Abstract
The implications of social psychological theory and research, particularly in the area of social influence, are examined in an attempt to provide a theoretical foundation for cross-age tutoring programs. Areas discussed include the relative effectiveness of adults and peers as sources of social influence, the desirability and effectiveness of various bases of social influence, and the effects of tutoring programs on students, tutors and teachers. A set of hypotheses that merit empirical testing is outlined. The potential benefits of utilizing social psychological theory in the development, implementation, and analysis of cross-age tutoring are examined.

Neil M. Malamuth and Shelly J.C. Turcotte*
Carol Taylor Fitz-Gibbon*

Tutoring And Social Psychology

In discussions of such diverse topics as the effects of family size on intelligence (Zajonc & Marcus, 1975; Zajonc, Markus & Markus, 1979), toilet training (Azrin & Foxx, 1974), and cross-cultural rearing practices (Bronfenbrenner, 1970), allusions are made to the notion that children's teaching of one another can be very potent methods of learning, both for the child who is teaching and the one being taught. In schools, the practice of having older students help younger students on a one-to-one basis is referred to as "cross-age tutoring". Recent empirical data support the efficacy of cross-age and peer tutoring programs in comparison to more traditional methods of instruction (Dineen, Clark & Risley, 1977; Fitz-Gibbon, 1978). The present paper provides the beginnings of a much needed theoretical foundation for cross-age tutoring programs by examining the implications of social psychological theory and research, particularly in the area of social influence, as they relate to the design and evaluation of such projects.

The Possible Benefits of Applying Theory

Many persons have urged that theory play a greater role in educational research. Devin-Sheehan, Feldman and Allen (1976) concluded a comprehensive survey of tutoring programs with one admonition:

> Unless investigators in this area make a stronger attempt to draw more directly upon the mainstream of psychological and education theory, it is likely that tutoring research will continue to be rather fragmented, inconclusive and noncumulative. The wider use of systematic theory should lead to the formulation of research problems of greater sophistication and significance, and thereby contribute directly towards the solution of the numerous practical problems encountered in devising tutoring programs for children (p. 380).

One aspect of the application of theory to the study of natural phenomena is that theories suggest the kind of variables that should be studied. This aspect will be emphasized by reference to social-psychological concepts in terms of observable behaviours occurring in school tutoring projects. Another valuable aspect of the application of theory to such practical matters as the planning of school projects is that theoretical considerations may indicate whether a project is likely to be successful, or under what conditions it might be successful. Usually such theoretical support comes in the form of specifying a process which explains how the project inputs lead to the desired outcomes. Theoretical arguments,

* University of Manitoba
* University of Newcastle, England

however, are no substitute for the implementation and evaluation of actual school programs. Only program implementation and evaluation, conducted in the framework of research designs, will enable educational researchers to assess the extent to which the processes predicted by theories actually occur and have educationally significant effects.

The Bases of Social Influence

Much of a teacher's day is spent consciously and deliberately trying to influence student behaviour. A teaching situation may thus be considered an instance of social influence: An influencing agent (the teacher) affects the cognitions, attitudes, or behaviour of the target (the student) by arranging environmental conditions, through modeling, by providing reward/punishment contingencies, by supplying information, etc. Similarly, in a cross-age tutoring situation, the tutors attempt to get the tutored student to learn, to do homework, and to be generally cooperative.

To what kinds of influence do young people respond, and what kinds of influence produce the most desirable long-term effects of schooling? How does a change from a traditional classroom method of instruction to a Learning-by-Tutoring method of instruction affect the bases of influence that are employed? It is these questions which guide the following discussion.

The Relative Effectiveness of Adults and Peers as Sources of Social Influence

Varied research studies suggest that while adults certainly exert some influence on youth, peer power is often more potent than that of adult teachers (Berenda, 1950). In one study, for example, peer models were found to be more effective at inhibiting adolescent boys from playing with a "forbidden" toy than either a nurturant or prohibitive adult (Grosser, Polansky & Lippitt, 1951). Although the relative influence of peers often exert greater influence than teachers is an appropriate generalization across a wide range of ages and backgrounds (Condry & Siman, 1968; Bronfenbrenner, 1970). This generalization has implications for tutoring. One implication is that tutors may be more effective in influencing other students than are classroom or remedial teachers, a point made by many persons who have conducted or observed tutoring projects in schools (Fitz-Gibbon, 1978). Moreover, there may be fewer negative connotations surrounding tutoring by students as opposed to the more common remedial work by adults. Blank, Koltuv, and Wood (1972) reported that students were reluctant to receive tutoring from mothers in the community, while there has been enthusiasm for participation in a student-to-student tutoring projects (Mohan, 1972; Robertson, 1971; Hoffmeister, 1973).

Type of Influence

While it is evident that peer influence yields substantial power, it is also of interest to analyze the type of power or social influence possessed by peers as compared with teachers. A taxonomy of differing types (or bases) of social influence has been provided by French and Raven (1959), Raven (1965), and Raven and Kruglanski (1970) and is briefly described in the following paragraphs:

Coercive influence. The ability of the influencer to mediate punishment for the individual being influenced is the basis of the effect.

Reward influence. The ability of the influencer to mediate rewards is the basis for the effect.

Informational influence. The information communicated by the influencer is the basis for the effect or the change. For example, a teacher may have successfully explained to the student why a particular procedure is desirable for solving mathematical and other problems and, by means of this information, may have influenced the student's behaviour.

Expert influence. The attribution of superior knowledge to the influencing agent is the basis for the effect or change. For example, a student might accept that a particular procedure is useful in solving a problem without understanding why.

Referent influence. Identification with another person or group, which serves as a "frame of reference", is the basis for the change. Thus, seeing other students doing (or not doing) homework and identifying with them may result in a similar behaviour.

Legitimate influence. Accepting the right of the agent to exert influence is the basis for change. The teacher might, for example, be perceived as having the right to assign homework and to expect students to do it, thereby eliciting the anticipated behaviour.

Clearly, bases of influence are interdependent rather than being mutually exclusive, and any given influencing agent may be using several bases simultaneously. Furthermore, an influencer might use differing bases at different stages in a relationship.

Tutoring programs may rely on various bases of influence to a greater or lesser extent. For example, a program in which considerable effort is expended upon training tutors to present clear, understandable instruction, accurately matched to the learner's readiness, might be found high in informational and/or legitimate influence whereas a program that deliberately selected high status students as tutors (e.g., football players) might show high scores on referent influence.

However, complexities surface as soon as one starts to operationalize general concepts. Some students might be more responsive to informational influence, others to referent. Legitimate influence depends upon the person's conception of legitimacy. For the acquiescent, more-accepting child, a tutor who occupies a legitimate role may ensure an effective working partnership whereas for a student whose approach to school is aggressively rejecting, referent power might be the most effective. The tutoring supervisor has, at least, a better chance of properly matching tutors and students than the principal who must assign a single teacher to influence a group of 30 students.

Raven (1974) undertook an analysis of the bases of social influence employed by teachers and students. Using a questionnaire format, the investigator asked Black, Hispanic and White junior high school students to state the reasons why they would comply with a request such as "picking up your things that you had left around" when made by their teacher as compared with a fellow student. As might be expected, responses indicated that teachers were much higher in legitimate and coercive influence, and somewhat higher in expert influence than peers. Peers were much higher in referent influence. Somewhat surprisingly, fellow students were judged higher in reward and informational influence. Similar findings have been reported with Brazilian students (Raven, 1974).

The Relative Desirability of Various Bases of Social Influence

Assuming for the moment that we might be able to choose among the types of influences applied to students, what would our choices be? Are some bases of influence more desirable and/or more effective than others?

One dimension along which the bases of influence differ is that of the need for surveillance. For example, there is a need for surveillance with the use of coercive influence to determine whether or not sanctions should be imposed. By contrast, surveillance is not of concern with the use of referent power.

Another dimension along which the bases of influence differ is that of the longevity of the influence. Although reward-power may not require surveillance because the target person is likely to claim the reward, the influence of the reward on the behaviour may cease when the reward ceases. The hoped-for effects of both coercion and rewards may be short-term, ending with coercive or rewarding process, or in some cases showing a negative reaction following termination (Bohart, Loeb & Rutman, 1969). The short-term status and the required surveillance of coercive power may make it undesirable. In one study, for example, subjects who had been placed under surveillance showed less subsequent interest than those whose behaviour had not been monitored (Lepper & Greene, 1975). Furthermore, varied sources of data indicate that coercive influence is negatively correlated with student satisfaction and learning as well as with the degree to which teacher influence transcends the classroom.

The possibility exists that intrinsic motivation will be undermined with influence by extrinsic rewards. An impressive series of studies has shown that under certain conditions extrinsic rewards (such as money) can undermine intrinsic interest in a task (Deci, 1971; Kruglanski, Riter, Amitai, Bath-Sheva, Shabtai & Zabsh, 1975), although some important issues continue to be debated (Calder & Staw, 1975; Deci, Cascio & Krusell, 1975).

By contrast, if a person engages in a certain behaviour (e.g., working in class) because a request to do so has been accepted as legitimate, the behaviour is likely to continue without surveillance or contingencies as long as the behaviour continues to be perceived as responsive to legitimate influence. Similarly, to the extent that information influences behaviour, the influence of information does not end when the person stops supplying it. Information may become internalized and continue to exert influence as long as it is remembered and is evaluated as being correct.

The employment of influence that leads to internalization may be in harmony with many long-term goals of education. Presumably we do not wish to produce students who study only under conditions of surveillance or for immediate rewards.

In short, it is suggested that referent power in particular, and to a lesser extent informational and legitimate bases of influence, appear to be more desirable than reward or coercive power. The first three require less surveillance, and are likely to have longer-lasting effects arising from internalization.

How may the concepts "need for surveillance" and "internalization" be operationalized in the context of tutoring programs to test predictions from theory? The need for surveillance could be measured by observing how many tutoring pairs continue to work when a teacher leaves the room (i.e., ceases to exercise surveillance) and contrasting this with observations of the work behaviour of the same students in regular classes when left unsupervised. Informal contacts with cross-age tutoring programs have provided us with indications that a decrease in the need for surveillance does in fact occur. For example, in one instance tutoring continued undisturbed by an orchestra practice at the other end of the auditorium. The supervising teacher commented: "I sometimes think an elephant could walk in and not be noticed." And a principal familiar with tutoring programs in elementary schools remarked that "You find teachers slipping out to chat in the hall or take a cigarette break during

tutoring time" (Fitz-Gibbon, 1978).

Internalization is of course and inferred state, implying a long-term change. To examine whether or not tutors had internalized some of the pro-school attitudes which enactment of a tutoring role implies, a variety of longitudinal data should be collected following a tutoring project, including records of school "discipline" problems, drop-out rates and numbers proceeding to jobs involving teaching. Many practitioners have felt that tutoring increased the interest of tutors in becoming teachers, but no data are available to date.

The Relative Effectiveness of Various Bases of Social Influence

While referrent, informational and legitimate power might be desirable, are they effective? Experimental attempts to assess the utility of differing bases of social influence (Collins & Raven, 1969; Raven, 1965; Raven & Goodchilds, 1975) have yielded no simple answers regarding which is the most effective means of social influence. However, it has been theorized — beginning with the original French and Raven (1959) taxonomy — that *referent* influence has the most broadly applicable power base with the most uniformly positive effects. A number of studies in non-educational settings have provided support for this theoretical proposition (Zander & Curtis, 1962; Zander, Medow & Efron, 1965; Kelman, 1958), but of particular interest here is an experimental study comparing the success of teachers using the coercion-reward, referent, or legitimate-expert power in changing the behaviour of students in a dyadic interaction (Millet, 1973). The demographic compositions of the pairs were systematically varied to include Black and White teachers and students and also differing student socioeconomic levels. Referent influence was found to be nearly twice as effective as the other bases of influence regardless of the student's or teacher's race or the student's socioeconomic level.

It may be that our existing eductional roles are utilizing only some means of social influence to the exclusion of others, such as referent influence, that are in many respects the most desirable (Raven & Goodchilds, 1975). Whereas in a tutoring project, the referent power of peers is harnessed for the goals of the school, there exists evidence (Bronfenbrenner, 1970) that in our present educational systems, referent influence among peers is often operating as a counter-force undermining educational goals, as many an observer and teacher can testify. The use of referent bases of influence *for* educational goals — such as might be accomplished via a cross-age tutoring program — may greatly aid the effectiveness and desirability of an educational program. For example, if a student devalues math, observing the captain of the football team, whom he idolizes, trying to teach him that very subject may generate an attitude change towards math.

The topic of bases of power or social influence may provide guidance for the evaluation of tutoring projects. It may be found, for example, that tutoring projects only succeed if they manage to change the primarily coercive influence of many classrooms to other bases of influence. An analysis which establishes the primary bases of influence used by tutors might identify patterns of influence associated with particular program outcomes (e.g., student learning) or program characteristics (e.g., longevity). Such an analysis could be conducted for individual students in a single program or an aggregated data base across several programs.

It might be found that lack of perceived legitimate influence presages trouble and that high referent influence presages success in both affective and cognitive domains. If such relationships were established, analysis of bases of influence could be used during the early stages of a program to make adjustments when trouble was foreshadowed. For example, it

might be found that the influence attempt of tutors was being rejected by tutees on grounds of legitimacy. This could occur if students perceived that teachers or the administration or parents felt it was improper for older students to tutor younger students. Another threat to the tutors' legitimate basis of influence may occur if the tutors do not appear to know the work they are teaching, thus calling into question their credibility as a source of informational influence and, inevitably too, the legitimacy of their requests for work and cooperation. It may be, in general, that only when the legitimacy of the tutor's role is accepted, can the tutor act from the basis of referent power that is so effective, desirable, and so frequently invaluable to the teacher.

Effects of a Tutoring Project on Tutors

We have been considering the tutor's influence on the student. But there is a mutual transaction involved, with the *student* exerting influence on the tutor. One characteristic of legitimate influence is that it is a source of power for the powerless. This is the basis of influence available to tutored students. To the extent that students clearly need the help of tutors, they exert a legitimate influence on tutors to provide this help. Many tutors recognize students' needs and feel this influence acutely, remarking that, as tutors, they can spend longer with a student than can a teacher, etc. Indeed, many tutors have been reported as feeling bound to come to school so as not to disappoint a student. Frequent testing of students will enhance this legitimate influence if the testing shows tutors that students are learning from their instruction. Furthermore, when teachers take the trouble to test student learning and discuss it with tutors, the teachers again signal to tutors the legitimate nature of their tasks.

The increased recognition which is associated with legitimate influence may be of special value within the secondary school system. Beginning at the junior high level, rather than attending a small local school within the community, students typically become part of a regional school in which they attend several different classes each day and have relatively limited contacts with any given teacher. They are largely functioning in an impersonal situation with a fairly high degree of anomymity. This point relates to the social psychological concept of "de-individuation" which occurs when the person is not seen or paid attention to as an individual but is primarily "submerged within groups" (Festinger, Pepitone, and Newcomb, 1952). A growing body of research demonstrates that conditions of de-individuation and associated anonymity can result in increased anti-social behavior (Zimbardo, 1970; Diener, 1975).

An important aspect of tutoring might be the decreased anonymity and de-individuation of students. Tutoring can be expected to lead to an increased number of relationships between secondary students and the surrounding community, an increase produced by such activities as tutors communicating with parents or delivering homework assignments and, of course, simply through communication between tutors and students being tutored.

In the role of tutor, many previously unmotivated and uncooperative students appear to become dedicated to the goals of education, working hard with tutored students, showing concern for their learning and communicating with teachers eagerly for perhaps the first time. Students who have negative attitudes towards the "system" but become agents of it through assuming roles as tutors, have adopted roles inconsistent with their attitudes. Social psychological research data derived from laboratory and field experiments reveal that counter-attitudinal role taking results in attitude change when subjects (a) feel personally responsible for what they did, (b) receive little direct financial reward, and (c) believe their

actions have significant consequences (Collins and Hoyt, 1972). Thus it would seem that if a situation was created whereby students who acted as tutors perceived that they had some choice in the matter, that they were not participating primarily for an extrinsic reward, and believed that their actions "made a big difference", then it would be anticipated that being a tutor would bring about considerable attitude change among students who were originally negative towards school tasks.

Effects of a Tutoring Project on the Teachers Conducting it

The effect on students and on tutors of participation in a tutoring program has been discussed. What of the effect on teachers, those who generally exert influence and exercise surveillance?

Exceedingly important is the changed influence patterns among teachers and tutors. As tutors accept the role of instructor and a position within the system, they are likely to identify more than previously with their teachers. This new role for tutors may serve to increase the referent power of teachers; tutors emulate them and empathize with them. The information power of the teacher is also increased as the tutor finds an immediate need for information. "How do you solve this kind of problem? I have to teach my student tomorrow". This kind of urgency replaces relatively remote needs, such as the need to get into college or to function in society. Therefore, one likely effect is that teachers will find tutors more eager to learn, more questioning, and more cooperative than in a regular classroom.

Research in the area of conflict resolution suggests that the crucial task in reducing conflict is to create acceptable super-ordinate goals (Sherif & Sherif, 1969). A tutoring relationship which requires the cooperation of tutor, student and the teacher focusing on the task of effectively teaching the student, may serve to create a super-ordinate goal which alters the "we" vs. "they" perception common among differing age levels and between students and staff.

Further hope for the alleviation of student-staff tensions is provided by the social-psychological finding that assuming the role of another, or role-taking, is an extremely potent technique for increasing empathy and for reducing interpersonal conflict (Bohart, 1972; Stotland, Sherman and Shaver, 1971). Bohart (1972) compared the efficacy of differing techniques in reducing the anger experienced by undergraduate females. He found that on both behavioral and self-report indices, playing the role of the person who had provoked them was clearly more effective than the other three techniques, namely, expressing their feelings to the provocator, intellectual analysis of the provocator's perspective, and a control condition.

We would thus expect that when students take on a teaching role by acting as tutors, this would serve to increase tutors' empathy and understanding of their own teachers. Such a process is indeed frequently reported by observers of tutoring programs, and by tutors themselves. As one tutor put it, "Now I know how teachers feel when we act up". In view of the fact that "discipline" has shown up on Gallup polls year after year as the most frequently mentioned problem for schools, this "teacher empathy" or conflict resolution effect, if established, could be a major important outcome of tutoring.

There are, perhaps, more subtle effects on teachers' attitudes. It was suggested earlier that there should be a decreased need for surveillance in tutoring projects. If this effect occurred, would it have any impact on teachers? An experiment by Kurglanski (1970) indicated that there are undesirable effects of surveillance on the person exercising it. This

investigator manipulated whether identical employee products were accomplished with or without monitoring by a supervisor. It was found that supervision (surveillance) caused distrust of the employee and the belief that it was necessary to supervise him. Presumably, the supervisor attributed the positive quality of the work to the fact that the employee was being "watched over" in one condition and to the employee's internal motivation in the condition where no supervision occurred.

Translating this into the world of teaching, we might hypothesize that the constant exercise of surveillance that appears necessary in the regular classroom, itself causes, to some extent, a mistrust of students and a sincere doubt that students can manage themselves or exhibit motivation. Such attributions will be particularly strong with respect to low achieving groups of students who may show little interest in school during adolescence. Negative attitudes towards students on the part of teachers have been widely criticized, but solutions other than general good will are rarely offered.

Some persons who have conducted tutoring projects have noted a significant change in their own attitudes to the students who were tutors, a change induced by the observation of the positive effects of the tutoring role on the students. The valuable effects of such observations on the teacher lead us to recommend that, while tutoring programs may be organized by a coordinator, they should be run with the full involvement of the tutors' teachers so that teachers observe their students in tutoring roles and may change their perceptions of these students. Clearly, an attempt to measure teachers' attitudes in the context of a valid experimental design in which tutoring by their students is the treatment would be a valuable piece of research.

In summary, much of the process of education is essentially an influence attempt: Schools are established to provide deliberate instruction. Influence may be exerted in various ways and social-psychological theory suggests that more desirable results are obtained with some kinds of influence than with others. Tutoring projects may be able to evoke situations in which referent, informational and legitimate sources of influence act on behalf of the goals of the schools, thus reducing the need for the use of less desirable forms of influence such as coercive power. Previously uncooperative students may be guided to work within the school system rather than against it. There is also the possibility that observations of the students in the role of tutors may significantly change teachers' perceptions of these students.

Hypotheses Requiring Empirical Testing

Based on the analysis presented in this paper, we suggest the following hypotheses to guide future research:

1 *Process studies of bases of influence.* The bases of social influence employed in a tutoring project differ from those employed in a traditional classroom and result in less need for surveillance and greater internalization of school norms.
2. *Process studies of influences on tutored students.* In both academic and non-academic areas, peer-group or cross-age tutors obtain more positive responses from students than do adult tutors.
3. *Effects of tutoring on social relationships.* Cross-age tutoring programs in schools lead to a greater number of friendships and acquaintances within the school's community and thus reduce problems resulting from de-individuation.
4. *Attitudinal effects of the role of tutor.* Enacting the role of tutor produces positive changes in attitudes towards school and an increase in empathy with teachers. The role of

tutor has particularly beneficial effects on those students who are most alienated from the traditional classroom.

5. *Effects of tutoring on teachers' expectations.* The experience of seeing students in tutoring roles alters the perceptions of these students by teachers.
6. *Predicting effectiveness.* Measurements of intervening social psychological variables — such as bases of influence, attributions, perceived and enacted roles — can be used to predict success or failure of a project on various outcome dimensions.

Since tutoring represents a change in social-psychological context in which learning is supposed to occur, it would seem reasonable to attempt some theory-based evaluations of tutoring programs utilizing social-psychological theories. The variables identified by such theories — variables such as bases of influence, the need for surveillance, attributions, attitudes, and teacher empathy — appear to capture the practitioner's view of tutoring in a richer way than the traditional variables employed in educational evaluation (e.g., academic achievement) and may flag the crucial processes that determine project success or failure. Attempts to study tutoring from the perspective of social-psychological theories may lead us to agree with Kurt Lewin that a good theory is the most practical of things.

Footnotes

[1] This paper was written as part of a research project supported by grant number 400-75-0076 from the National Institute of Education.

References

Azrin, N.H., & Foxx, R.M. *Toilet training in less than a day.* New York: Simon and Schuster, 1974.

Berenda, R.W. *The influence of the group on judgments of children.* New York: King's Crown Press, 1950.

Blank, M., Koltuv, M., & Wood, M. Individualized teaching for disadvantaged kindergarten children: A comparison of two methods. *The Journal of Special Education,* 1972, *6,* 207-219.

Bohart, K., Loeb, A., & Rutman, I.D. *Behavioral consequences of cognitive dissonance.* Paper read at Easter Psychological Association Meeting, 1969, (Quoted in Nisbett and Valins, 1972).

Bronfenbrenner, U. *Two worlds of childhood.* New York: Simon and Schuster, 1970.

Calder, B.J. & Staw, B.M. Interaction of intrinsic and extrinsic motivation: Some methodological notes. *Journal of Personality and Social Psychology,* 1975, *31,* 76-80.

Collins, B.E., & Hoyt, M.F. Personal responsibility-for-consequences: An integration and extension of the "forced compliance" literature. *Journal of Experimental Social Psychology,* 1972, *8,* 558-593.

Collins, B.E., & Raven, B.H. Psychological aspects of structure in the small group. Interpersonal attraction, coalitions, communication, and power. In G. Lindzey & E. Aronson (Eds.), *Handbook of Social Psychology.* Reading, Mass: Addison-Wesley, 1969.

Condry, J.C., & Siman, M.C. *An experimental study of adult versus peer orientation.* Unpublished Masters Thesis, Department of Child Development, Cornell University, 1968.

Deci, E.L. The effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology,* 1971, *18,* 105-115.

Deci, E.L., Cascio, W.F., & Krusell, J. Cognitive evaluation theory and some comments on the Calder and Staw critique. *Journal of Personality and Social Psychology,* 1975, *31,* 81-85.

Devin-Sheehan, L., Feldman, R.S., & Allen, V. Research on children tutoring children: A critical review. *Review of Educational Research,* 1976, *46*(3), 355-385.

Diener, E., Fraser, S.C., Beaman, A.C., & Kelman, R.T. Effects of de-individuation variables in stealing among Halloween trick-or-treaters. *Journal of Personality and Social Psychology,* 1976, *33,* 178-183.

Dineen, J., Clark, H., & Risley, T. Peer tutoring among elementary students: Educational benefits to the tutor. *Journal of Applied Behavior Analysis,* 1977, *10,* 231-238.

Festinger, L., Pepitone, A., & Newcomb, T. Some consequences of de-individuation in a group. *Journal of Abnormal and Social Psychology,* 1952, *47,* 382-389.

Fitz-Gibbon, C.T. An analysis of the literature on cross-age tutoring. *Centre for the Study of Evaluation Report No. 117.* Los Angeles: UCLA School of Education, 1978.

Fitz-Gibbon, C.T., & Morris, L.L. Theory based evaluation. *Evaluation Comment,* 1975, *5*(1), 1-4.

French, J.R.P., Jr., & Raven, B.H. The bases of social power. In D. Cartwright (Ed.), *Studies in social power.* Ann Arbor: University of Michigan, 1959, 150-167.

Garbarino, J. The impact of anticipated reward upon cross-age tutoring. *Journal of Personality and Social Psychology,* 1975, *32*(3), 421-428.

Grosser, D., Polansky, N., & Lippitt, R. A laboratory study of behavioral contagion. *Human Relations,* 1951, *4,* 115-142.

Harvey, J., & Smith, W. *Social psychology: An attributional approach.* Saint Louis: C.V. Mosby Company, 1977.

Hoffmeister, B. *Improving skills in the junior high school through peer tutoring.* Unpublished Masters Thesis, California State University, San Francisco, August, 1973.

Jamieson, D.W. & Thomas, K.W. Power and conflict in the student-teacher relationship. *Journal of Applied Behavioral Science,* 1974, *10,* 321-336.

Kelman, M. Compliance, identification, and internalization: Three processes of attitude change. *Journal of Conflict Resolution,* 1958, *2,* 51-60.

Kruglanski, A.W. Attributing trustworthiness in supervisor-worker relations. *Journal of Experimental Social Psychology,* 1970, *6,* 214-232.

Kruglanski, A.W., Riter, A., Amitai, A., Bath-Shevah, M., Shabtai, L., & Zabsh, D. Can money enhance intrinsic motivation? A test of the content-consequence hypothesis. *Journal of Personality and Social Psychology,* 1975, *31,* 744-750.

Lepper, M.R., & Greene, D. Turning play into work: Effects of adult surveillance and extrinsic rewards on children's intrinsic motivation. *Journal of Personality and Social Psychology,* 1975, *31,* 479-486.

Millet, J.E. *Social power analysis of the dyad in the classroom setting.* Doctoral dissertation, School of Education, University of California, Los Angeles, 1973.

Mohan, M. *Peer tutoring as a technique for teaching the unmotivated:* Fredonia, New York: State University of New York, Teacher Research Center, January, 1972.

Raven, B.H. *Power relations in home and school.* Paper presented at the annual meeting of the Western Psychological Association, San Francisco, April, 1974.

Raven, B.H. Social influence and power. In I.O. Streiner, & M. Fishbein (Eds.), *Readings in contemporary social psychology.* New York: Holt, Rinehart and Winston, 1965, 371-382.

Raven, B.H., & Goodchilds, J. *Social power: The analysis of bases, modes, and preferences.* Grant proposal to National Science Foundation, UCLA Department of Psychology, 1975.

Raven, B.H., & Kruglanski, A.W. Conflict and power. In D.G. Swingle (Ed.), *The structure of conflict.* New York: Academic Press, 1970, 69-109.

Raven, B.H., Mansson, H.H., & Anthony, E. *The effects of attributed ability and referent influence.* Technical Report No. 10, NONR 233 (54), University of California, Los Angeles, 1962.

Robertson, D.J. *The effects of an inter-grade tutoring experience on tutor self-concept.* Paper presented at the annual meeting of the California Educational Research Association, San Diego, April, 1971.

Sherif, M., & Sherif, C.W. *Social Psychology*. New York: Harper & Row, 1969.

Stotland, E., Sherman, E.S., & Shaver, K.G. *Empathy and birth order: Some experimental explorations*. Lincoln: University of Nebraska Press, 1971.

Zajonc, R.B., & Markus, G.B. Birth order and intellectual development. *Psychological Review*, 1975, *82*, 74-88.

Zajonc, R.B., Markus, H., & Markus, G.B. The birth order puzzle. *Journal of Personality and Social Psychology*, 1979, *37*, No. 8, 1325-1341.

Zander, A., Curtis, T. Effects of social power on aspiration setting and striving. *Journal of Abnormal and Social Psychology*, 1972, *64*, 63-74.

Zander, A., Medow, H., & Efron, R. Observer's expectations as determinants of group aspirations. *Human Relations*, 1965, *18*, 273-287.

Zimbardo, P.G. The human choice: Individuation, reason and order versus de-individuation, impulse and chaos. In W.J. Arnold, & D. Levine (Eds.), *Nebraska symposium on motivation*, 1969. Lincoln: University of Nebraska Press, 1970.