertness" resources:									
1. Smart at school		13.5	13	17	15	16	17	17	16
2. Has good ideas about how to have fun		1	17	13	6	6	10	9	4
3. Good at making things		13.5	6.5	12	15	13	12.5	15	14
4. Good at games with running and throwing		16.5	3	14	17	17	11	13	13
"Coerciveness" resources:									
5. Knows how to fight		12	4	11	15	14	15	16	12
6. Strong		9.5	13	15	13	12	16	14	15
"Social-emotional" resources:									
7. Acts friendly		2	15.5	3	3	3	5	2	2
8. A good person to do things with		9.5	1	4	11	9	6	6	9
9. Asks you to do things in a nice way		5.5	5	1	4	4	2	1	5
10. Doesn't start fights and doesn't tease		5.5	11	7.5	1	7	1	4	7
11. Knows how to act so people will like him		15	13	5	2	2	8	5	3
"Associational" resources:									
12. Plays with you a lot		3	8.5	9	10	8	9	11	6
13. Likes to do the same things you like to do		5.5	6.5	10	5	1	7	8	1
Other									
14. Nice looking		11	10	7.5	12	15	14	10	17
15. Has things you'd like to have		16.5	15.5	16	7	10	12.5	12	10
16. Gives you things		8	8.5	6	9	11	3	7	11
17. Does things for you		5.5	2	2	8	5	4	3	8

TABLE 3

Significances of Differences in Ranks of Items, by Resource Area Clusters: Importance *

Subjects	Resource areas			
	"Expertness" (4 items)	"Coerciveness" (2 items)	"Social-emotional" (5 items)	"Associational" (2 items)
Younger boys				
Boy target pairs	n.s.	n.s.	n.s.	n.s.
Girl target pairs	n.s.	n.s.	n.s.	n.s.
Younger girls				
Boy target pairs	>.05	n.s.	>.02	n.s.
Girl target pairs	.10	n.s.	>.02	n.s.
Older boys				
Boy target pairs	.10	n.s.	>.05	n.s.
Girl target pairs	n.s.	.10	>.02	n.s.
Older girls				
Boy target pairs	.05	.10	>.02	n.s.
Girl target pairs	n.s.	n.s.	>.05	n.s.

* By Mann-Whitney U-test: Cell entries are probability levels.

times each item was considered important. Table 3 represents the results of Mann Whitney U-tests (5), a statistical technique which enables us to test whether items in a resource area cluster at either end of the rankings.

Tables 2 and 3 reveal that the social-emotional resource area proves to be the most important to all the children but the younger boys. In the other groups the cluster of items in the area of social-emotional resources tended to rank higher in importance that the rest of the items; the higher ranking of this resource area could have occurred by chance five times out of a hundred or less.

Tables 4 and 5 present the data on the rankings of the items as properties of high power children. Younger girls attribute social-emotional properties to high power children significantly more often than other properties. Older girls perceive older high power boys in the same way.

Coercive properties are attributed significantly *less* often than other properties to high power boys by younger and older girls. Older boys attribute coercive properties significantly less often to high power children of either sex.

If our theory which relates resources to power is to be supported, we should find that all the properties, which we have said represent resources to some extent, should be more characteristic of high power than of low power children. We find that this is in fact the case. No matter what the age group, no matter what the sex of the child or of the target pair, no matter what the

TABLE 4

Ranks of Items by Per Cent of Times They "Best Describe" High Power Children

Items	School grade of subject:	K – 3rd				4th – 6th			
	Sex of subject:	Boys		Girls		Boys		Girls	
	Sex of target pair:	M	F	M	F	M	F	M	F
"Expertness" resources:									
1. Smart at school		6	13	5.5	17	15.5	14	12.5	8
2. Has good ideas about how to have fun		3	10.5	13	1.5	1	4.5	9.5	4.5
3. Good at making things		6	4	7.5	14	14	17	11	16
4. Good at games with running and throwing		13.5	10.5	14	14	11	4.5	6.5	9.5
"Coerciveness" resources:									
5. Knows how to fight		10.5	4	17	14	13	15.5	17	17
6. Strong		15.5	6.5	16	14	17	15.5	12.5	12.5
"Social-emotional" resources:									
7. Acts friendly		1	13	10.5	5.5	4.5	7	4	9.5
8. A good person to do things with		8	1	3.5	9	11	4.5	2	7
9. Asks you to do things in a nice way		10.5	15.5	1.5	7	7	2	4	14
10. Doesn't start fights and doesn't tease		3	17	10.5	4	9	12	14.5	15
11. Knows how to act so people will like him		6	8.5	3.5	3	2	4.5	4	2
"Associational" resources:									
12. Plays with you a lot		3	2	7.5	1.5	4.5	10	8	2
13. Likes to do the same things you like to do		10.5	6.5	5.5	5.5	4.5	8.5	9.5	4.5
Other									
14. Nice looking		17	4	1.5	14	8	1	1	2
15. Has things you'd like to have		13.5	15.5	15	11	15.5	12	14.5	6
16. Gives you things		15.5	13	10.5	9	11	12	16	11
17. Does things for you		10.5	8.5	10.5	9	4.5	8.5	6.5	12.5

item, it is more often said to characterize the high power child than the low power child in the target pair. In *almost* every case, the item was said to characterize the high power child rather than the low power child more than 50 per cent of the time.[2]

[2] A supplementary table indicating these data has been deposited with the American Documentation Institute, Auxiliary Publications Project, Library of Congress, Washington 25, D.C. Order Document No. 5357 remitting $1.25 for photoprints, or $1.25 for 35-mm microfilm. Make checks or money orders payable to Chief, Photoduplication Service, Library of Congress.

The data allow us to explore even further the relationship between resources and the perceived properties of high power children. For, by means of the importance ratings of the items obtained from the children, we can rank our 17 properties by their importance, or, in the terms of our theory, by the extent to which they are resources. And we can similarly rank the properties by the percentage of children in each group who saw them as describing the high power child better than the low power child in the target pair. Our hypothesis must be that the more a property is considered a resource by the children, the more likely the high power children will be perceived as possessing that property.

The data confirm the hypothesis. Using a Spearman rank order correlation coefficient to compare the items ranked by importance with their ranks as characteristic of high power children, we find that the relationships in seven out of eight groups could have happened by chance but once in ten times or less. In the eighth group where the relationship is not significant—where older girls judged their girl classmates—the relationship is in the predicted direction.

It seems clear that the more a property is considered a resource by the population studied the more it is associated with the higher power members of that population.

TABLE 5

Significance of Differences in Ranks of Items, by Resource Area Clusters: Characteristic of High Power Children *

Subjects	Resource areas			
	"Expertness" (4 items)	"Coerciveness" (2 items)	"Social-emotional" (5 items)	"Associational" (2 items)
Younger boys				
Boy target pairs	n.s.	n.s.	n.s.	n.s.
Girl target pairs	n.s.	n.s.	n.s.	n.s.
Younger girls				
Boy target pairs	n.s.	$>.02$	$>.10$	n.s.
Girl target pairs	n.s.	n.s.	$>.10$	$>.10$
Older boys				
Boy target pairs	n.s.	$>.10$	n.s.	$>.10$
Girl target pairs	n.s.	$>.05$	n.s.	n.s.
Older girls				
Boy target pairs	n.s.	$>.10$	$>.08$	n.s.
Girl target pairs	n.s.	n.s.	n.s.	$>.10$

* By Mann-Whitney U-test: Cell entries are probabilities.

TABLE 6

Spearman Rank Order Correlation Coefficients: Importance X Characteristic of High Power

Subjects *	rho	p †	Subjects *	rho	p †
YBB	.46	.03	OBB	.74	>.001
YBG	.44	.04	OBG	.37	.08
YGB	.49	.02	OGB	.48	.03
YGG	.80	>.001	OGG	.26	.17

*YBB: *Y*ounger *B*oys judging *B*oy target pairs; YBG: *Y*ounger *B*oys judging *G*irl target pairs, etc.

† N = 17, the number of items. The probability level is for one tail of the distribution.

Now among the children in the University Elementary School, as is probably true in all sizeable groups of people, some children are about equal in power. That is, Donald reports that Gordy is no more likely to get him to do something for him than Pete is. We presented to a small proportion of the children in the study target pairs who were actually equal in power in their relations to them. Our hypothesis is that children will have more difficulty in assigning resources to one member of the target pair or the other under this condition. For, if it is true that power is generated by the possession of resources, equal power must indicate equal possession of resources.

You will remember that a child could say that an item was characteristic of one or the other child in the target pair, or he could put the item aside because he could not say which child the item best described. The number of times items were put aside was used as a measure of the difficulty of the task. We matched the children who judged an equal-power target pair on sex and grade with children who judged an unequal-power target pair. Using a Wilcoxen Signed-Ranks Test (7), we compared these two matched populations on this measure.

The data indicate that children who see the target pair as equal in power put items aside much more often than matched children who see a power differential in the target pair. Among the 20 children for whom the target pair is of the opposite sex, the difference in the likelihood that the one group would put more items aside than the other could have occurred by chance but three times out of a hundred. Among the 7 children for whom the target pair is of the same sex, the difference is in the same direction, but largely because of the small number of children sampled here, the difference is not significant.

DISCUSSION

In several ways the data reveal a relationship between the values of the children in our study, the properties perceived to be possessed by the children

and the power structure of the classroom group. What are the implications of these findings?

To begin with, it seems that we have really *two* classes of findings. On one hand we have the relationship between values and power; on the other, we have information about the values of this particular sample of children, who are not representative of all children certainly.

Only very limited statements can be made about the content of the values which the data reveal. We found that these children valued social-emotional properties. This may be characteristic of the middle class, bureaucratic culture which is socializing them. Although it is also true that Rosen's study found the same to be true in a lower class population, as did a study by Lippitt, Polansky, and Rosen (4), a necessary next step in this line of research would be to carry our technique to other samples. But the relationship found between values, properties, and power may be more generalizable.

At this point, it is necessary to focus on an issue which with such a study as this one must come to grips. It has been implied here that possession of resources leads to a higher power position. But the data in reality tell us nothing of the kind.

It is possible that the values of the children have nothing to do with the power structure of their peer groups at all, that power is based, for example, on the devaluated ability to apply brute force, but that once power is established, it is rationalized by projecting upon the power figures all the properties which *are* valued. In terms of a long-standing concept in psychology, our data may be shot through with *halo effect*.

While this is possible, other data we have collected lead us to doubt it. A vast amount of data has been gathered from observations of these children by their teachers over several years, by naive observers over several hours, and by members of the research project staff for shorter periods of time in standard behavioral situations. The data show that the higher power children are in fact more friendly as a group, more likely to be helpful to their peers, and more able in terms of their psychological adjustments to be outgoing in social relationships, while the low power children as a group are quite different, and are, for example, more likely to use physical force as a method of attempting to influence their peers and more likely to manifest behavior symptoms of deeper lying disturbances.

The results of this study suggest that the values of the children do reflect a great deal of the situation in which they interact. Further, these values seem to play an important role in transforming certain properties of the children into resources which in turn determine the relative power positions of the children in classroom groups.

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