

DOCUMENT RESUME

ED 253 832

CG 018 035

AUTHOR Martin, Frank P.; Osgood, D. Wayne  
 TITLE Interpreting the Effects of Autonomy on Inmates.  
 PUB DATE Aug 84  
 NOTE 22p.; Paper presented at the Annual Convention of the American Psychological Association (92nd, Toronto, Ontario, Canada, August 24-27, 1984).  
 PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.  
 DESCRIPTORS Adolescents; Behavioral Objectives; \*Correctional Rehabilitation; \*Delinquency; Males; Models; \*Personal Autonomy; \*Prisoners; Secondary Education; Social Values  
 IDENTIFIERS \*Program Objectives

ABSTRACT

Research has indicated that increasing autonomy to incarcerated youths results in greater acceptance of institutional treatment goals and less support for an inmate counterculture. To examine different processes by which autonomy might affect individual outcomes, 430 youths in four Michigan boys' training schools were surveyed. The questionnaire used included two measures of autonomy and scales measuring perceived need for rehabilitation and satisfaction with the institution. Research focused on a model which differentiates the direct effect of autonomy on youths' antisocial values from the indirect effect of autonomy which operates through increasing youths' acceptance of institutional treatment goals. Data were analyzed using a structural equation model. Results indicated the model fit the data very well. Predicted correlations generated from path estimates closely matched the actual correlations between measures. The findings support the combined effects model, which predicts both a direct effect of autonomy on prosocial values and an indirect effect of autonomy mediated by the youths' acceptance of treatment goals. The largest path, between autonomy and acceptance of treatment objectives, suggests that persons who do not feel coerced are more accepting of authority. (Author/JAC)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED253832

Interpreting the Effects of Autonomy on Inmates

Frank P. Martin and D. Wayne Osgood  
Institute for Social Research  
The University of Michigan

U.S. DEPARTMENT OF EDUCATION  
NATIONAL INSTITUTE OF EDUCATION  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

X This document has been reproduced as  
received from the person or organization  
originating it

Minor changes have been made to improve  
reproduction quality

- Points of view or opinions stated in this docu-  
ment do not necessarily represent official NIE  
position or policy

"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

*Frank P. Martin*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)."

Paper presented at the convention of the American Psychological  
Association, August 1984, Toronto, Ontario.

## ABSTRACT

Previous research has indicated that increasing autonomy to incarcerated youth results in greater acceptance of institutional treatment goals and less support for an inmate counterculture. The present study expands on these promising results by examining different processes by which autonomy might affect individual outcomes. The research focuses on a model which differentiates the direct effect of autonomy on youths' antisocial values from the indirect effect of autonomy which operates through increasing youths' acceptance of institutional treatment goals. Data were collected through questionnaires administered to over 430 youth in four Michigan boys training schools. The data were then analyzed using a structural equation model with unobserved variables. The model fit the data very well. As predicted, the experience of autonomy has a direct contribution to values. Autonomy also contributes to more positive values because it leads to greater acceptance of treatment goals.

## Interpreting the Effects of Autonomy on Inmates

The ultimate goal of most institutional programs for juvenile offenders is to modify youths' behavior to become more prosocial upon return to the community. Programs typically seek to accomplish this by changing youths' attitudes and values. It is then hoped that these values will persist after treatment ceases and that they will influence subsequent behavior. In this study, we seek to identify a process by which these attitudes and values are affected by the treatment program.

Some of the more popular approaches used in institutions to accomplish this change in values are based on a model in which the treatment group is the agent of individual change. Social psychologists have long been interested in the question of how leadership style affects group functioning. In their classic study, Lewin, Lippitt, and White (1939) manipulated how adult leaders behaved with groups of children. They found that groups with democratic adult leaders showed more internalization of group goals than groups with autocratic leaders. They also found that the unsupervised behavior of the children was more consistent with these goals in the democratic groups. These findings were supported in the laboratory (Preston & Heintz, 1949; Shaw, 1955) and in organizational settings (Morse & Reimer, 1956; Bachman, Smith, & Slesinger, 1966).

The link between the use of coercive power by leaders and group outcomes has also been the focus of research on social control (French & Raven, 1968; French, Morrison & Levinger, 1960; Raven & French, 1958). These studies found that coercion tends to decrease the attractiveness of those in power and of the goals they support. Since we are defining autonomy as the opposite of coercive control, then its presence should lead to greater acceptance of the program goals by the youth. This acceptance of goals then produces conditions where the treatment itself can have the maximum effect on values. The influence of autonomy on values is not direct, but instead impacts values indirectly by increasing inmates' acceptance of treatment goals. Thus, the burden of directly changing values is placed on the treatment program.

It is also possible that the experience of autonomy in this setting is rehabilitative in its own right. Reactance theory (Brehm, 1966) predicts that freedom from external controls is needed before behavior will have a positive feedback to values. Thus, even if control by staff and fellow group members leads to conformity, values will not improve. Under conditions of autonomy, however, participation in the treatment program will have a greater impact because cooperation cannot be attributed to external sources. Reactance theory, as opposed to social control theory, predicts that the presence of autonomy will have a direct

effect on values which is independent of inmates' acceptance of program goals. This implies that a positive change in values may occur even if youth do not acknowledge a need for treatment.

Recent work in the field of juvenile corrections has found that granting groups of juvenile inmates a greater amount of autonomy (versus strict control by the staff) is associated with a greater acceptance of institutional treatment goals, a lessening of support for an inmate counterculture opposing the staff, and an increase in prosocial values (Osgood, Gruber, Archer, & Newcomb, in press; Moos, 1975; McEwen, 1978). While these studies indicate that a climate of autonomy vis-a-vis autocracy has beneficial consequences for groups (and individuals within groups), they have been satisfied with examining the bivariate relationships between autonomy and individual outcomes. Unfortunately, bivariate analyses are only able to determine the total effects of autonomy on outcomes and are therefore unable to examine the process by which this leadership style operates.

The present study expands on the findings of Osgood et al. by examining the multivariate process by which the granting of autonomy to youth affects their acceptance of treatment goals as well as their prosocial values. We will examine these three concepts using a path analytic approach by which we can identify both indirect and spurious effects which the simple bivariate

analyses of the previous research cannot identify. We can then obtain a clearer understanding of the impact that autonomy has on the treatment process.

The simplest model relating these constructs is shown in Figure 1. This model posits that autonomy affects group members acceptance of treatment goals and that it also leads to an internalization of group supported values, but that the correlation between acceptance of goals and internalization of values is spurious. This model is somewhat analogous to that of reactance theory which predicts that the acquisition of the values the program is trying to instill can be unrelated to the acceptance of treatment objectives.

The other possible extreme is that shown in Figure 2. This model corresponds to the predictions of social control theory which implies that any effects of autonomy on individual values are completely mediated by the acceptance of treatment goals. In other words, an autonomous leadership style only affects individual values through its role in increasing acceptance of treatment goals. This means that other forces may decrease the degree to which an individual accepts the treatment goals, thereby cancelling any positive effects of autonomy.

A third, and more plausible, model combines these two ideas (see Figure 3). This model assumes that granting autonomy has

Figure 1. "Direct Effects" Model

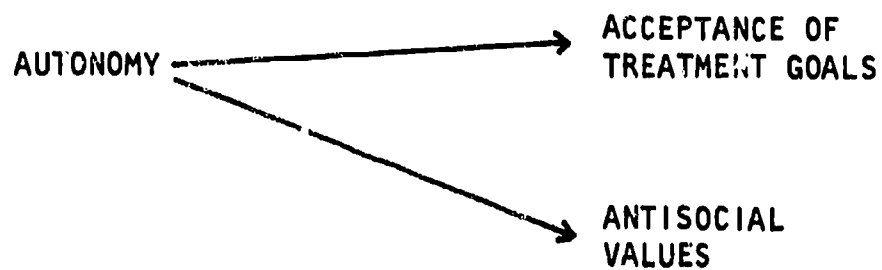
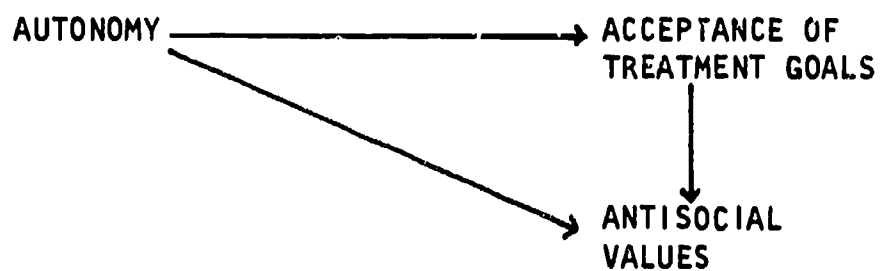


Figure 2. "Total Mediation" Model



Figure 3. "Combined Effects" Model





both a direct effect on increasing prosocial values and an indirect effect on values mediated by an increased acceptance of treatment goals. Unlike the model in Figure 2, this model implies that increasing the amount of autonomy granted the youth has a positive effect on prosocial values that is independent of the youths' acceptance of the rehabilitation objectives. Furthermore, this model posits that the relationship between the youths' acceptance of treatment and prosocial values is real (rather than spurious). Thus, it combines the predictions of both social control theory and reactance theory to explain the influences of autonomy on values.

## METHOD

### Sample

The study was conducted at two public and two private boys training schools for adjudicated delinquents in Michigan and uses the same research design as Osgood et al. Each institution uses a group treatment program called Positive Peer Culture (Vorrath and Brendtro, 1974) or some variation of it. Within each institution, youth reside in treatment groups of seven to thirteen members. The group is the organizational unit for

virtually all phases of institutional life, including school, meals, recreation, and treatment. Assignment to these groups is made according to the first bed which is available, thus eliminating any systematic assignment bias due to the personal characteristics of the youth. As a result, a youth is equally likely to be placed in a group experiencing a high degree of autonomy or a group experiencing relatively little autonomy.

#### Data Collection

Data were collected through questionnaires administered to the residents of 45 groups in October and November 1982. Residents completed questionnaires during sessions approximately one hour in length during school time. This procedure yielded over 430 completed questionnaires for a response rate of 92%. Participation was voluntary and respondents were guaranteed anonymity. Questionnaires were also distributed to staff team members for each group at their weekly team meetings. Team members were instructed to return their questionnaires to a member of the research staff at their next team meeting. The response rate for the staff questionnaires was 77.2% resulting in 156 completed questionnaires. The individual members' responses were averaged together to obtain a single score for that team.

If less than three staff members completed the instrument, the team was dropped from any analyses using staff data.

### Measures

Our measures are described in Table 1. We are using two measures of autonomy: perceived degree of autonomy granted by the staff (henceforth referred to as Autonomy from Staff) and perceived degree of autonomy granted by the group as a whole (Autonomy from Group). We are including the Autonomy from Group measure because there is considerable potential for coercive control over individuals by other residents in group oriented programs such as these. Autonomy from the Group and Staff are scales comprised of four and five items respectively ( $\alpha$ 's = .75 and .81).

The youths' acceptance of treatment goals is also measured by two four-item scales. The first measures the extent to which the youth believes that he needs treatment in order to stay out of future trouble (Perceived Need for Rehabilitation). The other measures the youth's acceptance of the institution and its perceived value to him (Satisfaction with Institution). The reliabilities ( $\alpha$ ) of the scales are .72 and .76 respectively.

Antisocial values are measured by the youth's acceptance of

Table 1. Summary of Measures Used as Construct Indicators.

Construct	Indicator	Scale Reliability	Number of Items	Sample Item
Autonomy	Perceived Staff Control	.81	5	The staff are always telling me what to do.
	Perceived Group Control	.75	4	The group has too much control over individual students.
Acceptance of Institutional Goals	Perceived Need for Rehabilitation	.72	4	Do you think you need help from someone so you can change and stay out of trouble?
	Satisfaction with Institution	.76	4	Do you think your life will be better or worse because you spent time here?
Antisocial Values	Subscription to Inmate Counterculture	.84	7	What if some of the guys were giving a staff member you don't like a hard time. What would you do?
	Delinquent Values	.62	8	How much would you admire a guy who made good money dealing drugs?

BEST COPY AVAILABLE

an inmate counterculture in opposition to the staff and by the youth's delinquent values ( $\alpha$ 's = .84 and .62 respectively).

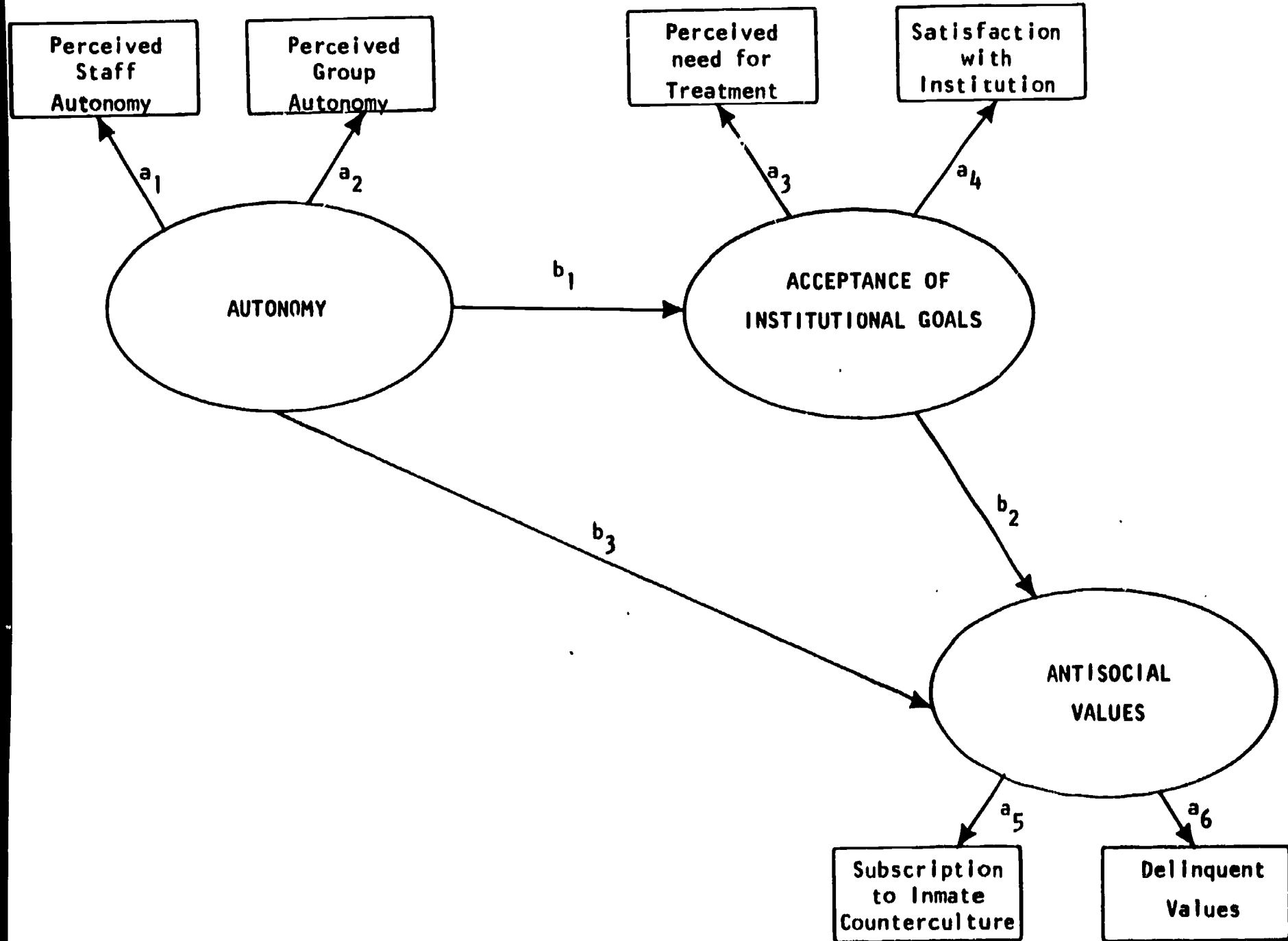
### Measurement Model

In order to test which of these models best explains how granting autonomy affects youth, we estimated the model in Figure 4 using LISREL. LISREL allows us to use multiple indicators of our measures which, in turn, yields estimates of the error in measuring the constructs of autonomy, acceptance of treatment goals and antisocial values. We can then determine the relationships between these constructs, "controlling" for this measurement error. In addition, we will be able to estimate the goodness of fit of the total model. If the model fits well (i.e., the correlation matrix can be reproduced by our estimates), then our confidence in the estimates increases.

The hypotheses which by our three proposed models are summarized below.

- The "direct effects" model (Figure 1) posits that the path  $b_3 = 0$ . This means that there is no influence of accepting the need for treatment on values.
- The "total mediation" model (Figure 2) assumes that the path

Figure 4. Model of the Effects of Autonomy on Antisocial Values.



$b_2 = 0$ . This means that there is no direct influence of granting youth autonomy on prosocial values. Instead, the relationship is wholly mediated by the consequences of youth recognizing a need for treatment.

- If the "combined effects" model (Figure 3) is correct, all paths will be significantly different from zero indicating that both a direct effect and an indirect effect of autonomy on values exist.

## RESULTS

The results of our analyses are shown in Table 2. Our model fits the data extremely well ( $\chi^2(6) = 7.16, p = .31$ ) meaning that predicted correlations generated from our path estimates closely match the actual correlations between our measures. We are reporting both the unstandardized and the standardized estimates of the path coefficients. The standardized estimates do not depend on the scale metrics used in our measures, making them more useful in comparisons between coefficients. We will, therefore, focus our attention on these estimates.

As can be seen from Table 2, all of the path coefficients are significantly different from zero. These findings support

Table 2. Estimates of Model Path Coefficients.

Path Coefficient	Unstandardized Estimate	Standardized Estimate
a <sub>1</sub>	.78**	.78
a <sub>2</sub>	.62**	.62
a <sub>3</sub>	.43**	.63
a <sub>4</sub>	.66**	.97
a <sub>5</sub>	.71**	.87
a <sub>6</sub>	.50	.61
b <sub>1</sub>	1.08**	.74
b <sub>2</sub>	-.24*	-.30
b <sub>3</sub>	-.38*	-.31
$\chi^2=7.16$ df=6 p=.31		

\* p<.05

\*\* p<.001



the "combined effects" model which predicts both a direct effect of autonomy on prosocial values and an indirect effect of autonomy mediated by the youths' acceptance of treatment goals.

The largest path, by far, is that between autonomy and acceptance of treatment objectives ( $b_1=.74$ ). This is consistent with French and Raven's conclusion that persons who do not feel coerced are more accepting of authority. The path coefficient between autonomy and values is approximately the same as that between acceptance of treatment goals and values ( $b_2=.30$  and  $b_3=.31$  respectively). The result is that the direct effect of autonomy on prosocial values is slightly greater than the indirect effect ( $b_3=.31$  vs.  $(b_1)(b_2)=.22$ ).

Thus, the fact that autonomy leads to more acceptance of treatment helps it contribute to more positive values. Even so, the experience of autonomy itself has an even stronger direct contribution to values, as suggested by reactance theory.

One possible explanation of these results, however, is that there is simply a "halo effect" between autonomy and acceptance of treatment goals. Since our measure of autonomy and acceptance of goals are measures of the youths' perceptions, it is possible that the correlation between the two merely reflects each inmates willingness to say nice things about the institution.

In order to correct for that possibility, we re-estimated the model in Figure 4 using the staff teams' perception of the amount of autonomy each group experiences. By using the staffs' perceptions we can eliminate any response bias that the individual youth may have. The results of this analysis are shown in Table 3. The pattern of results mirrors that of those found with the youths' perceptions of autonomy only weaker. It is not surprising that the effects of the staff measures are not as strong as the corresponding student measures. The staff measures are aggregated at the group level, thus, each member of the group will have the same score for the staff measures. This will decrease the correlations to the extent that there is any variation in the scores for the youth on our measures.

The overall fit of this model as measured by the chi-square test is not that good ( $\chi^2(6) = 12.3, p = .06$ ). A close examination of the residuals from the predicted correlation matrix, however, shows that the average discrepancy between the actual and predicted correlations is merely .012 (largest discrepancy is .065). As a result, we feel confident that the path estimates are reliable and stable. The largest coefficient in this model is between acceptance of treatment goals and antisocial values (both student measures). The effects of staff's perceptions of autonomy on values and acceptance of goals are both small, but significantly different from zero ( $b'_2 = .10$  and  $b'_1 = .24$ ). These

**Table 3.**  
**Estimates of Model Coefficients with Staff Measures of Autonomy**

Path Coefficient	Unstandardized Estimate	Standardized Estimate
a' <sub>1</sub>	.90**	.90
a' <sub>2</sub>	.61**	.61
a' <sub>3</sub>	.85**	.88
a' <sub>4</sub>	.67**	.69
a' <sub>5</sub>	.73**	.89
a' <sub>6</sub>	.52**	.63
b' <sub>1</sub>	.25*	.24
b' <sub>2</sub>	-.64**	-.54
b' <sub>3</sub>	-.13**	-.10
$\chi^2=12.3$ $df=6$ $p=.06$		

\*  $p < .05$   
 \*\*  $p < .001$

results give added support for the "combined effects" model which predicts both direct and indirect effects of autonomy on values.

## DISCUSSION

The results suggest that the experience of autonomy in residential treatment programs affects youths' antisocial values through two distinct processes. The first, predicted by social control theory, impacts values by first co-opting the youth into the treatment program. Individual's values then change as a result of the treatment process. Clearly, if the treatment program is not effective in changing values, granting youth autonomy will have little or no effect on values. Factors could also block the effects of autonomy on acceptance of treatment goals, thus blocking any effects on values (e.g., unfriendly staff members; friends or family members espousing negative opinions about the program, etc.).

Fortunately, autonomy also seems to have a direct effect on values which is independent of whether or not the youth accepts the treatment process. Consistent with reactance theory, autonomy should lead to a positive feedback from behavior to attitudes. To the extent that the youth is not engaging in delinquent acts while in treatment, then his values will become

less antisocial. If the youth feels controlled, however, values would not become more prosocial because compliance would be attributed to the coercion, rather than an internal source such as values.

Note that the cross-sectional design of our study does not allow us to definitively assign the causal order of these variables. Experiments where the degree of autonomy is manipulated or longitudinal studies are needed before the causal ordering can be stated with complete certainty. Even with our inability to "prove causality" in this fashion, our results clearly demonstrate the advantage of going beyond simple bivariate analyses between autonomy and outcome measures. Those analyses only estimate the total effect of autonomy without giving any clue as to the processes by which autonomy operates. The present study is a first step in identifying the multivariate processes by which autonomy operates in juvenile institutions.

## References

- Brehm, J. W. (1966). A theory of psychological reactance. New York: Academic Press.
- French, J. R. P., Jr., Morrison, H. W., & Levinger, G. (1960). Coercive power and forces affecting conformity. Journal of Abnormal and Social Psychology, 61, 93-101.
- French, J. R. P., Jr., & Raven, B. (1968). The bases of social power. In D. Cartwright & A. Zander (Eds.), Group dynamics: Research and Theory (3rd ed., pp. 259-269). New York: Harper & Row.
- Johnston, J. (1972). Econometric Methods (2nd ed.). New York: McGraw-Hill.
- McEwen, C. A. (1978). Designing correctional organizations for youths: Dilemmas of subculture development. Cambridge, MA: Ballinger.
- Moos, R. H. (1975). Evaluating correctional and community settings. New York: John Wiley and Sons.
- Osgood, D. W., Gruber, E., Archer, M. A., Newcomb, T. M. (1983). Autonomy for inmates: Counterculture or co-optation? Manuscript submitted for publication.
- Raven, B., & French, J. R. P., Jr. (1958). Legitimate power, coercive power, and observability in social influence. Sociometry, 21, 83-97.
- Vorrath, H., & Brendtro, T. K. (1974). Positive peer culture. Chicago: Aldine.