

Processes of Deinstitutionalization and Reinstitutionalization Among Israeli Kibbutzim, 1990-1998

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Abstract

This study examines processes of diffusion affecting the spread of 52 innovations among Israel's 248 nonreligious kibbutzim 1990-1998. We look closely not only at the adoption of innovations, but also at processes of deliberation and implementation, rejection and abandonment. Increasing frequencies of innovations increase the frequencies of all transitions. At the relatively low levels of adoption that are common for these innovations, increasing frequencies do not shorten periods of deliberation or implementation, as Tolbert and Zucker (1996) indicate. Radical changes and changes in compensation or consumption are most frequently rejected, while changes in production involve the most lengthy periods of implementation. Economic crisis and especially demographic crisis in individual organizations stimulate readiness for change, as Oliver (1992) and Kraatz and Zajac (1996) suggest, while membership in the Artzi federation of kibbutzim reduces it. The effects of size, age, and geographic isolation are mixed, stimulating interest in some innovations, while decreasing interest in others.

As institutional explanations have become increasingly popular in organizational theory, Tolbert and Zucker (1996) and others have begun to ask what questions remain unanswered after the recent profusion of empirical studies. Tolbert and Zucker

complain that organizational researchers most commonly use “institution” as a static label to be applied to any practice that becomes widespread, while few actually study institutional processes. Other researchers have probed for limits of institutional processes, by identifying circumstances that give rise to deinstitutionalization (Oliver, 1992), or that promote illegitimate (Kraatz and Zajac, 1996) or radical change (Greenwood and Hinings, 1996).

This study attempts to shed light on both on institutional processes and on their limits with the aid of data on the spread of 52 changes among Israeli kibbutzim from 1990 through 1998 (Table 1). Most of these changes are instances of the displacement of old institutions by new ones, which Jepperson (1991) describes as “reinstitutionalization.” From the standpoint of kibbutz traditions, all constitute instances of “deinstitutionalization” (Jepperson, 1991) and “illegitimate change” (Kraatz and Zajac, 1996). Most are also perceived by some kibbutzniks or others as “radical” changes (Greenwood and Hinings, 1996).

Changes in decision making transfer authority away from the egalitarian direct democracy of the General Assembly, and promote differentiation between leaders who specialize in holding offices and a rank and file that votes anonymously by secret ballot. In production, members who can earn more income outside the kibbutz than within it are now encouraged to work outside, while within the kibbutz, industrial ventures are now run by boards of directors with the freedom to fill both nonmanagerial and managerial positions with hired laborers. Consumption expenditures have been privatized, while the use of common dining facilities has been curtailed. Small numbers of kibbutzim are also now experimenting with various ways to create explicit links between individual efforts and material rewards, in contrast to the traditional kibbutz principle of “from each, according to ability, to each, according to need.”

The frequencies of “acceptance” shown in Table 1 are based on responses to a mail survey of all Israeli kibbutzim conducted annually by Shlomo Getz of Haifa University’s Institute for Kibbutz Studies. For each change, the secretary or other officer of the kibbutz was asked to indicate whether the change had not been considered, had been rejected, was under discussion, had been decided upon, was in the process of implementation, or was currently in use. To produce the summary statistics in Table 1, we combined the last three response categories, on the grounds that all three reflect varying degrees of acceptance of a given change.

While it was necessary to aggregate these response categories to produce Table 1, for the remainder of this analysis, we intend to keep them separate, giving explicit attention to intervening processes like discussion and implementation, as well as to overall outcomes like acceptance or adoption. In order to address these processes dynamically rather than statically, we arrange observations into pairs of years. While the tendency for adoptions in early years to promote additional adoptions in later years is now quite familiar, this study seeks to unpack the relationship between early adoptions and late adoptions, decomposing it into its component processes. We are interested in differentiating, for example, when adoption is preceded by lengthy discussion and when it is not, and when lengthy gaps intervene between decision and adoption and when they do not. With six possible response categories in each year, this creates a matrix of thirty-six possible response pairs. We reduce this complexity by sorting response pairs into nine meaningful categories, as shown in Figure 1.

Later sections describe the methods by which we analyze these data and present results. But first, we describe the theoretical expectations that motivate this research.

Effects of Rising Prevalence on Adoption, Retention, Hesitation, and Dissensus

As in Berger and Luckmann (1966), Tolbert and Zucker (1996) see processes of institutionalization as unfolding in three stages, and recommend that researchers be aware of which of these stages the innovations under observation are going through. None of the changes in Table 1 is at the advanced stage of “sedimentation.” The changes are spread out on a wide continuum between the stages of “habitualization” and “objectification,” with most probably closer to the second of these two stages. The very inclusion of these 52 changes in this survey indicates that most have weathered initial trials in at least a few kibbutzim, have acquired names and advocates, and have met other “institutional conditions for diffusion” to other kibbutzim (Strang and Meyer, 1993). Even the rarely adopted innovations gain theoretical support and champions from the movement for a “new kibbutz,” which has advocated numerous market and individually oriented reforms within the kibbutz movement since the late 1980s.

At these pre-institutional and semi-institutional stages of development, we see Tolbert and Zucker’s analysis as supporting two predictions about the relationship between the degree of acceptance of an innovation in a given year and the relative frequencies of the transitions shown in Figure 1 over the following year. First, higher rates of acceptance of an innovation should reduce the frequency with which the remaining organizations give it no consideration, while increasing the frequency of all other transitions. At low rates of adoption, “knowledge of the structures among non-adopters...will be extremely limited...” (Tolbert and Zucker, 1996, p. 182). Many actors will be uninterested in an innovation at this stage, because they do not know what it is, or cannot imagine how it might be applied in their own organization. When rates of adoption are high, an innovation can no longer be ignored, and an organization that still does not wish to use it should become more likely to make its negative assessment explicit by voting to reject. Higher frequencies of innovation should thus promote more talk about those innovations in other organizations, while also making it possible for organizations to adopt without prolonged controversy innovations that they have not previously discussed. Even rejection and abandonment are likely to grow in number, simply because votes are being held and more organizations that previously adopted the innovation have had a chance to have second thoughts.

Hypothesis 1. The per cent of organizations reporting acceptance of an innovation in an earlier year reduces the number of organizations reporting that they gave “no consideration” to the innovation over the following year, while increasing the frequency of all other transitions.

Our second hypothesis predicts that the per cent of organizations reporting acceptance of an innovation in the first year stimulates increases in the frequency of some transitions more strongly than others. We see the transitions shown in Figure 1 as illustrating three distinguishable levels of consensus or dissensus. Three transitions indicate acceptance of innovations, but with some degree of hesitation. These are acceptance that comes only after deliberation, prolonged implementation, and phased adoption. These transitions accept change, but with

some uncertainty about its desirability or about means of implementation. This kind of hesitation is characteristic of the stage of habituation, and may become relatively less common at higher levels of acceptance and consensus.

Three other transitions express positive assessments of innovations with no sign of hesitation. These are deliberation, short deliberation, and retention. All three of these transitions are signs of the rising consensus about the desirability and forms of innovations that Tolbert and Zucker associate with the stage of objectification. They should therefore become relatively more common, when rates of acceptance are higher, thereby increasing rates of consensus about ends and means.

Rejection and abandonment of innovations, on the other hand, express clear dissensus about the value of change. We therefore expect the incidence of these two transitions to increase more slowly than that of any others in response to rising rates of acceptance.

Hypothesis 2. The per cent of organizations accepting an innovation has more strongly positive effects on the incidence of deliberation, short deliberation, and retention than on other transitions, and has more weakly positive effects on rejection and abandonment than on other transitions.

Characteristics of Changes and of Kibbutzim

In testing these two hypotheses, we intend to include controls for measures of a number of other influences that previous literature has identified as likely to affect processes of deinstitutionalization and the adoption of illegitimate or radical change. We describe those measures below, before turning to a discussion of our models and results.

Economic and demographic crisis. Common to many treatments of change in organizations is the notion that organizations are most likely to abandon time-honored institutions and to consider illegitimate change when economic hardships or other crises compel them to consider reforms (Oliver, 1992; Tolbert and Zucker, 1996; Kraatz and Zajac, 1996). Two crises shook the kibbutzim in the 1980s. First, the collective bankruptcy of the entire kibbutz movement in 1985 left all kibbutzim increasingly dependent on their own self-generated resources to survive. Second, defections of disillusioned members and children of members in the years after 1985 left many kibbutzim unable to attract and retain a sufficient number of members to keep their communities viable.

As part of the restructuring of kibbutz finances that occurred in the late 1980s, an evaluation of the economic condition of all kibbutzim was conducted in 1988. The index of economic crisis produced then begins at 1 for kibbutzim “in very good economic condition” and rises to 5 for kibbutzim “in very bad economic condition” or 6 for “young kibbutzim.” We test the effects of demographic crisis by calculating the percentage change in the number of members from 1988 until the year of the observation or 1994, whichever is earlier, because we do not yet have complete data on growth after 1994.

Size and age. Two bodies of theory see readiness for change as being influenced by the size and age of organizations, but they make opposite predictions about their effects.

On one side is the theory of “structural inertia” of Hannan and Freeman (1984), which predicts that organizations grow less likely to change, the older and larger they become. On the other side is a wide range of older theories which suggest that kibbutzim should become more likely to embrace these changes as they grow and age. These include Weber’s theories of direct democracy and of bureaucracy (1978), theories of the relationship between size and differentiation such as those of Durkheim (1933) and Blau (1970), and Talmon and Cohen’s classic analysis of “The Structural Transformation of the Kibbutz” (Cohen, 1976). Within the literature on producer cooperatives, this is also the old idea that cooperatives “degenerate” over time (Blumberg, 1968).

We measure the size of a kibbutz as the number of members at the start of each two-year observation. This information is available in the statistical annuals of the kibbutz federations. Age is the number of years that have passed since the year in which the kibbutz was founded.

Federation and distance from cities. The most salient institutional constraints on the adoption of change by kibbutzim are the federations they belong to. Kibbutzim that adopt changes not permitted by their federations risk expulsion. In previous studies (Rosner and Tannenbaum, 1987; Simons and Ingram, 1997), kibbutzim affiliated with the more ideologically coherent Artzi federation (coded 1) have been found to be more faithful to kibbutz traditions in such areas as the avoidance of hired labor than the larger and more permissive Takam (coded 0). The 18 kibbutzim affiliated with the religious kibbutz movement are excluded from this analysis.

Kanter (1968) demonstrated that the longevity of past utopian communities in the United States has depended in part on the isolation of those communities from contact with the external economy and society. Ben-Ner (1987) asserted that kibbutzim that are located near cities become increasingly integrated into the urban market economy, and adopt increasingly individualistic patterns of consumption in response. We measure distance from cities as the distance in kilometers from Tel Aviv or Haifa, whichever is nearer, following the standard practice of Israel’s Central Bureau of Statistics. The omission of Jerusalem has little impact in the case of the kibbutzim, because no more than a dozen kibbutzim are in closer contact with Jerusalem than they are with either Tel Aviv or Haifa.

Radical change. Our judgements about whether a given change was radical or not are shown in Table 1. We labeled as radical any change that was seen as threatening a basic kibbutz value, such as equality or democracy, or as contradicting fundamental notions about the identity of the kibbutz, such as that it is a cooperative, and is collectively owned. In judging whether a given change was radical or not, the U.S.-based researchers did the initial coding, but Getz exercised final say on the grounds that he is kibbutz member himself, conducts this survey every year, and is the only one of us who knows what is being said in Hebrew about these changes. In most cases our codes agreed. One instance in which we disagreed was in the coding of the use of hired labor. Both outside and within Israel, the use of hired labor has often been interpreted as a definitive sign of the gradual transformation of cooperatives into conventional capitalist businesses. From the 1930s through the 1970s, Israel’s Histadrut and Labor leaders often chastised the kibbutzim for their use of hired labor, and the kibbutz federations launched periodic campaigns to root it out. After the Likud victory of 1977, however,

governmental and trade union leaders stopped complaining about this practice. When the kibbutz movements were renegotiating their collective debt agreements with the government in the late 1980s, the Likud leaders insisted that intensifying the use of resources through the addition of hired labor be part of the recovery plan. Since it is now officially encouraged both by the government and by the kibbutz federations themselves, the U.S.-based researchers deferred to Getz's judgement that it is no longer considered by kibbutzniks to be a radical change.

While we acknowledge the need to adjust our notions of what is a radical change to the times, we also face a reverse risk, which is that our measure of radicalism becomes simply a dichotomization of our measure of levels of acceptance. It is easy to be biased by the presumption that what is rare must be radical and what is common cannot be. Because of this high multicollinearity between radicalism and per cent acceptance, we are particularly interested in seeing what unique effect is attributed to this variable when the degree of acceptance of innovations is also controlled. The size of that unique effect will be a measure of our success in capturing qualitative nuances of radicalism that are not just synonyms for infrequency of use.

Other differences among changes. In addition to expecting to find differences between radical and nonradical changes, we also expected the reception given to changes to vary in response to more idiosyncratic characteristics of changes. Changes involving production may be as easy as any other changes to decide upon, but are likely to be more difficult to implement, because they are more dependent upon technology, capital, market conditions, external partners, etc. Decisions about changes in consumption and communities, on the other hand, may be easier to implement, but harder to make, because they strike so close to home. Decisions about reward systems are likely to be most difficult of all to make and to implement, not only because they contradict a sacred principle, but also because these innovations remain so scarce that knowledge of ways and means is hard to come by.

Modeling Transitions

Israel has 266 kibbutzim, of whom an average of more than 200 responded each year from 1990 through 1998. Between 11 and 16 responding kibbutzim each year were from the 18 kibbutzim affiliated with religious movements, which differ so greatly from the other kibbutzim that they are not included in this analysis.

The descriptive statistics in Table 2 and the predictive model in Table 3 are based on pooling observations across innovations and time. For each innovation, each pair of adjacent years was examined for each kibbutz, and the change in scores was coded as being of one of ten types (Figure 1). There were insufficient cases of "acceptance after rejection," so this transition was dropped from the analysis, leaving a dependent variable with nine response categories. The model in Table 3 was estimated using the multinomial logistic regression routine of SPSS (version 10 for Windows). For these models, the generalized logits were formed using the frequency of observations "not considering" the innovation in either year as the denominator, and regressed on the independent variables using a logistic link function and maximum likelihood, with the sum of predicted probabilities of the nine transition types constrained to equal unity.

The correlations and coefficients in Tables 2 and 3 are based on a total of 34,755 lines of data, but the significance levels of inference tests reported in those tables should be interpreted with caution. The pooling of observations in this analysis violates the assumption of independent sampling, and there may be systematic error components associated with kibbutz, innovation, and year that are not taken into account. Consequently, the inferential significance of results in Tables 2 and 3 may be considerably overstated. Standard pooled cross-sectional and time series regression methods could not be applied due to substantial and unsystematic missing observations.

Efforts were made to adjust some of the major sources of non-independence by directly modeling them as predictors. A series of models was calculated using dummy variables to adjust the vector of mean logits for innovation to innovation differences. Mean differences in the outcome probability vector by innovation account for nearly 38% of the variation, judging by Cox and Snell's pseudo R^2 . Unfortunately, such differences may be due to many causes, and are not very interpretable. As an alternative, innovations were categorized along two dimensions: the radical/nonradical dichotomy, and whether they dealt with production, consumption, compensation, or decision making. These two controls accounted for a substantial portion of the differences among innovations. Since they have the advantage of being interpretable, we decided to retain these two categorizations in the final model, and to use them instead of the full vector of dummy variables representing each innovation. Experiments with the models suggest that the magnitudes of effects of other independent variables are not substantially altered by this choice, although the overall predictive power of the final model is somewhat less.

A second potential source of interpretational problems lies in the use of pooled cross-sections, which rely on multiple observations of the same kibbutz, across innovations and across time. As most kibbutzim appear approximately the same number of times in the pooling, it seems unlikely that results would be biased by this pooling. Standard errors, however, may be substantially understated. The approach of using a vector of dummy variables to capture kibbutz-to-kibbutz differences in the vector of mean logits was deemed too cumbersome to pursue, as it would have required approximately 800 degrees of freedom.

A third potential source of interpretational confounding lies with pooling over time. Our preference again was to attempt to model major time effects directly rather than treating them as correlated error. We began by comparing two alternate ways to introduce time into our models: as a linear term, or as a vector of year-to-year differences. The linear time trend was nearly as effective as the vector of year-to-year differences in explaining variance. As Table 1 makes clear, however, the acceptance of most changes rises linearly with year. This high multicollinearity between year and per cent acceptance makes it difficult to distinguish their effects. Because the effects of levels of acceptance are of more immediate theoretical interest, we retain them in our final models, and omit controls for year. This means that the variable per cent acceptance should be understood as measuring not only the rising prevalence of innovations but also a potentially large number of other changes in Israeli society and in the kibbutzim that are simultaneous with them.

Turning to the results shown in Table 3, the effects estimated for the per cent of kibbutzim previously accepting the innovation provide consistent support for

Hypothesis 1. Relative to “not considering,” rising rates of acceptance increase the frequency of all other transitions.

Differences in frequencies among categories of transition, however, are only partially consistent with Hypothesis 2. Rising acceptance strongly increases the frequency of retention as expected (.088), but it increases the frequency of abandonment almost as strongly (.063), while doing relatively little to promote discussion of innovations, or to shorten periods of deliberation or implementation.

Among characteristics of changes, radical change increases the frequency with which changes are rejected (.102), while decreasing the frequency of all other transitions. As expected, changes in production require longer periods of implementation (.557) and adoption (.462). They are also more likely to be abandoned (.274) and to require lengthy deliberation before they are adopted (.306). Changes in consumption as expected are least likely to require phased adoption (-.386) or prolonged implementation (-.628), but are sufficiently controversial that they rarely gain acceptance after only short deliberation (-.828). Like changes in compensation, they also have high frequencies of rejection, and low rates of retention. Changes in compensatias expected require lengthy periods of adoption (.315) or implementation (.394), and are less likely to be accepted after only short deliberation (-.207).

Characteristics of individual kibbutzim also behave generally as expected. Growth reduces the frequency of innovations, which means that demographic crisis promotes change, as does the measure of economic crisis. Membership in the Artzi federation reduces the frequency of all transitions. Size increases the frequency of most forms of change, as the preponderance of theories cited earlier predict. Only age and distance from cities appear in these analyses to lack significant effects.

Before producing the pooled model shown in Table 3, we estimated models separately for each change. Per cent of kibbutzim accepting a change and growth had similar effects in all models. The remaining independent variables had different effects, depending on the change. For example, membership in the Artzi federation was negatively associated with most changes, but had positive effects on a small number of innovations that have been actively embraced by this federation, such as voting by secret ballot. The measure of economic crisis increased the incidence of most changes, except for a small number of changes that are difficult to implement in the absence of resources, such as the practice of having members pay for their own trips abroad. The effects of size, age, and distance from cities were not negligible in these analyses, but were highly mixed, increasing the frequency of some changes, while decreasing the frequency of others. Examination of the changes involved often suggested that these fluctuations were not random, but were based instead on meaningful links between the specific change and the specific influence. For example, large kibbutzim were more likely than other kibbutzim to introduce individual payment for meals, electricity, and travel, and to adopt voting by secret ballot, but were less likely to discontinue services or to accept children from outside in their children’s houses. Kibbutzim located near cities were more likely than others to privatize consumption, but rural kibbutzim had their own agenda for change, being more likely to establish boards of directors and representative councils and to seek external partners for their businesses.

Conclusions

Hypothesis 1 is consistently supported by the findings in Table 3, but Hypothesis 2 is not. Over the range of rates of acceptance under observation here, rising acceptance does not reduce the frequency of hesitation or dissensus. While higher overall acceptance enables some kibbutzim to accept or implement changes quickly, it also persuades kibbutzim that have misgivings about innovations to adopt them as well. While Tolbert and Zucker (1996) may still be right that the overall consensus in favor of an innovation increases with rising frequencies of adoption, over the range of levels of acceptance under observation here, there is always some degree of hesitation and ambivalence among recent and would-be adopters.

Crisis is a powerful stimulus to innovation among contemporary Israeli kibbutzim, as other instances of deinstitutionalization (Oliver, 1992). Membership in the Artzi federation is a fairly reliable deterrent to illegitimate change among kibbutzim, as Rosner and Tannenbaum (1987) and Simons and Ingram (1997) have previously found.

Many processes depend on context and meaning. Processes of adoption differ for radical and nonradical changes, and depending on whether production, consumption, or rewards are involved. Effects of many characteristics of kibbutzim, such as size, age, and distance from cities, are positive for some changes and negative for others. So thinking about generic processes can only take us so far in explicating the adoption of changes in this organizational population. For a fuller picture, we need to take into account the meaning of the individual changes involved.

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Table 1. Percentage of Responding Kibbutzim Reporting Acceptance of Innovations by Year									
	1990	1991	1992	1993	1994	1995	1996	1997	1998
I. Decision Making: Direct to representative democracy									
Secret ballot	7.3	13.5	30.5	38.3	38.7	45.0	49.2	49.8	57.6
Representative councils*	7.3	14.9	23.5	22.6	28.9	27.4	27.0	29.3	29.9
Hiring office holders*							9.4	27.2	27.6
Board of directors							13.1	17.1	21.4
Internal control committee	0.8	1.0	1.6	2.1	3.7	3.9	7.4	12.4	16.9
Replace committees by office holders	4.8	6.8	12.8	12.0	13.6	18.2	15.2	18.2	18.0
II. Production									
A. Differentiation and rationalization									
Board of directors in industry	18.8	25.3	43.1	45.5	57.6	61.7	61.7	64.2	70.0
Human resources division				23.1	26.5	32.0	25.9	35.9	51.7

Hiring a contractor to run the kitchen			1.2	1.6	3.6	4.5	5.1	6.4	9.0
Privatization of health services*							3.0	4.8	8.5
Closing of services*		3.6	6.6	3.6	3.6	4.4	4.0	3.9	5.2
D. Privatization of education and childrearing									
Young study by special agreement				74.3	78.1	76.4	73.2	77.1	79.6
Parent's budget includes enrichment	4.0	4.2	8.4	8.9	13.1	13.3	12.6	17.6	22.7
Privatization of education*							3.0	3.3	8.9
Higher education in member's budgets*	0.8	1.0	2.8	4.7	4.7	6.1	8.4	6.9	8.9
Special expenses for kids in parent's budgets*	0.8	0.5	1.1	1.0	2.1	3.9	3.4		
IV. Work and rewards									
A. Privatization of work choice									
Members work outside the kibbutz	51.6	49.7	69.6	54.5	59.5	59.8	56.7	64.4	70.8
Responsibility of member in selection of work*	14.6	13.3	29.9	29.0	36.0	35.0	40.7	42.4	54.2
Replacing members by outside labor	17.6	23.5	45.1	42.6	51.4	42.9	48.4	43.8	41.1
Increase in hired labor				50.8	66.0	62.9	62.5	48.5	35.9
B. Material rewards and incentives									
Pension plan		22.1	35.2	42.9	52.4	64.6	71.4	72.1	68.1
Pay for overtime or additional work*	0.8	2.6	6.0	2.6	5.7	10.6	10.8	19.9	25.7
Additional budget due to seniority							11.9	15.8	21.7
Connection between work and member's budget*			2.8	2.1	4.1	6.1	8.4	10.7	16.7
Budget with differential salary component*							3.5	7.3	8.7
Payment of differential salary*					1.0	0	1.0	4.4	5.7
Pay for officeholders in difficult jobs*	0.8	1.0	2.2	0	3.1	2.8		3.5	
Transfer of kibbutz assets*							0	1.0	1.0
Distribution of kibbutz shares*					0	0	0	0	0.5
Number of kibbutzim responding to the survey	135	210	191	203	204	196	221	225	225
* Coded as a "radical" innovation									

Table 2. Characteristics of Changes and Kibbutzim: Correlations, means, and standard deviations

	a.	b.	c.	d.	e.	f.	g.	h.	i.	j.	k.	l.	Mean	S.D.
a.. Artzi	1.00												.34	.49
b. Economic crisis	.00	1.00											3.01	1.37
c. Growth	-.00	-.33*	1.00										-3.35	18.04
d. Size	.11*	-.36*	.17*	1.00									238.27	130.02
e. Rural	-.17*	-.00	.11*	-.13*	1.00								109.34	56.25
f. Percent adopting	-.00	.01*	-.02*	-.01	-.00	1.00							24.63	21.92
g. Age	.05*	-.20*	-.08*	.61*	-.29*	.02*	1.00						49.67	14.38
h. Radical change	.00	-.00	.01	-.00	-.00	.52*	-.01*	1.00					.38	.49
i. Production	-.00	-.00	-.01	.00	-.00	-.10*	-.01*	.09*	1.00				.25	.43
j. Consumption	.00	-.00	-.00	.00	-.00	.13*	.01	.08*	-.47*	1.00			.40	.49
k. Compensation	-.00	.01	-.02*	-.00	.00	.02*	.01	-.23*	-.32*	-.45*	1.00		.24	.42
l. Decision making	.00	-.00	.03*	-.00	.00	-.09*	-.00	.07*	-.21*	-.30*	-.20*	1.00	.12	.32

* p < .01, one-tail (assuming independent sampling)

Table 3. Effects of Percent Accepting and Other Predictors on Transitions (Parameter estimates for pooled data)

	Transition type								L ²
	Deliberation	Short deliberation	Retention	Accept after deliberation	Prolonged implementation	Phase d adoption	Reject	Abandon	
Intercept	-1.257*	-3.876*	-3.906*	-3.809*	-5.153*	-4.842*	-5.069*	-4.036*	----

		Not considering	Discussing	Rejected	Decided to adopt	Implementing	Adopted
Time one	Not considering	J.		H.	B.		
	Discussing		A.		D.		
	Rejected				E.		
	Decided to adopt	I.			F.		G.
	Implementing						C.
	Adopted						
Codes: A. Deliberation; B. Short deliberation; C. Retention; D. Accept after deliberation; E. Accept after rejection (not modeled); F. Prolonged implementation; G. Phased adoption; H. Rejection; I. Abandonment; J. Not considering.							