ABSTRACT
              The increasingly popular view of the counseling
process from an interactional perspective necessitates the
development of new measurement instruments which are suitable to the
study of the reciprocal interaction between people. The validity of
the Relational Communication Coding System, an instrument which
operationalizes the constructs of complementarity and symmetry in
human communication processes, was directly assessed in a two-factor
design. Undergraduates (N=242) who were divided into 10 groups
listened to one of five audiotaped interactions. Subjects were told
that the persons on the tape were either a husband and wife or a
counselor and client. Each interaction was loaded with one type of
symmetrical or complementary communication pattern. The effects of
pattern, context (marital versus counseling), and their interaction
on subjects' perceptions of the relationship control were examined.
The results revealed that interactions loaded with certain types of
relational control patterns were reliably distinguished by outside
observers. The context of the interaction was found to have little
effect on how well observers' perceptions of relational control
reflected the actual coded communication. These findings generally
support the use of the Relational Communication Control Coding System
in counseling process research. (NB)

Validation of a Communication Process Measure

for Coding Control in Counseling

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Abstract

The validity of the Relational Communication Coding System
(Ericson & Rogers, 1973) was directly assessed in a
two-factor design. This instrument operationalizes the
constructs of symmetry and complementarity in human
communication process, following the work of Bateson
(1936) and other researchers (Sluzki & Beavin, 1965/1977)
in the "interactional" or "systems" tradition. Subjects
were 242 undergraduates in 10 groups who listened to one
of five audiotaped interactions, after being told either
that the pair was a) a husband and wife or b) a counselor
and client. Each interaction was "loaded" with one type
of symmetrical or complementary communication pattern.
The effects of pattern, context (marital vs. counseling),
and their interaction on subjects' perceptions of the
relationship control were examined. The results generally
supported the use of this measure for counseling process
research.

Validation of a Communication Process Measure

for Coding Control in Counseling

Counseling process is being viewed increasingly from an interactional perspective, in which individual behavior or communication can only be fully understood by its antecedents and pragmatic effects within the context of a relationship (e.g., Strong & Claiborn, 1982; Watzlawick & Weakland, 1977). This perspective necessitates the development of new measurement instruments, suitable to the study of the reciprocal interaction between people, rather than traits or other individual dynamics. The Relational Communication Coding System (Ericson & Rogers, 1973) is a fairly recent instrument which operationalizes the constructs of complementarity and symmetry in human communication processes, following the work of Gregory Bateson (1936) and other researchers (Sluzki & Beavin, 1965,1977) in the "systems theory" tradition. Its rationale and construction are firmly grounded within this "systems" or "interactional" framework; thus it is a promising tool for studying propositions about communication in a) normal and dysfunctional human systems and b) therapeutic change. And in fact, this coding system, although originally devised and used to study marital communication, is becoming increasingly popular for studying various aspects of control in counselor-client relationships (Lichtenberg & Barke, 1981; Miars, 1982; Thames & Johnson, 1982; Heatherington & Allen, 1984).

Nonetheless, few studies have directly examined the
validity of this coding system (Ayres & Miura, 1981;
Folger & Sillars, 1980), and none have specifically
studied its validity for use in counseling contexts.

This paper reports the results of a validity study in
which taped interactions were "loaded" with a high
percentage of certain relational control patterns:
competitive symmetrical patterns (↑↑), in which both
people attempt to define themselves as in control by their
verbal messages, complementary patterns (↑↓ and ↓↑) in
which one person defines him/herself as in control while
the other accepts that definition, submissive symmetrical
patterns (↓↓) in which both vie to relinquish control, and
neutralized symmetrical patterns (→→), in which both give
messages which neither seek to gain nor give up control.
(For a full description of how these codes are derived
from the raw data, see Rogers [1979], Rogers & Farace
[1975].) Assuming that the coding system has at least
criterion validity, outside observers' perceptions of the
control dynamics of the interaction should show some
correspondence with the coded control dynamics, and this
was examined. A second question concerned whether the
correspondence would be better when the coding was applied
to a marital interaction vs. a counseling interaction.
Use of the system in the counseling process studies cited
earlier has raised some questions regarding whether
certain coding assumptions make more sense when applied to

marital contexts than to counseling contexts. Thus the study was designed to answer this question as well.

<div align="center">Method</div>

Subjects

Subjects were 242 introductory psychology students, 104 males and 138 females, who received course credit for their participation. Subjects were randomly assigned to one of 10 groups (conditions), constituted by crossing the context (marital vs. counseling) with the five different transcripts. Each group had 23-27 subjects with the exception of one group with 19 subjects; males and females were roughly equally distributed across groups.

Apparatus

Taped interactions. Five transcripts of an interaction which could have taken place between a husband/wife or a counselor/client were written to include a high percentage of one of the following five relational control patterns ↑↑, ↑↓, ↓↑, ↓↓, or →→. Thus the communication process was varied, but the content (people discussing the job stress and smoking habits of one of them) was held constant. (The other 4 possible patterns [↑→, ↓→ , →↑, →↓] were of course included in the interactions but not as the dominant pattern.) Three drafts and two pilot tests of the transcripts to ascertain their naturalness and believability resulted in transcripts which were "loaded" with 39% to 57% ($\underline{M}$ = 47%) of one particular type of interaction pattern. (Note: if all

patterns were equally frequent, each would represent 11%
of the total.) Two unrelated adults (a male, who took the
husband/therapist lines and a female, who took the
wife/client lines) then made audiotapes from the
transcripts. A post-experiment manipulation check showed
that the interactions were believable as presented (see
Procedure) for 83% of the subjects; the majority who
dissented felt that the speakers were more like friends,
and only 4 subjects "guessed" the opposite context.

Interaction questionnaire. A five-page Interaction
questionnaire which tapped several areas was devised for
use in this study. First, subjects rated the quality of
the interaction on a 5-point Likert scale (1 = very poor,
5 = very good) and checked one of five control
descriptions (e.g., it seemed that both were competing for
control, that Speaker A was in control, that speaker B was
in control, that both competed to give up control, or that
the interaction was essentially neutral with respect to
control) which corresponded to the coded patterns of
interest. Subjects also rated each speaker's attempted
and actual influence in the interaction on a scale from 1
(not at all) to 4 (very much). Finally, subjects rated
the process-relevant characteristics of each speaker
separately on a 15-item 6-point semantic differential
scale. Items were chosen on the basis of past use to
reflect both control (e.g., powerful, assertive, strong,
dominant) and evaluative(e.g., pleasant, friendly,

caring) dimensions.

Procedure

The groups were run separately, five at a time, with
the second set of groups overlapping the first to prevent
subjects from meeting. Subjects were asked to listen to a
short audiotaped interaction. Depending on the context
condition, they were informed either that the speakers
were husband and wife or counselor and client; within each
of the context conditions each group heard one of the five
interactions. Subjects then individually completed the
Interaction questionnaire.

Results

The correspondence between subjects' perceptions of
relational control in the dyad and the coded relational
control is revealed by the frequency data in Table 1.

Insert Table 1 about here

Clear, nonrandom patterns emerged from a chi-square
analysis of the data combined across contexts, $\chi^2(16)$ =
92.78, p < .01. Of the subjects who heard the ↑↑ tape,
the highest number of subjects (39%) indicated that both
people were competing for control; of the subjects who
heard the ↑↓ tape, 49% indicated that the "first" person
was asserting control while the other accepted it. It can
be seen in the table that the correspondence was higher,
for both interactions, in the counseling context.

Subjects' perceptions of the ↓↓ and →→ interactions were
consistent in 29% and 36% of the cases, respectively. In
both cases, these combined percentages were only the
second highest. When the data are examined by context
however, it appears that for the neutralized symmetrical
interaction (→→) there _is_ the expected correspondence with
subjects' perceptions; 48% of the subjects responded that
both speakers' messages appeared to be neutral with
respect to control. Finally, there was little
correspondence between the coded and perceived control
patterns in the ↓↑ conditions. The most frequent
perceptions of subjects hearing this interaction was that
both parties were seeking to give up control.

The type of relational control pattern in the
interaction also affected subjects' perceptions of the
quality of the interaction, as revealed by a 2-way
(context x pattern) ANOVA, F (4,232) = 5.10, p < .001.
Speakers in the ↑↑ interaction were seen as communicating
the least well (M = 2.67, SD = .79), and speakers in the ↓↑
condition were seen as communicating the most well (M =
3.43, SD = 1.02), followed by ↓↓ (M = 3.35, SD = .88), →→
(M = 3.30, SD = 1.04), and ↑↓ (M = 3.10, SD = 1.05). A
Newman-Keuls procedure showed that the ↑↑ mean was
significantly different from each of the other groups.
There was no effect of context on perceived communication
quality, and no interaction.

Subjects' perceptions of the interpersonal control of

individual speakers as a function of context and pattern
were assessed by a MANOVA procedure on the means (see
Table 2) of: Speaker A's a) attempted and b) actual

Insert Table 2 about here

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influence, and Speaker B's a) attempted and b) actual
influence. This revealed no main effect of context and no
interaction, but a significant effect of pattern, with a
multivariate (Pillai's trace) $\underline{F}(16,920 = 4.79$, $\underline{p} < .001$.
Univariate $\underline{F}$ tests revealed significant effects of pattern
on A's attempted influence, $\underline{F}$ $(4,230) = 15.12$, $\underline{p} < .01$.
A's actual influence, $\underline{F}(4,230) = 7.32$, $\underline{p} < .001$, and B's
actual influence, $\underline{F}(4,230) = 8.92$, $\underline{p} < .001$. The data
also show that A's and B's perceived actual influence was
roughly the same in two symmetrical (↑↑, ↓↓) interactions,
that A's perceived influence was higher than B's in the ↑↓
interaction but lower in the ↓↑ interaction, and that B's
perceived influence was higher in the ↓↑ but lower in the ↑↓
interactions. The differences were found to be
significant by a Newman-Keuls procedure, $\underline{p} < .05$. The
only finding contrary to expectations was that the
perceived influence of B (wife, client) was higher than
A's in the neutralized symmetrical (→→) interaction.

Factor analysis of the 15-item semantic differential
scale revealed two clear (factor loadings ranged .64-.81,
median of .72) factors, one labeled "power" including 7

items (e.g., dominant, controlling, strong, assertive) and
another labeled "pleasant" including 4 items (e.g.,
pleasant, friendly, caring). Thus the items were summed
to yield two summary scores; the mean "Power" summary
scores were examined in the present study and are
presented in Table 3. A 2-way ANOVA on Speaker A's power

Insert Table 3 about here

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score revealed a significant effect of pattern only,
$F(4,214) = 21.16$, $p < .001$. Among the significant
post-hoc comparisons (Newman-Keuls, $p < .05$), the highest
mean Power score (in the ↑↓ group) was significantly
different from the three other groups in which Person A
was not in the ↑ position. The same procedure on B's mean
Power score revealed a significant effect of pattern,
$F(4,211) = 8.52$, $p < .001$ and context, $F(1,211) = 6.74$, $p
< .01$. Post-hoc pairwise comparisons showed that the
latter effect was accounted for by the higher mean Power
scores for B in the marital context ($M = 30.3$) than the
counseling context ($M = 24.6$) when the interaction was
loaded with neutralized symmetrical patterns (↔↔). The
main effect of pattern was accounted for by significant
pairwise comparison differences between the ↓↑ group mean
vs. each of the other groups in which Speaker B was not in
the ↑ position.

Discussion and Conclusions

Two major conclusions can be drawn from these results. One, in general, interactions which are "loaded" with certain types of relational control patterns can be reliably distinguished by outside observers. Two, in this study, the context of the interaction had little effect on how well observers' perceptions of relational control reflected the actual coded communication. These conclusions require some qualification/elaboration.

Not all interactions were given ratings equally consistent with the coding. Two of them, the ↑↑ and ↑↓ interactions were especially consistent. They contained, by definition, high frequencies of instructions, orders, and nonsupport statements. It seems that the control definition carried by these kinds of messages is clear. Subjects' perceptions of the actual influence of the individual speakers also reflected the coding (in the ↑↑ condition the "actual influence" means were very close, while in the ↑↓ condition A's mean was higher) as did the mean "Power" scores. Moreover, the fact that subjects rated participants in the ↑↑ interaction as communicating the least well is consistent with Parks' (1977) proposal that competitive symmetry is associated with more open conflict and less satisfying communication.

The submissive (↓↓) and neutralized (→→) symmetrical patterns were rated as such by a substantial, though only second highest, number of subjects. The former contained

many extending questions and support messages. It may be
that these have less clear control functions, e.g.,
questions could be seen as deferring to the other person
or structuring/leading the conversation; su port
statements such as "you're right" could be seen as
agreeing $(\downarrow)$ or offering judgment $(\uparrow)$. Perhaps, then,
subjects were responding to the content or the particular
roles in judging it to be a complementary (with
husband/counselor $\uparrow$) interaction; certainly this is
testable. The $\rightarrow\rightarrow$ interaction contained many statements
which simply extended the topic of conversation. Subjects
perceived this primarily as an interaction in which both
people sought to give up control, and secondarily as one
in which messages were neutral with respect to control.
It may be that following the topic of conversation is seen
as a "submissive" act by some subjects; this also would be
testable, by examining subjects' perceptions of individual
messages in addition to the interaction as a whole.
Again, the "actual influence" means for speakers in the
interaction were very close, as expected, though for the $\rightarrow\rightarrow$
interaction on both the "actual influence" and "Power"
scores, Speaker B (wife/client) was rated higher. This
was particularly so when "B" was presented as the wife.
In this transcript, "B" is essentially holding the floor
by telling a continuing story while "A" responds in a
Rogerian listening manner, which may explain the subjects'
perceptions.

The ↓↑ interaction, which contained many straightforward husband/therapist question-wife/client answer sequences, and husband/therapist support statements was not perceived as such by the subjects. Instead, the majority believed that both participants were seeking to give up control in the interaction. At the same time, the questionnaire ratings of individual speakers were very consistent with the coded patterns.[1] In ratings of both actual influence and "Power," relative to the other four transcripts, A's mean and B's mean were the lowest and highest, respectively, as expected. Moreover, B's means were also higher relative to A's. This discrepancy may be in part accounted for by some subjects second-guessing or impugning intention of the speakers, especially in the counseling interactions, where ↔ was also a frequent (30%) response to this. One subject, for example, explained his ↔ response as follows: "the client had more control, but I don't feel the counselor wanted to take it from her. She was telling him about her day and getting things out that she needed. For this reason, though, I am not sure if the counselor accepted the clients' control or acted neutrally." (Here is a "naive" subject expressing the dilemma of coding "meta-complimentary" interaction, which communications researchers have so far avoided!)

In summary, these data provide empirical evidence for the usefulness of the Relational Communication Control

Coding System in counseling process research. They also demand further investigations of the coding of simple questions and answers, with an eye to revisions that will enhance the system's validity.

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Author Notes

Footnotes

[1]Speaker A was always the male (husband or therapist) and Speaker B was always the female (wife or client). A replication in which sex and role were counterbalanced (e.g., Speaker A was wife or therapist) would expand the generalizability of these results.

Table 1

Correspondence Between Coded and Perceived Relational Control Patterns

Percent of Subjects who perceived the relationship as:	Predominant (coded) control pattern in taped Interaction, by Marital (M), Counseling (C) Contexts and Combined (Cb) across Context														
	↑↑			↑↓[1]			↓↑[2]			↓↓			→→		
	M	C	Cb	M	C	Cb	M	C	Cb	M	C	Cb	M	C	Cb
↑↑	37	42	39	32		20	04	09	06	17	25	18			
↑↓[1]	37	13	25	39	65	49	13	09	11	33	36	35	04	04	04
↓↑[2]		17	08	11	12	13	08	04	06	04	04	04	04	04	20
↓↓		25	12	14	12	11	67	48	57	29	32	31	44	56	50
→→	26	04	16	04	12	07	08	30	19	17	08	12	48	24	36

1 husband/therapist ↑, wife/client ↓
2 husband/therapist ↓, wife/client ↑

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Table 2

Mean Ratings of Speakers' Attempted and Actual Influence as a Function of Patern and Context

Ratings of:	Pattern				
	↑↑	↑↓	↓↑	↓↓	→→
A's attempted influence					
Combined M	3.22	3.31	2.40	2.84	2.14
Marital M	3.15	2.95	2.42	2.88	1.92
Counseling M	3.29	3.58	2.39	2.80	2.36
B's attempted influence					
Combined M	2.94	2.75	3.19	3.02	3.14
Marital M	2.78	2.84	3.13	3.08	3.04
Counseling M	3.12	2.70	3.26	2.96	3.24
A's actual influence					
Combined M	2.62	2.96	2.10	2.73	2.16
Marital M	2.63	2.79	2.04	2.62	2.00
Counseling M	2.62	3.10	2.17	2.85	2.32
B's actual influence					
Combined M	2.63	2.38	3.36	2.75	3.08
Marital M	2.63	2.26	3.35	2.63	3.12
Counseling M	2.63	2.46	3.38	2.88	3.04

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Table 3

Mean "Power" Scores as a Function of Pattern and Context

	Pattern				
	↑↑	↑↓	↓↑	↓↓	→→
Speaker A					
Combined M	30.75	33.69	22.21	27.94	22.27
Marital M	31.50	32.06	22.00	27.04	21.04
Counseling M	29.95	34.80	22.45	28.79	23.40
Speaker B					
Combined M	24.11	21.40	28.76	27.60	27.32
Marital M	23.79	21.47	29.86	29.63	30.27
Counseling M	24.50	21.36	27.55	25.80	24.63