

**POLITICAL PARTICIPATION: A TEST
OF SOCIAL IMPACT THEORY**

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POLITICAL PARTICIPATION:
A TEST OF SOCIAL IMPACT THEORY

An Abstract
Presented to
the Graduate Council of
Austin Peay State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Stephanie L. Bellar
August 1980

ABSTRACT

Social impact theory (Latane, 1973; Latane and Nida, 1980) makes predictions regarding the impact of groups on individuals. The present study used data from the Iowa Republican 1980 caucus and the Congressional Quarterly Almanac party unity scores to test predictions about participation derived from social impact theory. Partial support for the predictions was found.

In the primary voting study, party strength was negatively and significantly related to participation. Also, the number of registered Republicans was related negatively to participation, although this relationship was not significant.

Analysis of data on Congressional party unity voting resulted in neither total delegation size nor the number of Democrats per delegation being significantly related to participation. Number of Republicans per delegation was positively related to Democratic participation. Percentage of Democrats per delegation was negatively related to participation and percentage of Republicans in delegation was positively related to democratic participation. The results of this study offer partial support to social impact theory.

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A Thesis
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Jack R. Galt
Chair, Committee Members

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

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by
Stephanie L. Bellar

August 1980

To the Graduate Council:

I am submitting herewith a Thesis written by Stephanie M. Bellar entitled "Political Participation: A Test of Social Impact Theory." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Psychology

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ACKNOWLEDGEMENTS

The author would like to express her appreciation to the members of the graduate committee: Drs. Cyril Sadowski, Garland Blair, and Charles Grah. Special thanks goes to Dr. Sadowski for the idea, the encouragement, and the help given in making this project a reality.

The author would like to thank Miss Marsha Lewis Bailey for her help in typing this thesis.

Finally, the author wishes to express thanks to Ms. Helen Bellar and William Jerry Deck for their support, encouragement, and willingness to see me through the project.

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INTRODUCTION

This study is designed to examine certain aspects of social impact theory (Latane, 1973; Latane and Nida, 1980). Social impact is defined as "changes in physiological states and subjective feelings, motives and emotions, cognitions and beliefs, values and behavior that occur in an individual, human or animal, as a result of the real, implied, or imagined presence of other persons" (Latane and Nida, 1980, p. 5). Although the definition of social impact is broad, social impact theory presents three principles which provide a general framework from which precise predictions about social change can be made.

The first principle is one of social forces, where $\text{Impact} = f(\text{SIN})$. That is, the impact which is experienced by a target person when social forces are acting on that person should be a multiplicative function of the strength (S), immediacy (I), and number (N) of sources present. By strength is meant the salience, power, importance, or intensity of a given source to the target, typically determined by the source's status, age, prior relationship with the target, or future power over the target. Immediacy refers to the closeness in space or time and absence of intervening barriers or filters. Number refers to the actual number of people in a situation.

The second principle, $\text{Impact} = \frac{s}{N} \underline{t}$, where (\underline{t}) is less than 1, refers to marginal impact. In this case, the difference between 99 and 100 is less than the difference between 0 and 1. Likewise, the first other person in a social force field should have a greater impact on the target than the hundredth. Parallel to Steven's (1957) psychophysical law, this psychosocial law implies social impact will equal some power (\underline{t}) of the number of sources (N) times a scaling constant (s), reflecting the specific situation and the impact of a single person. Furthermore, the exponent, (\underline{t}) should be less than one (Latane and Nida, 1980). Therefore, impact is proportional to some root of the number of people present.

The third principle, $\text{Impact} = \frac{s}{N} \underline{t}$, regards situations in which an individual stands with a group as the target of forces coming from outside of the group. In this type of situation, the target feels less than he/she would if standing alone against the social forces. The difference in divisive social structures is the negative value of (\underline{t}), but (\underline{t}) remains greater than -1 (Latane and Nida, 1980).

It is the second and third principles which are of primary interest for this study. There is a host of empirical evidence which lends support to these two propositions.

The research on conformity and imitation yields results which support the second principle of social

impact theory. In a replication of the classic Asch (1956) studies on conformity, data presented by Gerard, Wilhelmy, and Conolley (1968) resulted in a power function accounting for 80 percent of the variance in means. Conformity grew as the square root of the majority.

Another piece of research on conformity which supports the second principle is the Milgram, Bickman, and Berkowitz (1969) study on craning and gawking. Increasing the number of cranes and gawkers led to a total increase in cranes and gawkers, but the increase grew smaller with increasing number. The exponent of the best fitting power function was .24, less than one as the second principle predicts.

Latane and Harkins (1976) developed an experiment which provided an exact test of the relationship between group size, strength, and social impact. The investigation was on anticipated stage fright as a function of size and status of the audience. The task was cross-modality matching. The outcome indicated the exponent for the effect of audience size on rated tension was about .52, again less than one as predicted. Apparently subjective tension grew approximately as the square root of the number of people in the audience.

In a series of experiments by Bassett and Latane (1976), students acted as newspaper editors and decided on inches in columns devoted to potential news events. Status, distance, and number of people involved in catastrophes were manipulated. The results indicated the difference in judged

news value between nearby and faraway events grew larger as the number of people involved increased. Inches assigned to news stories increased as a power function of the number of persons involved, with an exponent of about .5.

The third principle, a generalization from the social inhibition of responding hypothesis, is supported by research in the area of bystander intervention in emergencies. The data from the original Darley and Latane (1968) experiment are perfectly fit by an inverse power function with an exponent of less than one (Latane, 1973).

Social inhibition occurs in non-emergency situations also. A study by Latane and Dabbs (1975) produced data consistent with social impact theory. This study dealt with chivalry in elevators. The systematic decrease in responding as the number of people available to respond grew is best described by an inverse power function with an exponent of about .5. Freeman, Walker, Borden, and Latane (1975) did an innovative piece of work on tipping behavior in restaurants. The results of the research indicated that the best fitting power function $\text{Tip} = .184/\underline{N}^{.22}$ accounted for 95 percent of the variance in mean percent tipped, and an additional 4 percent of the individual variation in percent tipped. Again, the systematic decrease is best described by an inverse power function.

In an attempt to expand social impact theory, Latane, Williams, and Harkins (1979) devised a study in which subjects were asked to make noise by shouting or clapping

their hands. The results confirmed the expectation of the "social loafing hypothesis," i.e., an individual taking less responsibility for work as the number involved increases. While overall noise level grew as number of people making noise grew, it did not grow in proportion to the number of people involved. Average sound pressure generated per person decreased with increasing group size.

A second experiment by Latane, Williams, and Harkins (1979) was conducted to consider the possibility that the decrease in work generated per person was a loss in group coordination rather than social loafing. The results indicated social loafing was a factor in subject participation. Subjects were tested under conditions in which they shouted with groups of varying size, alone or in pseudogroups. Actual groups of two shouted at only 66 percent of capacity and groups of six at 36 percent. People shouted with less intensity in pseudogroups than when alone. Group size made a significant difference even in pseudogroups in which coordination loss is not a factor and only social loafing can operate.

The questions of marginal impact and social loafing in the area of political participation are of interest in this study. Specifically, this study investigated voting participation in two different contexts, the 1980 Iowa Republican caucus and Congressional party unity voting for a ten year period. In the primary situation, dealing only with a single party, the social loafing hypothesis predicts

participation would be an inverse function of the number and strength of the party in each county. The Congressional party unity voting allows an examination of both the social loafing and marginal impact hypotheses. Party unity voting should be an inverse function of the number and relative strength of the party in each delegation according to the social loafing hypothesis. The marginal impact hypothesis predicts that the number and relative strength of the opposing party would be positively related to party unity voting.

Chapter 2

STUDIES ON VOTING PARTICIPATION

Study 1: 1980 Iowa Republican Caucus Voting

Rationale

This study was undertaken to test the marginal utility prediction of social impact theory with regard to voting participation in a primary. Using data from the 1980 Iowa Republican caucus, it was predicted that participation would be negatively related to the number of registered Republicans in a county and also negatively related to the relative strength of the party in the county.

Method

Data Set and Sample. Data regarding the number of registered voters in each county were obtained from the Iowa State Register of Voters. Data regarding caucus voting was obtained from the Iowa Republican State Central Committee. The final sample consisted of those 46 of the 98 counties which had 100 percent of their precincts reporting.

Results

Following Latane (1973), the data were converted to logarithms so an additive model could be formed. Correlations among the variables are presented in Table 1. As expected, party strength was negatively and significantly

Table 1

Correlations between Number, Strength, and Participation

Variable	2	3
1. Registered Republicans (Number)	-.027	-.111
2. Percent of Republicans Registered (Strength)	-----	-.510*
3. Voting (Participation)		-----

Note. $N = 46$ counties.

* $p < .001$.

related to participation, $r = -.510$, $p < .001$. The number of registered Republicans was also negatively related to participation, but this relationship was not significant, $r = -.111$, n.s.

According to social impact theory, the relative weights of the variables should be negative and significant. A summary of the regression analysis is presented in Table 2. As can be seen in Table 2, the weights of both predictor variables are negative. However, as also indicated by the correlations, only the party strength variable had a significant impact, $F(1,43) = 15.515$, $p < .001$. Party strength accounted for approximately 95 percent of the explained variance in participation.

Discussion

The results of the present study are somewhat supportive of social impact theory. Consistent with the theory, party strength correlated negatively and significantly with voting participation rates. On the other hand, the number of registered Republicans was not significantly related to voting participation. This finding is not consistent with the recently demonstrated relationship between number of voters and participation in town meetings (Harkins and Latane, Note 1). However, in the case of meeting participation number is equivalent to strength as there is no issue of partisanship involved. It is possible that where partisan voting is an issue, the relative strength

Table 2

Summary of Regression of Number and Strength
on Participation

Predictor	Beta	Explained Variance	$\underline{F}(1,43)$
Registered Republicans	-.125	.014	0.823
Percent of Republicans Registered	-.513	.261	15.515*

Note. \underline{N} = 46 counties.

* $\underline{p} < .001$.

of a voting block is more salient than the absolute number of potential block voters within a district or group.

Study 2: Party Unity Voting in Congress

Rationale

This study was undertaken as a further test of the effects of number and strength on voting participation. As an extension of the first study, the present investigation deals with social impact in a bipartisan context. Specifically, it was predicted that the number and strength of party members within each delegation would be negatively related to participation and the number and strength of opposing party members within each delegation would be positively related to participation.

Method

Data Set and Sample. Data regarding delegation size, number affiliated with each party, and voting were obtained from the Congressional Quarterly Almanac. Congressional party unity voting for the years 1971, 1973, 1975, 1977, and 1979 was the dependent variable. Party unity votes were chosen as the dependent variable because these cases should be most sensitive to partisan pressures. Only those delegations with complete contingents and in which both major parties had representatives were included in the sample. For the years 1971, 1973, 1975, 1977 and 1979, the Ns were, respectively, 26, 33, 30, 33, and 34 complete delegations.

As in the first study, the data were converted to logarithms. Because the samples for each year were small, making the data unreliable, the correlations were combined and the average correlations were analyzed.

Table 3 presents the average correlations between the predictor variables and participation (percent of unity voting) for the Democrats. As can be seen in Table 3, neither the total delegation size nor the number of Democrats in the delegation were significantly related to participation, $\bar{r}(141) = .139$ and $\bar{r}(141) = .058$, respectively. The number of Republicans in the delegation, as predicted, was positively related to Democratic participation, $\bar{r}(141) = .279$, $p < .001$. Also consistent with the social impact predictions, the percentage of Democrats in the delegation was negatively related to participation, $\bar{r}(141) = .171$, $p < .05$, and the percentage of Republicans in the delegation was positively related to Democratic participation, $\bar{r}(141) = .178$, $p < .05$.

The average correlations between the predictor variables and participation for the Republicans are presented in Table 4. None of the correlations in Table 4 were reliably different from zero.

Discussion

The results of this investigation were somewhat consistent with predictions concerning participation derived from social impact theory. For Democrats, the number of

Table 3
Democratic Participation in the U. S. House
of Representatives

Predictor	Democratic Participation
Delegation Size	.139
Number of Democrats	.058
Number of Republicans	.279**
Percent of Democrats in Delegation	-.171*
Percent of Republicans in Delegation	.178*

Note. For the average correlations df = 141.

*p < .05.

**p < .001.

Table 4
Republican Participation in the U. S. House
of Representatives

Predictor Variables	Republican Participation
Delegation Size	.149
Number of Democrats	.120
Number of Republicans	.146
Percent of Democrats in Delegation	-.101
Percent of Republicans in Delegation	-.009

Note. For the average correlation df = 141.

opposing delegation members was positively related to unit action. Moreover, party strength, as indicated by the percentage of party representation in each delegation was also related to unit action as predicted by social impact theory. Greater Democratic strength was inversely related to unit action while greater Republican strength was positively related to unit action for the Democrats. This would suggest that participation in bipartisan situations is influenced not only by the ability of a group to affect a decision but also the extent to which a group's power is opposed. However, this conclusion must be tempered by null outcomes evidenced within the Republican sample.

this held only for Dem.

Surprisingly, group size was

in caucus or Congressional cases. This might indicate that relative strength is more salient than absolute strength affecting involvement. These variables are confounded in the laboratory studies cited by Latane and Wida (1980). In the distinction is not relevant in the town meeting studies of Harsanyi and Latane (Notes 1). Further work is necessary to determine the validity of this possibility.

The marginal utility hypothesis also received some support in the Congressional party unity voting study. For

Chapter 3

GENERAL DISCUSSION

The present research was undertaken to test the generality of the social loafing and marginal utility hypothesis derived from social impact theory (Latane, 1973; Latane and Nida, 1980). Two studies on voting participation resulted in a moderate degree of support for these propositions in a field setting.

Support for the social loafing hypothesis, less individual responsibility with increasing group ability for action, was evidenced in both studies. Party strength, both in the Republican caucus and Congressional voting, was inversely related to participation. However, in the latter instance, this held only for Democrats.

Surprisingly, group size was not much of a factor in the caucus or Congressional cases. This might indicate that relative strength is more salient than absolute strength in affecting involvement. These variables are confounded in the laboratory studies cited by Latane and Nida (1980) and the distinction is not relevant in the town meeting studies by Harkins and Latane (Note 1). Further work is necessary to determine the validity of this possibility.

The marginal utility hypothesis also received some support in the Congressional party unity voting study. For

Democrats, the number and relative strength of the Republicans in the delegations was positively related to party unity voting. That is, when opposition to action increases, the impact on an individual to assume responsibility for acting increases.

This outcome only obtained for the Democrats and is problematic. It might be the case that the minority size of the Republicans restricted the outcome from being evidenced or it could be that a more complex dynamic is involved in predicting minority participation. However, since Republicans evidenced less relative strength and greater party unity voting in each of the five years, the latter position is probably the stronger conjective.

Social impact theory, as evidenced in the results of the present studies, appears to be a valid model for predicting group dynamics. Further research will determine its utility for understanding complex group phenomena.

REFERENCE NOTE

Harkins, S. G., and Latane, B. Population and Political Participation. Paper presented at the annual meeting of the American Psychological Association, Montreal, Canada, 1980.

REFERENCES

- Asch, S. E. Studies of independence and conformity: A minority of one against a unanimous majority. Psychological Monographs, 1956, 70(9, Whole No. 416).
- Bassett, R. L., and B. Latane. Social influence and news stories. American Psychological Association, Washington, 1976.
- Congressional Quarterly Almanac, Vol. XXVII, 1971,
Congressional Quarterly, Inc., Washington, D. C.
- Congressional Quarterly Almanac, Vol. XXIX, 1973,
Congressional Quarterly, Inc., Washington, D. C.
- Congressional Quarterly Almanac, Vol. XXI, 1975,
Congressional Quarterly, Inc., Washington, D. C.
- Congressional Quarterly Almanac, Vol. XXXIII, 1977,
Congressional Quarterly, Inc., Washington, D. C.
- Congressional Quarterly Almanac, Vol. XXV, 1979,
Congressional Quarterly, Inc., Washington, D. C.
- Darley, J. M., and B. Latane. Bystander intervention in emergencies: Diffusion of Responsibility. Journal of Personality and Social Psychology, 1968, 8, 377-383.
- Freeman, S., M. Walker, R. Borden, and B. Latane. Diffusion of responsibility and restaurant tipping: Cheaper by the bunch. Personality and Social Psychology Bulletin, 1975, 1, 584-587.

Gerard, H. B., R. A. Wilhelmy, and E. S. Conolley. Conformity and group size. Journal of Personality and Social Psychology, 1968, 8, 79-82.

Latane, B. Theory of social impact. Psychonomic Society, St. Louis, 1973.

Latane, B., and J. Dabbs. Sex, group size and helping in three cities. Sociometry, 1975, 38, 180-194.

Latane, B., and S. Harkins. Cross-modality matches suggest anticipated stage fright a multiplicative power function of audience size and status. Perception and Psychophysics, 1976, 20, 482-488.

Latane, B., and S. Nida. Social Impact Theory and group influence: A social engineering perspective, P. B. Paulus (ed.). Psychology of group influence Hillsdale, N.J.: Lawrence Earlbaum Associates, 1980.

Latane, B., K. Williams, and S. Harkins. Many hands make light the work: The causes and consequences of social loafing. Journal of Personality and Social Psychology, 1979, 37, 822-832.

Milgram, S., L. Bickman, and L. Berkowitz. Note on the drawing power of crowds of different size. Journal of Personality and Social Psychology, 1969, 13, 79-82.

Stevens, S. S. On the psychophysical law. psychological Review, 1957, 64, 153-181.