Perceptions Of Leadership In Groups: An Empirical Test Of Identity Control Theory*

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1 Introduction

Within identity control theory, as derived from the symbolic interaction perspective, identities are sets of meanings people hold for themselves that define what it means to be who they are as role occupants (for example, student or truck driver), as persons (for example, domineering or intellectual), and as group members (for example, American or sorority member) (cf. Burke, 1991, 2004; Burke & Reitzes, 1981, 1991; Burke & Stets, 1999; Cast & Burke, 2002; Stets & Burke, 2000, 2002). These self-meanings constitute what is called an identity standard.[1] The identity standard serves as a reference with which persons compare their perceptions of ongoing self-relevant meanings in the interactive situation (how am I coming across now?). When the perceived meanings match the meanings in the standard, people are doing just fine. Their identities are being confirmed or verified, and they will continue to act as they are; no changes are required.

However, often there are disturbances, for example, the behavior of other individuals, which change the interactive situation and thus the perceived situational meanings so that they no longer match the standards (you treat me as if I am an idiot and I am not). Any differences between perceived self-relevant meanings in the situation and the standard as assessed by the comparator constitute an error or discrepancy. As a result of this error or discrepancy, people will change their behavior in such a way as to counteract that disturbance and restore the situational meanings so that they again match the meanings of the standard (Ill show you Im not dumb). This is the self-verification process and is outlined in Figure 1. It is a negative feedback system, which controls self-relevant perceptions of meanings in the situation to keep them aligned with

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[1]Following the work of Osgood, Suci, and Tannenbaum (1957), meanings are defined as internal responses to stimuli. These responses vary along underlying dimensions, which constitute the dimensions of meaning. Meanings are thus perceptions.

the identity standard and lies at the heart of identity control theory, hereafter referred to as ICT.

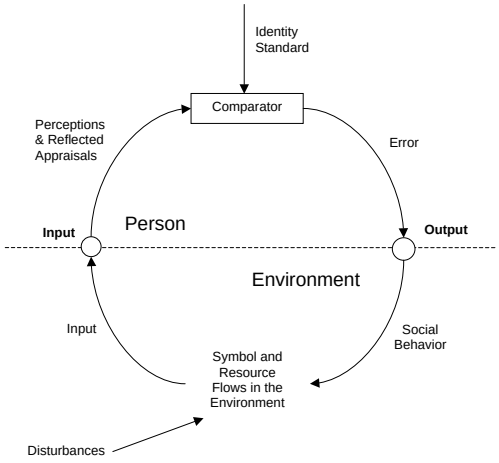

Figure 1: Identity Model

While much of sociology examines peoples behavior and views it as under persons control (for example, the dominant paradigm of exchange theory views social behavior as exchange and under rational control (Cook & Rice, 2003), ICT is different. ICT suggests that what people do (their behavior) is relevant only so far as it has the consequence of keeping their perceived self-relevant meanings aligned with the self-meanings of their identity standard. It is the (perceived) meanings of the behavior that are important, not the actual behavior itself or other persons perceptions.[2]

As an example, consider a model of the production of task leadership behavior in a small task-oriented group from an ICT perspective in which each individual has an identity standard that provides a reference level for the degree to which her or she should be a task leader in the group. Each actor controls his or her own perception of the degree to which he or she is a task leader in the group, trying to make his or her self-perception match their standard. In this model people engage in more or less task leadership not as a function of what others are doing as might be suggested in a stimulus-response model in which others behaviors are rewarding or punishing, but as a function of what they perceive themselves as doing relative to the level set in their identity standard.

The behavior of others is a disturbance to the self-organized identity system. When others behavior disturbs the identity process, it is countered; when that behavior facilitates the process it is accepted. Thus, if one has a strong

[2]This idea that people control their perceptions and not their behavior is the central thesis of perceptual control theory (Powers, 1973) and is part of affect control theory (Heise, 1979; Smith-Lovin & Heise, 1988) and self-verification theory (Swann, 1983; Swann & Read, 1981).

leadership identity, but others are engaging in leadership behavior preventing one from acting as a strong leader, one will engage in behaviors to enhance ones own leadership standing thereby bringing ones perceptions of ones own task leadership behavior into alignment with ones own identity standard. Relevant to this theoretical argument is data measuring each persons perceptions of his or her own leadership behavior relative to their leadership identity standard.

In the present paper, I apply this model to the analysis of task leadership identities and behavior of individuals in small task-oriented groups and show that the data strongly favors a model of behavior governed not by the actors perceptions alone or by the actors identity standard alone, but by the relationship (difference, or discrepancy, or error) between the two. And, this behavior controls the actors perceptions in order to reduce the discrepancy between the actors perceptions and identity standard. While others group members perceptions of the actors behavior are highly correlated with the actors own perceptions of their behavior because of the symbolic character of interaction, those perceptions are not under control, though, as we shall see, they do play a role in the control of ones own perceptions. Because description of the particular models and propositions to be discussed requires knowledge of the context in which they are evaluated, I next describe the experimental groups and manipulations.

2 The Groups

The sample analyzed for this research consists of the identities and perceived behaviors of participants in 48 four-person laboratory groups. Each group was composed of two males and two females. To form the groups I randomly sampled undergraduates from the whole student population at a large midwestern university and invited them to participate in a study of communication in small groups. The students were paid $10 for filling out a background questionnaire and participating in a discussion group.

Each group of four persons engaged in four different discussions based on group polarization or choice dilemma protocols.[3] An example protocol is given in Appendix A. I used the choice dilemma problems only to provide the groups with a task in which they had to reach a consensus. All the discussions followed the same format. Before any of the discussions, the individual members read all of the choice dilemma problems, and wrote down their personal recommendation for each. After that, the members were instructed to discuss the first problem and to reach a consensus for making a group recommendation.[4] After each discussion was completed, and before the next discussion, the subjects each filled out a questionnaire in which they evaluated the discussion and rated each other on a series of items measuring the degree to which they performed various activities during the discussion. The four discussions were held during the one

[3] These include two of the protocols that usually show a shift to risk and two that usually showed a shift to conservatism.

[4] The order of the four problems was randomized across the groups.

session in which the group met for about an hour and a half; each discussion lasted 10 to 20 minutes.

3 Measures

Task leadership role identity (task id) is measured from participants' responses to five self-descriptive statements about task-oriented activities in a background questionnaire filled out prior to the discussions.[5] The content of the items, shown in Table 1, is consistent with meanings of the characteristics of task-oriented individuals described in the literature (Bales, 1950; Burke, 1971; Slater, 1955). Response categories consisted of five-point Likert scales ranging from "strongly agree" to "strongly disagree" on some statements, and from "usually" to "never" on others. The responses were scored from 1 to 5: low task orientation was scored 1. The items are given in Table 1. These items share a single underlying dimension of meaning as indicated by factor analysis. To form the scale, I first standardized the ratings on each item and then summed the standardized ratings for each person, and obtained task leadership role identity scores ranging from 1.65 to 1.68, with a higher task leadership identity reflected in higher scores. In this way, each persons self-descriptions were placed on the same scale shared by everyone. The responses were individual, but the scale was shared. This scale has an omega reliability (Heise & Bohrnstedt, 1970) of .81.

Table 1. Items, Factor Loadings [a], and Reliability for Task Leadership Identity and Task Leadership Performance

Item	Loadings
Task Leadership Identity **(task id)**	
(1) When I work on a committee, I like to take charge of things.	0.72
(2) I am able to keep at a job longer than most people.	0.53
(3) I try to influence strongly other people's actions.	0.63
(4) I am a hard worker.	0.61
(5) I try to be a dominant person when I am with people	0.64
Omega Reliability (Ω)	**0.81**

	Loadings		
Task Leadership Performance (task)	"Objective"	Self-Perceptions	Others' Perceptions
(1) Providing fuel for the discussion by introducing ideas and opinions for the rest of the group to discuss.	0.91	0.83	0.90
(2) Guiding the discussion and keeping it moving effectively.	0.86	0.75	0.85
(3) Attempting to influence the group's decision.	0.87	0.75	0.85
(4) Standing out as a leader of the discussion.	0.94	0.88	0.93
Omega Reliability (Ω)	**0.93**	**0.82**	**0.91**

[a] Principle Component Factor

After each discussion (four times in all), the participants were asked to rate each other including themselves on four task leadership performance items

[5] In an earlier analysis of these data, Riley and Burke (1995) showed that the task leadership identities of the participants were related to their task leadership performance, and that discrepancies between the identity and performance were related to the level of dissatisfaction felt by members of the group.

(shown in Table 1) that have been used in prior research and capture the meanings of task leadership performance (Burke, 1971; Riley & Burke, 1995). These items also share a single underlying dimension of meaning as indicated by factor analysis. From these ratings three different scales were constructed.

The leadership behavior scale (task) viewed the group members ratings as multiple indicators of each persons objective leadership behavior. The scale was based on the mean of the standardized ratings of each person based on the ratings of all group members across the four items. Thus, each person was assigned the average of the 16 ratings applied to him or her by everyone in the group (four persons by four items). This was done for each of the four discussions. The omega reliability for this scale was .94.

The next two measures view the ratings as indications of each persons perceptions of behavior and disaggregated the ratings into two components: self-perceptions and others perceptions. The self-perceptions of leadership behavior scale (s-task) was based only on the set of self-ratings: each person received the average of his or her own self-ratings across the four standardized task leadership items. Again, this was done for each of the four discussions. The other-perceptions of leadership behavior scale (o-task) was based on the ratings by others (not including the self). Each person was assigned the average of the 12 standardized ratings applied to him or her by the others in the group (three other members multiplied by four items). This was done for each of the four discussions. For each of these measures, higher scores reflect higher task leadership ratings of each participants behavior. Means, standard deviations, and correlations for each of these scales for each of the four discussions are presented in Table 2.

Table 2. Means, Standard Deviations, and Correlations Among Variables.

			Correlations											
Variables	Mean	Std. Dev.	task id	task 1	s-task 1	o-task 1	task 2	s-task 2	o-task 2	task 3	s-task 3	o-task 3	task 4	s-task 4
task id	0.00	0.66	1.00											
task 1	0.00	1.07	0.28	1.00										
s-task 1	0.01	0.93	0.36	0.82	1.00									
o-task 1	0.00	1.09	0.24	0.98	0.68	1.00								
task 2	0.00	0.97	0.28	0.56	0.47	0.55	1.00							
s-task 2	-0.02	0.99	0.13	0.37	0.36	0.34	0.81	1.00						
o-task 2	0.01	0.96	0.20	0.58	0.47	0.57	0.97	0.64	1.00					
task 3	0.00	0.97	0.28	0.49	0.43	0.47	0.55	0.41	0.54	1.00				
s-task 3	0.03	1.00	0.29	0.25	0.32	0.21	0.32	0.35	0.28	0.77	1.00			
o-task 3	-0.01	0.98	0.24	0.52	0.42	0.51	0.56	0.39	0.58	0.97	0.57	1.00		
task 4	0.00	0.99	0.18	0.48	0.44	0.46	0.47	0.31	0.48	0.52	0.33	0.53	1.00	
s-task 4	-0.02	1.08	0.24	0.32	0.32	0.30	0.24	0.28	0.24	0.30	0.27	0.27	0.79	1.00
o-task 4	0.01	0.97	0.14	0.49	0.44	0.47	0.51	0.32	0.53	0.55	0.32	0.57	0.97	0.60

In what follows, I will examine three different models. The first of these models is a kind of baseline model of the sort generally accepted in sociology today. It assumes that people control their behavior to make it consistent with their identity; any inconsistency results in people adjusting their behavior to make it more consistent. For this model, the objective performance is measured by the perceptions of all participants. In the second model it is assumed that

people control their perceptions of the meanings of their own behavior in the situation a model consistent with Powers (1973) perceptual control theory.

The third model builds upon the second by adding the notion of reflected appraisals. For this model I would want both the persons perceptions of their own behavior meanings as well as their perceptions of the meanings implied in others reactions (the reflected appraisals). Unfortunately, I do not have peoples perceptions of others reactions, but I do have others actual reactions. The actual reactions can be used as a proxy for the reflected appraisals on the assumption that people can understand others reactions in the way they are intended because they share the same cultural meanings. Of course to the extent that the proxy differs from the desired measure, there will be measurement error and the reliability of the estimated effects in the model will be lowered.

With these three models, I build from the generally accepted view that people control their own behavior to the ICT view that people control perceived meanings in the situation those perceived directly as well as those implied by the reactions of others (reflected appraisals). .

4 Model One

As indicated above, I examine in the first model what might be expected if, as in the exchange model, it were true that behavior (rather than perception) is controlled. If we take the basic ICT model under that assumption and apply it to leadership behavior of individuals in a small task-oriented group, then we would understand leadership behavior as being controlled to be consistent with the leadership identity of the actor. Such behavior that is consistent with the leadership identity might be called desired leadership behavior. We would expect the actual amount of objective leadership behavior to be the same as the desired leadership behavior; i.e., consistent with the level of leadership that they held as appropriate for their leader identity in the group. In this way the meanings of the actors leadership behavior would match the meanings held in their leadership identity standard. But, because each person is one of several persons in the group, and each is trying to control his or her own leadership behavior to their own desire level, each disturbs the leadership behavior of others in the group except perhaps in that rare instance where by chance the leadership identities of each mesh perfectly and the behavior of each serves to verify his or her own identity. The interaction process is thus one of working out a mutual accommodation of leadership behaviors, if possible, such that each persons identity is confirmed by their own behavior in the group. If there is a discrepancy between the actual or objective level of leadership behavior and the desired leadership behavior, each person will try to adjust the level of the objective leadership behavior to match their desired level.

This simple model is outlined in Figure 2. The arrows represent causal effects proposed in the model that suggest each persons task leadership identity (tasked in the figure) influences his or her task leadership behavior (1 task, 2 task, etc. in the Figure); the meanings of the behavior should reflect the meanings in the

identity standard. The model assumes that that over time the leadership behavior generally persists from one discussion to the next (representing stability of performance). But, because of the disturbances introduced by other members of the group trying to adjust their behavior in the interactive setting, the meanings of the actors behavior and their leadership identity standard do not perfectly match.

There is an error or discrepancy between the meanings of the actual behavior and the meanings of the desired behavior based on the identity standard and this discrepancy is captured by the error term in Figure 2 (the difference between the objective task leadership performance and the desired level of task leadership predicted by the identity). Thus, over time, each person adjusts his or her subsequent behavior to compensate for the discrepancy and counteract the disturbance. This is the negative feedback look of the control system. If a person were doing more than the desired level of leadership behavior as predicted by her leader identity, she would subsequently reduce the level of leadership behavior. Or, if she were doing less than the desired level, she would increase the level of leadership behavior. It is also assumed in this model that behavior is best measured objectively as the mean performance as seen by all members of the group. This triangulation removes the biases that might be introduced by using only one observer.

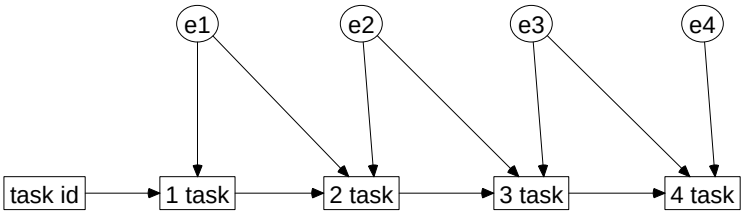

Figure 2: Structural Diagram for Analytic Models One and Two

The results of the analysis of the first model (represented in Figure 2) are presented in Table 3 and it can be seen that the theoretical model fits the empirical data very well.[6] (Chi-square = 3.9, df = 7, p = .78).[7] It should be noted that some constraints were added to the model based on theoretical assumptions. It was assumed that the persistence effect of task behavior from time one to time two was the same between times two and three as well as between times three and four. In addition, it was assumed that the effect of the

[6] Although not shown in the figure, the actual model that is analyzed assumes that the constructs are measured with error. Thus, the model includes the measurement error as well as the unmeasured theoretical constructs of the task leader identity and the behavior at each time point.

[7] Chi-Square measures the difference between what the model predicts and what the data show. The lower the chi-square relative to degrees of freedom, the better is the fit. The p-value indicates no statistically significant difference between the model and the data.

error or discrepancy at time one on leadership performance at time two was the same as the effect from time two to time three and from time three to time four.

Table 3 about here

Table 3. Structural Coefficients for the Analysis of Model 1[a]

	Outcomes			
Source	task 1	task 2	task 3	task 4
task id	0.52**	--	--	--
task 1	--	0.92**	--	--
discrepancy 1	--	-0.46**	--	--
task 2	--	--	0.92**	--
discrepancy 2	--	--	-0.46**	--
task 3	--	--	--	0.92**
discrepancy 3	--	--	--	-0.46**

[a] Model fit: chi-square=3.9, df=7, p=0.78

** p≤.001

-- Effect not included in the model

Looking at these effects as shown in Table 3, we see that task leadership identity strongly influences task leadership performance, but the prediction is not perfect; there are factors in the situation (disturbances) that also influence the actual performance and make it different than is predicted by the actors identity. However, we also see that the discrepancy has consequences for the subsequent task leadership performance. If a person performs more than her task leadership identity would predict in one discussion, she reduces her task leadership performance in the next discussion; similarly, if she perceives her leadership performance as too low in one round, she increases her effort in the next, in effect counteracting the disturbances that forced her to be too high or too low in the first place. With the present data, that counteracting force becomes is about .49.[8] These results are consistent with a model in which actors control their behavior to bring it into alignment with their identity and counteract any disturbances in the situation.

5 Model Two

The above results seem to confirm the idea that people control their behavior to be consistent with their identity, and we might be content with them. However, ICT is based on a perceptual control theory (Powers, 1973), that proposes it is not the objective behavior that is being controlled, but the actors own perceptions of the meanings of their behavior. Rather than measuring the objective behavior using the multiple viewpoints of all the participants or just the viewpoints of others, ICT suggests that we need to use only the viewpoint of the actor, that is, person performing the behavior. If we replace the measure of

[8] If it is assumed that people are not good or objective judges of their own behavior and we thus measure the behavior based only on the observation of more objective others, the results are very similar, but the counteracting force drop to .46. These results are available from the author.

objective behavior with the measure of the actors perception of the meanings of his or her behavior, but otherwise keep the model the same, we have a model that is more consistent with Powers (1973) perceptual control theory and with ICT.

In model two I do that. This model is the same as model one with the sole difference being the way in which task leadership behavior is measured. Here, I exclude the perceptions of others and use only the actors own perceptions of the task leadership meanings of their own behavior. Thus, the 1 task, etc. variables indicated in Figure 2 are now the actors perceptions not the objective behavior. Also, the error term in this model is not just a statistical error term, but represents the theoretical construct of the subjectively felt cognitive discrepancy between the known meanings of the task leadership identity and the perceptions of task leadership performance. The assumptions underlying the model are the same as before and the constraints are the same as before.[9] The results of this analysis are presented in Table 4.

Table 4. Structural Coefficients for the Analysis of Model 2[a]

	Outcomes			
Source	task 1	task 2	task 3	task 4
task id	0.64**	--	--	--
task 1	--	0.94**	--	--
discrepancy 1	--	-0.66**	--	--
task 2	--	--	0.94**	--
discrepancy 2	--	--	-0.66**	--
task 3	--	--	--	0.94**
discrepancy 3	--	--	--	-0.66**

[a] Model fit: chi-square=3.2, df=7, p=0.87

** p≤.001

-- Effect not included in the model

This model also fits the data (Chi-square = 3.2, df = 7, p = .87). The main two differences in these results compared with those of model one are 1) the somewhat stronger link between the meanings of the task leadership identity and the actors perceived task leadership meanings of their own behavior, and 2) the stronger effects of the discrepancy on subsequent perceptions (the counteracting force). Each persons perceptions are much more strongly controlled by the discrepancy between prior perceptions and the identity standard than was first indicated in model one. Of course, the problem with model one (from the point of view of the current model) was that the individuals perceptions of the meanings of his or her behavior were contaminated by the perceptions of others of that behavior. With the proper measure (from the point of view of perceptual control theory) we have a better estimate of the way in which the perceptual control system works: identities and behaviors are connected through common meanings, and disturbances to the perceived meanings of the behavior

[9] Also, as in the first model, I assume the perceptions are measured with error. Again, the model that is analyzed includes the unmeasured theoretical constructs as well as the measurement error.

are counteracted to maintain identity verification. These stronger connections support the perceptual control model over the behavioral control model.

However, that is not the only story, because people not only perceive their own behavior, they also perceive other persons reactions to their behavior reactions based on the others perceptions. This is the reflected appraisals process. The meanings of our behavior are also assessed by our perceptions of others responses. In model three I add this component.

6 Model Three

For the third model, I include, along with the actors own perceptions of his or her behavior, others perceptions of the behavior in question (as a proxy for the reflected appraisals). Model three is shown in Figure 3 where two parallel structures of perceptions across the four discussions are indicated: one for the actor (labeled s-task) and one for others in the group (labeled o-task). The two sets of perceptions are linked only by an effect from others perceptions of the actors task leadership to the actors self-perceptions of his or her task leadership. This represents the reflected appraisals portion of the actors perception. Thus, in this model, part of the actors perceptions are assumed to be of their own task leadership behavior, and part of their perceptions are of others reactions to their own task leadership behavior. Missing from the model, but implied, is the actual behavior of others that the actor observes and from which the actor makes inferences about what others perceive. Thus, the others perceptions are standing as a proxy for the meanings of the others behavior resulting from these perceptions. The path from others perceptions to the actors own perceptions implicitly represents the product of the effects (paths) from others perceptions to others behavior and from others behavior to the actors perceptions.

I also assume in the model that others perceptions of the actors task leadership behavior are related to the actors task leadership identity. Again, missing from the model, but assumed, is the actors task leadership behavior that results from their identity, which behavior both projects the actors task leadership identity meanings and counteracts disturbances to that identity. It is this behavior that is perceived by others and interpreted in meaningful ways. Thus, the path from the actors task identity to others perceptions at time one implicitly represents the product of a path from the actors task identity to their behavior and a path from the actors behavior to others perceptions. In addition, I assume that there is persistence in the perceptions of others, which persistence likely exists in the meanings of the behavior being perceived. I also include in the model paths from the error term for others perceptions to their perceptions at the next time point, paralleling the model for self-perceptions. The meaning of these effects will be discussed later. Finally, I assume that the errors for self-perceptions of task leadership and others perceptions of task leadership may be correlated.[10]

[10]As in the earlier model, I assume the perceptions are measured with error. The model that is analyzed includes the measurement error and the unmeasured theoretical constructs.

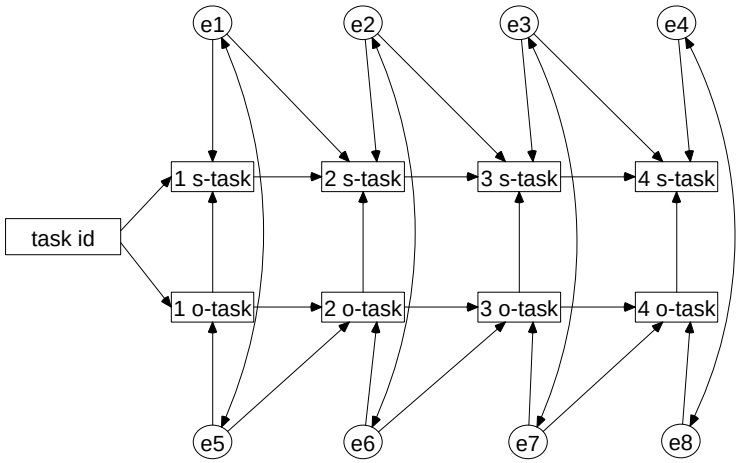

Figure 3: Structural Diagram for Analytic Model Three

The results of the analysis for Model 3 are given in Table 5, where it can be seen that the model fits the data very well (Chi-square = 26, df = 28, p = .57). Looking first at the actors side of the model, I note that the results show, as hypothesized, a significant component of the self-perceptions are based on reflected appraisals. In addition, the estimated effects of discrepancy (error) between the perceived level of task leadership and that predicted by the task leadership identity standard for the actor has increased even further to .80. The perceptual control model is working very well here, with indications of strong counteractions of any disturbances.

Table 5 About Here

Looking at the other side of the model, i.e., the part pertaining to others perceptions, we see, (1) others perceptions are dependent upon the meanings held in the identity standard of the actor, (2) they are just as persistent as the self-perceptions, and (3) there is an apparent effect of the error at one time on the perceptions in the next time, though the effect is much weaker than for the self-perceptions (.46 as opposed to .80, which difference is significant: t = 16.6, p ¡ .001). Finally, I note that the errors for the self-perceptions are correlated with the errors for others perceptions. Let me discuss each of these in turn.

Why are others perceptions of the meaning of the actors behavior (in task leadership) an apparent function of the task leadership identity standard of the actor when the latter is not something that the others can see? What is missing, of course, is the actual behavior of the actor. The others perceive that behavior and interpret its meanings. And, since that behavior is designed by the actor to reflect the meanings of the actors task leader identity, the others in the group come to see those meanings. For this to happen, the actor and the others in the group must share meanings and symbols as we assume they do because they exist in a common culture. It is not assumed that the sharing is perfect, but is

Table 5. Structural Coefficients for the Analysis of Model 3[a]

	Outcomes							
Source	s-task 1	o-task 1	s-task 2	o-task 2	s-task 3	o-task 3	s-task 4	o-task 4
task id	0.64**	0.50**	--	--	--	--	--	--
s-task 1	--	--	0.93**	--	--	--	--	--
s-discrepancy 1	--	--	-0.80**	--	--	--	--	--
o-task 1	0.07*	--	--	0.93**	--	--	--	--
o discrepancy 1	--	--	--	-0.46**	--	--	--	--
s-task 2	--	--	--	--	0.93**	--	--	--
s-discrepancy 2	--	--	--	--	-0.80**	--	--	--
o-task 2	--	--	0.07*	--	--	0.93**	--	--
o discrepancy 2	--	--	--	--	--	-0.46**	--	--
s-task 3	--	--	--	--	--	--	0.93**	--
s-discrepancy 3	--	--	--	--	--	--	-0.80**	--
o-task 3	--	--	--	--	0.07*	--	--	0.93**
o-discrepancy 3	--	--	--	--	--	--	--	-0.46**
o-task 4	--	--	--	--	--	--	0.07*	--

[a] Model fit: chi-square=26.0, df=28, p=.57

** $p \leq .001$

* $p \leq .01$

-- Effect not included in the model

only sufficient for coordination and common goals to be met. In this way the others appear able to infer the actors task leader identity meanings, but more importantly, they can understand the implied meanings of the actors behavior, just as the actor understands the meanings of their own behavior (as well as the implied meanings in others behavior as reflected appraisals). Thus, the effect of the actors identity on others perceptions is indirect, feeding through the (unmeasured) behavior of the actor.

With respect to the path representing persistence of others perceptions of the actors behavior, I am assuming only that there is some stability in the meanings of the behavior being observed. Thus, these paths represent the product of three paths not shown in the model: a path from the unmeasured underlying meaningful behavior of the actor to others perceptions at (say) time one, a persistence path in the underlying behavior of the actor from time one to time two, and a path from the underlying behavior of the actor at time two to others perceptions at time two.

I also note the level of persistence is approximately the same for both the actors perceptions and others perceptions, which should be the case if these perceptions are all based on the same unmeasured underlying behavior of the actor. The magnitudes of the estimates indicate that approximately 86% of the variance in the observations of the actors behavior is common from one discussion to the next. Assuming that the behavior itself is approximately as stable, it appears that once the actor engages in meaningful task leadership behavior, the meanings of that behavior do not change drastically from one discussion to the next. Of course, to the extent that the behavior reflects the meanings of the actors task leader identity, which itself should be stable (cf. Burke & Cast, 1997) this is not unexpected.

The third aspect of others perceptions is that they can be modeled as apparently under some sort of self-correction, just as the actors perceptions are.

That is, it appears that to the extent others perceptions of the actors behavior are too high they are lowered in the next discussion, and to the extent they are too low they are raised in the next discussion. Is this evidence that others are controlling their perceptions of the actors behavior? To answer this we again have to distinguish between the model that is estimated (Figure 3) and the underlying structural model. As already indicated, the path from the actors task leadership identity to others perceptions is understood to represent two unmeasured paths indirectly connecting the two concepts: from the actors identity to the actors behavior and from the behavior to others perceptions of that behavior. The error term for others perceptions, unlike the error term for the actors perceptions, is only a statistical error term and does not represent a cognitive discrepancy held in an identity. Nevertheless, because this error term is constructed in the same way as the actors discrepancy, and because what the actor perceives and what others perceive are highly correlated (r .65), the two errors relate to other variables in similar ways.

When, because of disturbances in the situation, the task leadership meanings of the actors behavior are in excess of the level of task leadership implied by the actors task leader identity, others correctly observe the level of implied task leadership meanings (as does the actor). However, these are too high only from the point of view of the actor. Others may see the level of leadership as high, but only the actor can assess the idea that it is too high for the actors identity. Yet statistically, it is the actors task leader identity that creates the predicted level of others perceptions of the actors task leadership. Hence the error term for the others corresponds in magnitude with the discrepancy term for the actor. When actors then control their perceptions of task leadership by reducing such meanings in their behavior in the next discussion, others also see this reduction, and it is related to the error in their perceptions as well an artifact of the way it is modeled. That is, others errors mirror the actors discrepancy because they are derived from the same source– the actors role performance and the actors task leader identity standard (which the actor knows but the others do not).

To be clear, others do not see the task leadership meanings of the actors behavior as being too high or too low (implying a comparison with some standard) they simply see a particular level of task leadership. And they can see whether the actor has reduced or increased the level of task leadership behavior in the following discussions.

7 Discussion

Identity control theory is a theory about the way in which people act to portray, preserve, and protect their identities by acting to keep their perceptions of who they are in a situation congruent with the meanings held in their identity standards. It is a perceptual control view of behavior in that it assumes behavior is used to control perceptions rather than the other way around (Powers, 1973). In perceptual control theory, people are understood to use whatever behavior is necessary to bring their perceptions in alignment with a reference and to

keep them in alignment. The actual behavior is not relevant except for its effects on the meanings that are perceived and may change from time to time to maintain control of perceptions. For example, if we are controlling to stay in the middle of our lane while driving a car, we may have to turn the wheel left or right depending upon the way the road turns, the wind gusts, lane marking change, etc. We only know what to do by noting our perception of the current position of the car relative to our standard of where it should be, and then taking appropriate action. The action needed is not constant and cannot be foreseen.

ICT assumes that the relevant perceptions pertain to meanings of the self in the situation, and that the standard to which the perceptions of meanings are compared is the identity standard, i.e., the meanings that define the relevant identity of the actor. Actors dont always know what to do to make the perceived self-relevant meanings match the standard or to keep them close to the standard, but they keep trying until that happens. In this way, the identity standard is a goal (Burke, 2004). When the perceived self-relevant meanings do match the standard, the self is verified and people feel good about it. If they do not match, the self is not verified, people do not feel good, and they keep trying.[11]

Further, if there is a disturbance in the situation, that is, some factor that causes an actors perceptions of self-relevant meanings not to match the meanings of their identity standard, they must counteract that disturbance in order to make the self-in-situation meanings match the standard. For example, if when driving down the highway in the middle of the lane a gust of wind pushes the car toward the edge of the lane, we counteract that disturbance of the wind to bring the car back to the middle of the lane. The idea of counteracting disturbances to our perceptions is central to the idea of control in ICT, and it is that aspect that I have focused on in this paper

I began with a demonstration of the control aspects of the theory by examining a model, consistent with much sociological thinking, which assumes people control their objective behavior to make it consistent with who they are. In this case, members of small problem-solving discussion groups make their task leadership behavior consistent with their task leader identity. And, when the actual task leadership behavior is too much or too little relative to the actors task leader identity standard because of some (unmeasured) disturbances in the discussion, the actor reduces or increases their level of task leadership behavior in the subsequent discussion to counteract the disturbance. In this way, the actor counteracts whatever disturbances move his or her objective task leadership performance out of alignment with their task leader identity.

However, as I pointed out, ICT is not about the control of behavior, but about the control of perceptions. Since the behavior in that first analysis was measured in terms of the combined perceptions of all members of the group, some of those perceptions (i.e., those of members other than the actor) are not under the actors control. Reanalyzing the data using only the actors perceptions

[11] The theory also recognizes that if it is not possible to make perceptions match the standard, over time the standard comes to match the perceptions (Burke, 2002; Burke & Cast, 1997).

yielded results that showed much stronger control forces. Discrepancies between the actors perceptions and the actors identity standard served to move the actors perceptions back toward alignment with their identity standard much more strongly than discrepancies between their identity and objective behavior.[12] By using only the actors perceptions in the model it is clear that it is the actors perceptions that are controlled. The actual behavior that is perceived is not known, but that behavior has meanings that are perceived, and these meanings are brought to match the identity standard.

Finally, I suggested that the actor does not perceive only his or her own behavior to garner self-relevant meanings from the interaction. Consistent with symbolic interaction theory, ICT recognizes that people also perceive self-relevant meanings through the reflected appraisal process by perceiving and interpreting the meanings of the actions of others (which actions are part of the perceptual control processes of the others in the group). The final model showed that the actors perceptions are indeed also influenced by the perceptions of others in the group (through the meaningful behaviors in which they engage). With that final model it is clear that each actors perceptions of self-relevant meanings remain relatively stable and close to the meanings of their identity standard. But, when the perceptions are disturbed by events in the interaction process within the group, actors work strongly to counteract those disturbances and bring their perceptions back into alignment with their identity standards.

The third model also shows that others perceptions of the actors behavior also seem to be controlled. Indeed, this model of apparent control of others perceptions fits the data so well (although the effects are not as strong) that our analysis of model one, which merged self-perceptions with others perceptions into a measure of objective behavior, could lead the unsuspecting to conclude that it is the behavior that is controlled rather than the perceptions. I have already discussed some of the statistical reasons for what is going on with others perceptions of the actors behavior to be under apparent control, but behind this statistical explanation is the fact that the group participants all share the same culture, symbols, and meanings. And it is on this point that I want to focus on here.

As indicated earlier, meanings are peoples responses along particular dimensions to stimuli (Osgood et al., 1957). Meanings are not the stimuli themselves; meanings are perceptions. Different perceptions can lead to the same meaningful behavior. The same perception in different situations can lead to different meaningful behaviors. When we measure group members perceptions of the interaction and the behaviors of each other, we are measuring meanings along particular dimensions. In the present case, we are measuring meanings along a dimension of task leadership, but we are doing so by examining the impact of different stimuli (providing fuel for discussion, guiding the discussion, attempting to influence the groups decision, standing out as a leader) along a common

[12] Measured using either a combination of all participants views or just the views of objective others.

dimension the single underlying factor shown in Table 1. The instances of each of these multiple indicators that people attend to are varied. Yet, the group members come to a common understanding.

Sharing a culture and the symbols within it implies that people will respond to (perceive) stimuli (symbols) in similar ways. These symbols are significant symbols (Mead, 1934), indicating that the responses are shared the meanings are shared. Providing fuel for the discussion is understood by all the members to indicate task leadership. Evidence of providing fuel for the discussion is commonly understood. Thus, when one person engages in certain activities, both the actor and others understand the meanings of those activities and can similarly assess and communicate those activities on the dimension of task leadership.

The result is that the multiple perceptions will be highly correlated even if they are not perceptions of exactly the same objective phenomenon. This is because most language and interaction is multiply encoded with redundancy so that there are many stimuli and all of them lead to similar interpretations (meanings). Task leadership is not one thing. It is the way we encode a variety and range of activities as evidence of task leadership (hence the multiple indicators used to measure task leadership). And, to a certain extent, each persons response is a little different than others; thus each has his or her own unique views about what task leadership is, though the constraints upon such individual interpretation are quite strong within a shared culture. These constraints are due to the fact that communication is only possible when the shared component of meaning is very high. Communication is possible only when actors response to actors behavior is the same as others response to actors behavior. Continued interaction increases the shared components of meaning (Burke, 2003) as idiosyncratic reactions are reduced by their inability to be communicated.

The result of this sharing of meaning in the present context is that others perceptions of the actors behavior shadow the actors perceptions. The apparent control of others perceptions is a shadow of the actors control like reading a thermometer but not controlling the furnace/AC. When I see the temperature is high, I later see it lower, but I did not act to make it lower.

The sharing of meaning brings up one final point that needs to be made. Perceptual control theory is a theory about individual control (Powers, 1973). Runkel (1990) argues that perceptual control theory is a theory about individuals controlling their own perceptions to bring them into alignment with their own internal reference points. In order to understand what perceptions each individual is controlling, one must, according to Runkel, test each individual, because the exact perceptions controlled by each individual are likely to differ. Yet, in the present chapter I have analyzed a set of individuals using statistical procedures that hide individual perceptions and reactions in order to examine aggregate or average perceptions. Is this analysis valid?

Runkels admonition to test individuals is exactly correct when we are trying to understand individual control systems and how they work. However, social behavior and communication requires that there must be common perceptions (meanings), and to understand social behavior and communication requires that

we study these common perceptions. Society is organized and structured into positions and roles that have names, which names carry with them shared expectations and understandings. From societys point of view, common roles must be played out in common ways. For this to happen, role identities based on these positions must incorporate common sets of meanings as standards guiding perceptions. Individuals, in playing out their roles, must maintain the stable social system within which we all exist.

The common identity standards are common goals that individual identities achieve and maintain against continuous disturbances. What the present analysis shows is not what each individual controls, but the common dimensions of shared meaning that individuals within a culture control to maintain a stable social system.[13] I have not analyzed individual control systems, but the common patterns displayed across multiple individual control systems as they operate to maintain the social structure of the small group in which they are embedded.

This approach does not deny that it is individual control systems that are operating. As Burke and Tully (1977) pointed out with respect to the measurement of gender identity, it was the individuals perception of who they are that was important, but it needed to be measured along a dimension that was determined by the shared consensus of the meanings of masculine and feminine that exist in a shared culture. That continues to be true in ICT. Each individual controls his or her own perception, but, sociologically, we are interested in the control that occurs along dimensions that are determined by the common, shared view of the relevant meanings for the identity in question. Identities are tied to (shared) culturally defined positions in the social structure. Many of the meanings held in the identity standards define the identities along shared dimensions, as well as constitute the shared goals that someone located in a particular position obtains and maintains through the mechanism of identity verification.

In order to understand the way in which identities control perceptions of shared meanings we must investigate the patterns of control that are shared across individuals. In the present case, it is the individual perceptions of shared meanings along culturally determined dimensions of what constitutes task leadership in small groups. Individuals clearly control their own perceptions, but the control is often of culturally shared meanings. The fact that each person can see and respond to what others see and respond to makes society possible.

8 References

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[13] It is important to remember that the shared meanings are not the only meanings that individuals control; the shared meanings are a necessary focus for the study of social behavior and social systems.

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9 Appendix A

Mr. A, an electrical engineer, who is married and has one child, has been working for a large electronics corporation since graduating from college five years ago. He is assured of a lifetime job with a modest, though adequate salary and liberal pension benefits upon retirement. On the other hand, it is very unlikely that his salary will increase much before he retires. While attending a convention, Mr. A is offered a job with a small, newly founded company, which has a highly uncertain future. The new job would pay more to start and would offer the possibility of a share in the ownership if the company survived the competition of the larger firms.

Imagine that you are advising Mr. A. Place a check mark next to the answer that best represents the lowest probability of success that you would accept and still recommend that Mr. A take the new job.

I WOULD RECOMMEND THE NEW JOB

1. If the odds of success were at least 1 out of 10.
2. If the odds of success were at least 3 out of 10.
3. If the odds of success were at least 5 out of 10.
4. If the odds of success were at least 7 out of 10.
5. If the odds of success were at least 9 out of 10.