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ABSTRACT

A study was conducted to determine the degree to which teachers and students share perceptions of the use of power in the classroom. The study defined five bases of power: coercive (implied or explicit punishment), reward, legitimate (assigned), referent (identification with the person in power), and expert (perceived competence). A total of 156 teachers and 2,698 of their students from grade seven through college filled out a perceived power measure, in which the teachers completed the statement "I use (blank) power" and the students completed the statement "My teacher uses (blank) power" with one of the five defined power bases. A second measure asked the subjects to rate the percentage of each of the five power bases they or their teachers used. The resulting data indicated that both the students and the teachers felt that coercive power was less likely to be used than power from other bases. The teachers and students did not differ in their perceptions of how likely either coercive or legitimate power are to be employed; however, teachers saw themselves as more likely to use more reward, referent, and expert power than did the students. In relative terms, both teachers and students reported greater use of expert, referent, and reward power than coercive power. Students saw coercive power as accounting for a higher proportion of power use than did teachers, while teachers saw a significantly higher proportion of expert power than did the students. (HTH)

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# Power in the Classroom I: Teacher and Student Perceptions

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## Abstract

The primary focus of this study was to determine the degree to which teachers and students have shared perceptions of the use of power in the classroom. The results indicated that even though statistically significant associations between teacher and student perceptions were found, teacher and student perceptions of the use of power are not isomorphic. The results also indicated that both teachers and students view the overwhelming proportion of power use to stem from reward, referent, and expert bases.

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## POWER IN THE CLASSROOM I: TEACHER AND STUDENT PERCEPTIONS

Education has been undergoing rapid change in the last several years. New modes of learning have been espoused and new communication techniques/strategies are being encouraged as alternative methods to the traditional classroom model. However, "the traditional view of education, a view that still prevails, ~~holds~~ that learners must submit themselves to teachers" (Menges, 1977, p. 5). As Menges further suggests, this view means that the teachers' authority is not to be questioned. The underlying assumption is that without the communication of power by the teacher over the student, the student cannot learn.

Hurt, Scott, and McCroskey (1978) suggest that in a classroom setting "a certain degree of teacher power is always present" (p. 125). They continue by suggesting that the more power is employed by the teacher as a means of control, the more likely it will be required as a means of control. In other words "the more it is used, the more it will need to be used" (p. 125).

The primary focus of this study is to determine the degree to which teachers and students have shared perceptions of the use of power in the classroom. If there is a high degree of shared perceptions this might illustrate that both teacher and student are aware of power and its outcome. If there is a low degree of shared perceptions this might suggest that the communication between the teacher and student is ineffective. For example, if the student doesn't like the type of power employed by the teacher but can recognize it when it is used he/she will be able to respond appropriately. However, if the student cannot recognize the type of power communicated by the teacher, he/she might respond inappropriately. The key is to determine if students and teachers have shared perceptions about the kinds of power employed in a classroom. If this is determined then both teachers and students can be taught what types of power produce certain outcomes (i.e., learning).

### Power and Communication

The importance of effective communication in the classroom cannot be overstated. Communication is central to the teaching process. Some even argue that communication is the teaching process. As Hurt, Scott and McCroskey (1978) have stated it, there is "a difference between knowing and teaching, and that difference is communication in the classroom" (p. 3).

Power and communication are closely interrelated. Power that is not used, for all intents and purposes, is power that does not exist. The use of power requires communication. In the absence of communication, therefore, the teacher in the classroom is powerless. In the same vein, the way(s) the teacher communicates with her/his students to a major extent determines the type and extent of the power he/she exerts over those students. Similarly, the type of power exerted will have a major impact on the quality of teacher-student communication.

### The Nature of Power

"Power" is a term commonly employed in a wide variety of academic disciplines. Not surprisingly, the constituent definitions of the term are far from

consistent from one discipline to another, or even within a given discipline. We will not attempt to review all of the ways the term "power" is used in the varied literatures. Rather, we will examine only a few that are particularly pertinent to the present investigation.

One of the more narrow views of power in the classroom is provided by Hurt, et. al. (1978, p. 124): "Power refers to a teacher's ability to affect in some way the student's well-being beyond the student's own control." This view suggests an absence of intellectual assent to influence on the part of the student. While this may be the case in many instances, in many others students willingly accept the power of the teacher to influence their behavior. While we find this definition flawed, we hasten to add that our experiences with hundreds of in-service teachers in workshops and seminars indicates that the "lay definition" of most of these individuals is highly consistent with the Hurt, et. al., definition.

Considerably broader views of power are expressed by a number of other writers (eg. Cartwright & Zander, 1968; Goldner, 1970; McClelland, 1975; Zaleznik & Kets de Vries, 1975). Power is typically defined by these writers as an individual's potential to have an effect on another person's or group of persons' behavior. More specifically, this broader view sees power as the capacity to influence another person to do something he/she would not have done had he/she not been influenced. In short, an individual exhibits some type of change in her/his behavior, attitudes, beliefs, etc. as a result of influence from someone else. However, French and Raven (1968) qualify this type of definition by noting that such change must be a direct result of the influence exerted by another rather than the result of a combination of forces which may have exerted additional influence. From this view of the nature of power, French and Raven (1968) identified five potential bases of power: coercive, reward, legitimate, referent, and expert.

The Bases of Power

French and Raven's (1968) bases of power are all founded on the perceptions of individuals over whom the power might be exerted. Although French and Raven (1968) were not writing with the classroom as their intended focus, we will examine these power bases in this context below.

Coercive Power. A teacher's coercive power is based on a student's expectations that he/she will be punished by the teacher if he/she does not conform to the teacher's influence attempt. The strength of the teacher's coercive power is contingent upon the student's perception of how probable it is that the teacher will exact punishment for non-conformance and the degree of negative consequences such punishment would entail, minus the probability of punishment from other sources (eg. from peers, the behavior itself, etc.) if the student does comply with the teacher's influence attempt. It is important to note here that in environments where very strong peer-group pressure against the teacher exists, the teacher may have no coercive power at all, even though the teacher may be in a position to exert a high degree of punishment.

Reward Power. A teacher's reward power is based on a student's perception of the degree to which the teacher is in a position to provide reward to



her/him for complying with the teacher's influence attempt. Such rewards may involve providing something positive (positive reinforcement) or removing something negative (negative reinforcement). As was the case with coercive power, the strength of a teacher's reward power is mediated by the possibility of receiving other rewards from other sources as a function of non-compliance.

Although it is often not recognized, coercive and reward power essentially are the flip sides of the same coin. Coercive power involves introducing something unpleasant or removing something pleasant if the student fails to comply. Reward power involves introducing something pleasant or removing something unpleasant if the student does comply.

Legitimate Power. Legitimate power often is referred to as "assigned" power. It stems from the assigned role of the teacher in the classroom. Legitimate power is based on the student's perception that the teacher has the right to make certain demands and requests as a function of her/his position as "teacher." This type of power generally is most related to mundane matters, such as controlling classroom time, determining what unit should be studied, regulating interaction, and the like. It generally does not extend beyond the school environment into the private lives of students. In some cases, however, this type of power is much broader. A prime example is the coach who sets up training rules. Usually the athlete will comply with these rules because they are seen as "legitimate" demands from this person because of her/his role as coach. Similar demands from the art teacher likely would be ignored.

Referent Power. The foundation of referent power is the student's identification with the teacher. This type of power is based on the relationship between two people. Specifically, it is based on the desire of the less powerful person (the student) to identify with and please the more powerful person (the teacher). The stronger the student's attraction to and identification with the teacher, the stronger the teacher's referent power.

Expert Power. Expert power stems from the student perceiving the teacher to be competent and knowledgeable in specific areas. Most information taught in a classroom is presented from a base of expert power. The ideas are not "proven" in an objective sense. They are presented with the expectation they will be accepted by the student. To the extent the student sees the teacher as competent and knowledgeable, this expectation will be correct. French and Raven (1968) stress that the main impact of expert power is change in an individual's cognitions. Any change in behavior is a secondary result of that influence.

### The Communication of Power

As we have noted previously, the use of power requires communication. Often, power is used to influence without explicit verbal communication. When a teacher tells a student to do her/his homework, it usually is not necessary to say "or I will punish you by lowering your grade" or "because I am the teacher and I have the right to demand you do this" or "because you like me and want to please me". Such appeals to power are implied and generally recognized by the student without being directly stated.

In other instances, direct power appeals are stated. Coercive power, for example, may be invoked when a teacher says "If you don't turn your work in on time, I will give you an 'F' for the assignment". Similarly, reward power may be invoked when a teacher says "If you do this extra problem, I will give you five bonus points". An appeal to referent power may take the form of the teacher saying "Will someone help me set up this film projector?"

Whether power appeals are directly stated or implied, for teacher power to influence behavior the student must associate the requested behavior with the power of the teacher. All teacher power is based on student perceptions. If the student does not perceive the teacher to have a certain type of power, a teacher's appeal to that power, whether direct or implied, is not likely to result in influence. Similarly, even if the student perceives the teacher to have the power, if the influence attempt is not associated with the power, the attempt is likely to be unsuccessful.

Purpose of Study

The present paper reports the first of a series of studies investigating the role of teacher power in student learning. The ultimate purpose of this research program is to determine how teacher power impacts student learning and how teachers may modify their communication behavior and use of power to enhance learning in the classroom. The implicit assumption in this research is that a teacher cannot avoid using power in the classroom, that use of power is an inherent part of the teaching process. However, it is also assumed that use of some bases of power will result in more positive learning than use of other bases. A primary goal of this series of studies is to test and refine this latter assumption.

This first study was designed to accomplish two objectives: 1) to determine an acceptable method of measuring use of power in the classroom, and 2) to determine the degree to which teachers and students have shared perceptions of the use of power in the classroom.

Method

Measurement of Power

As we noted previously, the constituent definitions of power in the literature are highly diverse. Similar diversity is characteristic of operational definitions. Consequently, the selection of measuring instruments was crucial to the furtherance of this research.

Since we chose the conceptualization of power advanced by French and Raven (1968) as the foundation for our work in this area, it was considered vital that a measure isomorphic with this conceptualization be selected. The original authors provide no suggestions for measurement of power based on their conceptualization. However, Student (1968) introduced an appropriate approach. In his work based on the French and Raven (1968) conceptualization, Student (1968) provided subjects with a description of each type of power, and asked them to estimate (on a five-point, Likert-type scale) the extent to which they complied with their supervisor's wishes because of that type of power. The

validity of this approach was suggested by the strong results he obtained relating to both employee satisfaction and productivity.

More recently a modification of the Student (1968) approach was introduced by Richmond, McCroskey, Davis, and Koontz (1980). Their research was focused on organizational communication and employed a variety of employee samples, one of which was public school teachers. Because of the difficulty in estimating the reliability of the single-item type measure used by Student (1968), Richmond, et. al. (1980) employed five seven-point, bipolar scales for each type of power. They provided subjects with a description of each type of power and asked the subjects to respond to the following statement for each type of power on the five scales: "My supervisor employs \_\_\_\_\_ power." The appropriate name for each power base was inserted in the blank. The bipolar scales they employed were: agree-disagree, false-true, incorrect-correct, wrong-right, and yes-no. The substantial associations they found between the bases of power and employee satisfaction and management communication style (MCS) are suggestive of validity for this measure.

For the present research we employed the Richmond, et. al. (1980) instrument as our primary measure of power in the classroom. We shall refer to this measure as the perceived power measure (PPM). We made only minor modifications. When our subjects were teachers we modified the response statement to read: "I use \_\_\_\_\_ power." When our subjects were students, the statement read: "My teacher uses \_\_\_\_\_ power." As we will report later, the reliabilities we obtained were very high and comparable to those reported by Richmond, et. al. (1980).

While this instrument is highly reliable and has, in slightly different forms, a fairly good case for validity, it measures use of power in an absolute rather than a relative form. It is possible for a power source to be rated extremely highly (or any other level) on all of the power bases simultaneously. Since we believed that the relative use of the five power bases in comparison to each other may be as important as the degree of each's use, we employed a second measure of power to supplement the information provided by the first.

We shall refer to the second measure as the relative power measure (RPM). This measure also explains the five power bases. It then requests the subjects to estimate the percentage of total power usage that stems from each base, with the requirement that the total equals 100 percent. To illustrate, the instrument for teachers takes the following form:

Presuming that 100 percent represents all of the power that you use with your students, please estimate the percentage which you use in each of the five categories below. For example, if you use a lot of coercive power but little else, you might respond as follows: 80 coercive, 5 reward, 5 legitimate, 5 referent, 5 expert. Be sure the total percentage for the five categories adds up to 100.

	coercive
	reward
-----	legitimate
-----	referent
-----	expert
-----	100 Total

These two measures, then, were our operational definitions of power in the classroom. The PPM measures power use in a more absolute form, while the RPM was designed to measure power use in a relative form.

### Samples

Data for this study were drawn from paired samples of teachers and classes of students. A total of 156 teachers and 2698 of their students provided usable data. An additional 4 teachers and 163 students provided incomplete data and were excluded from the data analyses.

To insure as much generalizability as possible, teachers and students were selected from diverse educational levels and academic disciplines. All levels from seventh grade through college were included. Similarly, teachers and classes from sciences, humanities, social sciences, and arts were included. At the college level, both regular faculty and graduate assistants were included. The only restriction placed on selection of a class for inclusion was enrollment. No large classes (over 35) were chosen. Because the method of data collection provided strong guarantees of anonymity, we are unable to specify the exact number of respondents in each category. The original sample included 200 teachers selected in a systematic, non-random manner. Forty, or 20 percent, did not return the data collection instruments. However, on the basis of the legible postmarks and return addresses of the materials returned, no systematic bias was suspected.

### Procedure

Because of the sensitive nature of the data being collected and the obvious potential for providing socially desirable responses, it was deemed that anonymity of responses must be absolutely assured. Consequently, no personal information was requested from either the teachers or the students. However, it was necessary to be able to pair student responses with those of their teacher. Thus, each teacher was asked to select a five-digit number at random and record it on their response form. They were asked to request that each of their students place the same number on their forms.

Teachers were selected and asked to participate. Those that agreed were sent the appropriate forms with instructions for their completion and return. No follow-up correspondence to increase return rate was employed because the anonymous responses did not permit knowledge of who had returned materials and who had not.



## Data Analyses

All data analyses were performed with the assistance of the SAS statistical package. Data for individual subjects were punched separately and teacher and student data paired by means of the MERGE procedure available in this statistical package.

The data analysis included several procedures. 1) Alpha reliability estimates were computed for the PPM responses for both teachers and students. 2) Means for PPM and RPM responses for both teachers and students were computed. 3) These means were tested (t-test for related samples) to determine significance of differences between teacher and student samples. 4) Canonical correlational analyses were separately computed for the PPM and RPM data as tests of overall association between teacher and student responses. 5) Simple correlation analyses for each power base were performed on the PPM and RPM data as tests of specific association between teacher and student responses.

## Results

The reliability estimates for the five dimensions of the PPM are reported in Table 1. As noted in that table, the reliabilities are very high. While such high reliability certainly is desirable, it also indicates the need for the expanded number of items is doubtful. Additional examination of the data indicated that the lowest correlation of any item with the total score for a given power base was .92. Thus, the use of a single item to measure perceived power for each base, as employed by Student (1968), would probably be sufficient.

The means and standard deviations for the scores on both the PPM and the RPM are reported in Table 2. The difference between teacher and student scores on each measure are also reported in that table as are the obtained t's for the tests for the significance of these differences.

Both the students and the teachers indicated on the PPM that coercive power is less likely to be used than power from other bases. The teachers and students did not differ in their perceptions of how likely either coercive or legitimate power are to be employed. Their perceptions did differ, however, on all three of the other power bases. Teachers saw themselves as likely to use more reward, referent, and expert power than did the students.

In relative terms, as indicated by the RPM scores, both teachers and students report greater use of expert, referent, and reward power than coercive power. However, students saw coercive power as accounting for a higher proportion of power use than did teachers, while teachers saw a significantly higher proportion for expert power than did students.

The canonical analysis of the PPM data indicated significant correlations for the first three variates extracted. The first variate ( $r_c = .53$ ,  $p < .001$ ) was primarily a function of student and teacher perceptions of the use of coercive and legitimate power. The second variate ( $r_c = .37$ ,  $p < .001$ ) was primarily a function of student and teacher perceptions of the use of expert power. The third variate ( $r_c = .33$ ,  $p < .01$ ) was most associated with student

and teacher perceptions of reward and referent power. (See Table 3 for correlations of all power variables with the variates).

The canonical analysis of the RPM data indicated significant correlations for only the first two variates extracted. The first variate ( $r_c = .50$ ,  $p < .001$ ) was primarily a function of student and teacher reports of the proportion of use of coercive and referent power. The second variate ( $r_c = .38$ ,  $p < .05$ ) was most associated with reports concerning reward and expert power. (See Table 3 for correlations of all power variables with the variates).

The simple correlations between teacher and student reports on all of the dimensions of both PPM and RPM are reported in Table 2. All of the correlations on the PPM are statistically significant, with the highest ( $r = .46$ ) being the association for coercive power. On the RPM measure all of the correlations are also significant, with the exception for that relating to legitimate power. As was the case with the RPM scores, the highest association was for coercive power ( $r = .37$ ).

### Discussion

The results of this study suggest the measures employed are useful instruments for studying power in the classroom. The reliability of the PPM instrument is so high that even fewer items can probably be employed successfully. Although the reliability of the RPM measure could not be assessed because of its single-response type format, the results obtained on the PPM and the earlier results obtained by Student (1968) suggest perceptions of people relating to power are so strong they may be reliably measured with single-response scales. These results suggest, then, that our first goal--to develop instruments which can be used to measure power in the classroom--has been achieved satisfactorily.

The second goal of this study was to determine the degree to which teachers and students have shared perceptions of the use of power in the classroom. The results indicate that, although there is substantial and statistically significant association between these perceptions, they are far from isomorphic. In nine of ten cases, the observed correlations were statistically significant, but the highest association was only .46. Thus, even at best, the teachers and students share only a little over 20 percent of variance.

An examination of the mean differences on the measures gives us more insight into the differences in teacher and student perceptions. If we view coercive power negatively and reward, referent, and expert power positively (as is suggested in much of the education literature), it is clear that the teachers have a much more positive view of their behavior than do the students. Interestingly, however, both teachers (70.3%) and students (67.1%) see the overwhelming proportion of power use to stem from reward, referent, and expert bases. Thus, it would not be correct to conclude from this study that teachers see their behavior in a positive light while students see it in a negative light. They both have a generally positive view, but the teacher view is a bit more positive.

The aggregate data represented by mean scores and the correlational data from the measures suggest what may seem to be conflicting conclusions. The mean data suggest substantial similarity in teacher and student responses. Even where statistically significant differences exist, they generally are small. The largest on the PPM accounts for 24 percent of the total score range, while the largest on the RPM accounts for only about five percent. While students collectively have a somewhat more negative view of their teacher's power usage than the teacher does, the generally modest correlations between teacher and student perceptions indicate that many students have a more positive view of their teacher's use of power than does the teacher her/himself.

Since teachers and students do not have the same perceptions of power use, and the differential perceptions cannot be simply explained by self-serving interests, the question that needs to be addressed is whose perceptions are right? Or, to put it another way, whose perceptions should be researched? While we do not wish to take an absolutist approach to right and wrong on this issue, we do believe that the perceptions of the students are the more critical perceptions, hence should be the main focus for future research. Students will respond in the classroom on the basis of how they perceive that classroom to be, not on the basis of how their teacher perceives it. Their perceptions of their teacher's behavior, while certainly affected by what the teacher thinks and does, are the direct precursors of their classroom behaviors. Thus, we believe, the impact of teachers' use of power in the classroom on student learning is mediated by the students' perceptions of that power use.

While future research should continue to examine the relationship between teachers' perceptions of their power usage and student learning, we believe the higher and more meaningful associations will be found between student perceptions of teacher power and their own learning. Future research in this program will directly test this belief.



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Table 1  
Alpha Reliability Estimates

PPM	Teacher Sample	Student Sample
Coercive	.99	.97
Reward	.98	.97
Legitimate	.98	.98
Referent	.97	.97
Expert	.98	.97

Table 2  
Simple Statistics, t-tests, and Correlations for All Measures

Measure	Teacher $\bar{X}$	Sample SD	Student $\bar{X}$	Sample SD	$\bar{X}$ Difference	t	r
PPM							
Coercive	17.1	9.5	17.0	8.7	.1	.13	.46***
Reward	26.3	7.5	22.5	6.5	3.8	5.21***	.16*
Legitimate	23.7	9.3	22.9	6.5	.8	25.99	.21*
Referent	26.0	6.9	23.3	7.3	2.7	3.70***	.17*
Expert	29.3	5.6	24.6	7.1	4.7	7.34***	.22*
RPM							
Coercive	13.1	15.7	16.8	15.4	-3.7	2.65**	.37***
Reward	18.6	14.6	19.2	12.6	-.6	.45	.25**
Legitimate	16.2	14.6	16.4	11.3	-.2	.14	.06
Referent	20.4	14.9	21.9	15.3	-1.5	1.04	.29***
Expert	31.3	18.9	26.0	17.1	5.3	3.03**	.27**

\* p < .05  
 \*\* p < .01  
 \*\*\* p < .001

Table 3

Correlation Coefficients for Significant Canonical Variates -  
PPM Data and RPM Data

PPM Measure	Variate 1		Variate 2		Variate 3	
	Teacher	Student	Teacher	Student	Teacher	Student
Coercive	.90	.92	-.06	.07	-.01	-.19
Reward	.12	.13	-.32	-.34	.75	.44
Legitimate	.56	.61	-.10	-.12	.05	-.19
Referent	-.09	-.47	-.41	-.19	-.60	-.46
Expert	.20	.03	.68	.93	-.03	-.06

RPM Measure	Variate 1		Variate 2	
	Teacher	Student	Teacher	Student
Coercive	.79	.75	.36	.42
Reward	-.24	-.51	.61	.75
Legitimate	-.30	.06	.24	.35
Referent	-.61	-.69	-.35	-.45
Expert	.23	.28	-.77	-.60