

## COGNITIVE CONSISTENCY RELATED TO ATTITUDINAL ASPECTS OF MOTHER-CHILD RELATIONS\*

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Consistency is the central theme to which this symposium addresses its attention, and it is concerned with very broad and inclusive, and yet, very fundamental areas and problems in psychology. Various versions of consistency theories have in common the notion that a person behaves in a manner which maximizes the internal consistency of his cognitive system (e. g., Abelson *et al.*, 1968; Glass, 1968). In this presentation I will try neither to comment on the main theories, nor to conduct a critical review of the abundant experimental research. Instead, I want to limit myself to examine some aspects of certain very basic interpersonal relations in a real life situation in connection with principles of consistency. (Furuhata *et al.*, 1969, 1971 a, 1971 b; Furuhata, 1972). Hopefully my examination will provide a means of better understanding such interpersonal relations as well as providing some basis to change the relations in a desirable direction. Hence, I am going to deal with the problem that some specific dyads will also behave in ways that maximize the internal consistency of their

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interpersonal relations. My presentation, then, is titled Cognitive Consistency Related to Attitudinal Aspects of Mother-Child Relations.

When one mentions a POX system in the framework of a consistency theory, needless to say, P refers to the person involved, O to the other person who is related to P in certain specific ways, and X to an attitudinal object that should be perceived as central and important by both P and O. "POX" tends to be stated and thought of in an abstract manner as something found in the experimental situation only. However, the theory does not explicitly designate the applicability and/or the delimitation of the system as to the kinds of interpersonal relations, together with their shared attitudinal objects. It is apparent that parents and their children, who are constantly interacting with each other and who have commonly shared attitudinal objects which are perceived as central and important to both, provide us with an excellent POX-system observed in a natural setting as opposed to a laboratory situation.

Though parents and their children mutually influence each other, much of the research in the field has been based on what Bell (1964) terms a "one-tail theory". There may be two main methods of perceiving parent-child relations. One method is to consider that all of the child's characteristics, such as behavior, attitudes, and personality, are attributed to parental treatment and handling. The other method is that parent and child characteristics are mutually interacting. It is this latter method of perceiving parent-child relationships which forms the basis of my presentation.

Presently, at least in our country—but I suspect that the same holds true for most nations—the lack of adequate communication between parent and child, failure to understand each other, and what we term the "generation gap" are topics of serious discussion.

Don't parents and children really have common interests? Is the child's behavior perceived differently by the parent than by the

child itself? If one is attracted to the other, is that attraction reciprocated? Or, does attitudinal similarity between them really elicit attraction? Sizeable discrepancies in beliefs, opinions, and attitudes which exist between parents and their children are often pointed out when we speak of the "generation gap". Such being the case, is there an appropriate method to help reduce such discrepancies?

These are just a few of the questions which arise from the current parent-child problems. In attempting to answer these questions, it seems to me that concepts and principles of cognitive consistency provide us with certain reasonable basis to answer these questions, at least in part, because they regard parent-child relations as a system. Furthermore, they are more concerned with dynamic, motivational processes, as well as the situational determination of behavior, rather than static and stable personality characteristics.

What I am about to present is not a complete and final report; rather it is a trial taken as a first step to provide some preliminary answers. More specifically, I have two main purposes here; first, to mention the investigation of the relationships between certain attitudinal similarity between the mother and the child, on the one hand, and their interpersonal attractions on the other. Secondly, to show the examination of the effects of feedback from the mother to her child insofar as changing the child's attitudes and behavior is concerned.

### **Method**

Let me briefly describe the method used in the current study. The subjects were 98 female second-year high school students in Tokyo and their mothers. This choice of subjects was made to control the variables of sex and, in the case of the children, the developmental stage.

First, the attitudinal objects selected for study were instances of children's behavior which was perceived as important and central

by both the child and its mother. Instances of such behavior were itemized on the basis of an analysis of the responses to 8 open-ended questions; responses in a preliminary study using 170 fifth- and seventh-graders, including both males and females, and their mothers. Based on the analysis of the responses, fifty typical items were selected from the areas of study, habits, hobbies, self, siblings and friends. Examples of typical items include:

Hanako is detracted from her studies.

Hanako fails to put her things in order.

Hanako has many friends.

(You must remember Hanako is a common female name in Japan.)

Each child was asked to rate herself on each item using one of the six alternatives provided which ranged from "very much like me" to "very much unlike me". This rating was called the Child's First Rating or C-I. In addition, each child was asked to rate how she felt her mother would rate her on the same items. We called this Child's Second Rating or C-II. Similarly, each mother was asked to rate her child using six corresponding alternatives ranging from "very much like my child" to "very much unlike my child". This was known as the Mother's First Rating or M-I. In addition, using the same 50 items, each mother rated what she thought the behavior of an ideal child would be. The ideal child rating was called Mother's Second Rating or M-II.

Of the six possible combinations of ratings, four were established as being psychologically meaningful. They were (a) assumed or perceived similarity as measured by the congruence of C-I to C-II; (b) similarity or real similarity as measured by the congruence of C-I to M-I; (c) accuracy; that is the accuracy of the child's perception of the mother's responses as measured by the congruence of C-II to M-I; and (d), tentatively labeled "satisfaction" as measured by the congruence of M-I to M-II.

We constructed another scale to measure mother-child attraction. A recent study of parent-child intimacy by Kuniko Aoki (1966)

provided us with the materials to develop the ten items for the mother-child attraction scale. Measures were obtained from both the mother's ratings and the child's ratings. Sample items rated by the child include :

Hanako's mother is not interested in paying much attention to what Hannako does.

Hanako's mother is willing to do anything she can for Hanako's sake.

Similarly worded items were rated by the mother. Attraction scores were computed by means of the normal deviate weightings of response categories method (Edwards, 1957, pp. 149-152).

With that description of the methods used in the current study, let us now turn to a description of our experimental design. The pretest-posttest control group design was adopted. The subjects were randomly assigned either to the experimental — that is the feed back condition — or to the control or non-feedback condition. All subjects were given the pretest and, ten days later, the children of the experimental group were provided their mother's responses on the pretest as feedback. The posttest, consisting of identical items as the pretest, was administered to all subjects twelve days after the period of feedback or, in other words, 22 days after the pretest.

### **Hypotheses**

Having explained, briefly, the methods we used, I would like to present to you the two basic hypotheses which were developed and their corollaries, derived from cognitive consistency theory with special emphasis on Newcomb's postulates concerning interpersonal balance (Newcomb, 1953, 1959, 1961, & 1968; Newcomb *et al.*, 1965).

Fundamentally, it was assumed that a mother is likely to love her child, and the child will tend to reciprocate her attraction to the mother. Furthermore, mothers and their children who have mutually attracted relationships are likely to have more similar at-

titudes toward their shared objects, compared to those who have a less attractive relationship. Based on the foregoing, the following hypothesis was tested.

a. Since there is a tendency for dyad members who at any given time have a  $++$  or a  $--$  relationship to retain the same relationship over a period time, the child's attraction to its mother would be positively related to the mother's attraction to her child.

b. "Assumed similarity" would be positively related to the child's attraction to its mother. In this instance we are primarily concerned with the intrapersonal cognitive system on the part of the child.

c. "Real similarity" would be positively related to the child's attraction to her mother as well as the mother's attraction to her child. We are dealing with the consistency in the interpersonal system of the mother-child relations.

d. "Accuracy" would be positively related to the child's attraction to its mother. It was assumed that the child who is more attracted to her mother is likely to assess her mother's perception and judgment more accurately insofar as the child's behavior is concerned.

e. "Satisfaction" would be positively related to the mother's attraction to her child. This is not the prediction derived directly from consistency principles, but it was reasonable to presume that the mother who judges her own child's behavior as being relatively close to an ideal child's behavior would tend to be satisfied with her child. Such a mother is more likely to accept her child and to be attracted to her.

In the second hypothesis I assumed that if the mother's opinions are generally accepted by her child, and if the child, in the course of this experiment, finds a sizeable discrepancy between her mother's ratings of her behavior and the ratings the mother gave an ideal child, then the feedback that the mother has provided would create a condition of inconsistency in the child. Actually, prior to the application of feedback, statistically significant differences existed between ratings M-I and M-II which involved 29 of the 50 items

of the pretest. Compared with the discrepancies found in the other three indices of the pretest, this discrepancy was conspicuous in the extreme. The rationale is as follows. The normal child must have positive self-esteem; generally they love themselves and they are apt to accept their own behavior. The mother's judgment of her own child is, however, rather discrepant from her judgment of an ideal child. The child receiving feedback from her mother on her own behavior as well as on the behavior of an ideal child would likely feel uneasy as the result of receiving certain negative information on her self by her loving mother. The child may be interpreting her mother's judgment of an ideal child as the criterion of desirable behavior.

Then, as the result of feedback, an increase in assumed similarity, real similarity and accuracy would be found in the posttest, as compared to the pretest, provided the child is motivated to seek consistency in the presence of a certain degree of inconsistency.

### Results

I shall go on to state the results as contrasted with the hypotheses. First, the correlation coefficient between the attraction scores of the child and her mother was 0.47 (N=88) in the pretest and 0.34 (N=79) in the posttest. Both were significant at the .01 level. Thus hypothesis 1-a was confirmed.

TABLE 1 Correlation coefficients between scores of attitudinal index (I) and scores of mother child attraction (II)

	I	Assumed similarity	Real similarity	Accuracy	Satisfaction
II					
Pretest		.40*** (N=73)	a. .44*** (N=65)	.32** (N=67)	.00 (N=58)
			b. .26* (N=65)		
Posttest		.30** (N=71)	a. .22* (N=57)	.25* (N=55)	.40** (N=52)
			b. -.09 (N=60)		

\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

a: child's attraction to its mother

b: mother's attraction to her child

Next, please look at Table 1 on page 223 of the Abstract Guide. There were significant positive relationships between the attraction scores and attitudinal similarity measures, except the relationships between mother's attraction to the child and real similarity in the posttest and between mother's attraction and satisfaction in the pretest. Thus, except for hypothesis 1-e; 1-b, 1-c, and 1-d were supported by the data.

With respect to hypothesis 2, when comparisons were made between the experimental group and the control group, the analysis of the data revealed the following findings. To save space, only Table 2 is shown here on page 223 of the Abstract Guide. As is shown in Table 2, the feedback group increased accuracy to a statistically significant degree, but the control group did not. Likewise, real similarity increased to a statistically significant degree in the post-test as compared to the pretest for the children of the experimental group.

TABLE 2 Changes in accuracy of children's perceptions of their mothers' ratings of them

Group		Pretest	Posttest	Pre.—Post.	$\overline{S_{pre-post}}$	t	p
Exp. (N=20)	Mean	46.80	40.70	6.10	2.827	2.157	.025
	S. D.	17.61	18.84	12.04			
Cont. (N=22)	Mean	42.95	39.86	3.09	3.048	1.016	N. S.
	S. D.	14.79	14.97	14.29			

Though the feedback group increased assumed similarity significantly, the non-feedback group also attained similar results. Thus, with respect to assumed similarity, the effect of feedback was inconclusive. Finally, satisfaction on the part of the experimental mothers increased to a certain degree, but it did not reach a statistically significant level.

Furthermore, several subsidiary results which were not directly related to consistency principles were also obtained. The examination of the responses of the control group subjects on both tests

revealed the following :

First, the variability of four indices were less than one third of the random variable errors. Second, the increase of real similarity and accuracy was less conspicuous than that of the experimental subjects. Third, the children were more susceptible to varying their responses than were the mothers. Fourth, the variability of responses relating to intrapersonal cognitive structuring, such as assumed similarity, was larger than that relating to the interpersonal system such as real similarity and accuracy.

### **Discussion**

Before closing my presentation, I would like to discuss the findings and to consider the implications of the study.

All in all, the results indicated that there are certain significant relationships between mother-child attraction and the measures of attitudinal similarity of the child's behavior. This, in spite of the fact that there are considerable differences such as the roles and status in the family, experiences, cognitive maturity, and many other factors. Of course, I am not unaware that many recent studies indicate similarity and attraction are not necessarily uniformly distributed, as discussed by Jones, Bell and Aronson (1972) and many others (e. g., Berscheid & Walster, 1969 ; Byrne, 1969) based on rigorous experimentation. Yet, it seems clear that people who share the same interests, values, beliefs or attitudes are likely to be attracted to each other. Our findings did not contradict previous research ; that is, even in the dyads composed of the mother-child, such relations are in evidence.

Furthermore, the feedback affected changes in the children's behavior, particularly by providing a significant improvement in the accuracy of the children's perception of their mother's opinions. The effects of feedback were substantially similar to those dealing with student-teacher relations (Gage, Runkel & Chatterjee, 1963) and with teacher-principal relations (Daw & Gage, 1967). I admit that there are a multitude of specifications regarding the conditions in

which inconsistency arises as a result of feedback and that, in the current study, only a small sample has been examined. Yet our findings were generally consistent with the predictions based on cognitive consistency theory, particularly postulates on interpersonal balance.

There are several implications of the present study. First, certain aspects of consistency processes were revealed in the interpersonal system of the mother-child relationship using the children's behavior as the attitudinal object. Secondly, considering the rather widespread view of the lack of meaningful communication between mother and child, the results suggest the necessity for proper feedback of parent-child views, opinions, beliefs, and attitudes with a view toward mutual understanding and for the purpose of changing the child's behavior appropriately.

The results of this study indicate that many questions remain for subsequent research. In the first place, our instruments and tools were newly contrived for the present purposes and more validation and reliability check must be performed more systematically. With respect to measures of attitudinal similarity, other ways of weighting and computing discrepancy scores should also be examined. One question requiring investigation is whether the method of measuring, other than re-rating, would reveal the same results.

Next, in the present study I have dealt with the dyads found in a typical real life situation, unlike most consistency research which is mainly limited to an artificial laboratory situation.

Further, I did not make use of elaborate experimental manipulations in the condition of feedback, such as providing specific persuasive communication. Such procedures certainly had several credit sides, but at the same time, certain methodological shortcomings were unavoidable. For example, the normal day-to-day interaction between mother and child was unavoidable not only in the experimental group but also in the control group although specific feedback was not provided. This likely contaminated the results of the

experiment. Moreover, aspects such as method, frequency, and interval of providing feedback are factors which deserve further investigation.

Although our children subjects were restricted to female junior high school students, the developmental changes and stability as well as the developmental differences and sex differences should also be systematically examined.

I have dealt with the mother-child relationship as a unit, but further analysis should be devoted to making clear the idiosyncratic features of each of the pair as well as the pair itself, in much the same fashion as individual differences should be analyzed in the intrapersonal cognitive system.

### Conclusion

Finally, I would like to draw some very brief conclusions. The present study aimed at, first, investigating the relationship between attitudinal similarity between the mother and the child and their interpersonal attraction, and second, examining the effects of feedback on changing the child's attitudes and behavior. The mother's attraction to her child was positively related to the child's attraction to its mother, as predicted. Their interpersonal attraction was positively related to assumed similarity, real similarity, and accuracy. Finally, real similarity and accuracy increased significantly as a result of the feedback. The results indicate an applicability of postulates of cognitive consistency to the investigation of parent-child relations.

### References

- Abelson, R. P. *et al.* (Eds.) 1968 *Theories of cognitive consistency*. Chicago: Rand McNally.
- Aoki, K. 1966 Intimacy between parent and child observed in pattern of

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- contact. *Jap. J. educ. Psychol.*, 14, 88-102. \*
- Bell, R. Q. 1964 Structuring parent-child interaction situations for direct observation. *Child Developm.*, 35, 1009-1020.
- Berscheid, E. & Walster, E. H. 1969 *Interpersonal attraction*. Reading, Mass.: Addison-Wesley.
- Byrne, D. 1969 Attitudes and attraction. In L. Berkowitz (Ed.) *Advances in experimental social psychology*. Vol. 4. New York : Academic Press, pp. 35-89.
- Daw, R. W. & Gage, N. L. 1967 Effect of feedback from teachers to principals. *J. educ. Psychol.*, 58, 181-188.
- Edwards, A. L. 1957 *Techniques of attitude scale construction*. New York : Appleton-Century-Crofts.
- Furuhata, K. 1972 The practical methods for the understanding with children and pupils: From a point of view of family relations. (Presented to the symposium of Theory and Method of Educational Psychology II at the 13th Annual Convention of the Japanese Association of Educational Psychology, chaired by Prof. A. Tsuzuki, Nagoya University) *Annual Rep. Educ. Psychol. in Japan*. 11, 71-72. \*
- Furuhata, K. *et al.* 1969 Mother-child attitudes toward the child behavior and their interpersonal attraction: An application of equilibrium theory (I). *ICU educ. Studies*, 14, 61-121.\*
- Furuhata, K & Suzuki, Y. 1971a Mother-child attitudes toward the child's behavior and their interpersonal attraction (II). *ICU educ. Studies*, 15, 87-109.\*
- Furuhata, K & Suzuki, Y. 1971b Effects of feedback from the mother to her child on changing the child's behavior. *Jap. J. educ. Psychol.* 19, 152-162.\*
- Gage, N. L., Runkel, P. J. & Chatterjee, B. B. 1963 Changing teacher behavior through feedback from pupils: An application of equilibrium theory. In W. W. Charters & N. L. Gage (Eds.) *Readings in the social psychology of education*. Boston : Allyn & Bacon, pp. 173-181.
- Glass, D. C. 1968 Theories of consistency and the study of personality. In E. Borgatta & W. Lambert (Eds.) *Handbook of personality theory and research*. Chicago : Rand McNally, pp. 788-854.
- Jones, E. E., Bell, L. & Aronson, E. 1972 The reciprocation of attraction from similar and dissimilar others: A study in person perception and evaluation. In C. G. McClintock (Ed.) *Experimental social psychology*. New York : Holt, Rinehart & Winston, pp. 142-179.
- Newcomb, T. M. 1953 An approach to the study of communicative acts. *Psychol. Rev.*, 60, 393-404.
- Newcomb, T. M. 1959 Individual systems of orientation. In S. Koch (Ed.) *Psychology: A study of a science*. Study I. Conceptual and systematic. Vol. 3. Foundations of the persons and the social contexts. New York : McGraw-Hill, pp. 384-422.
- Newcomb, T. M. 1961 *The acquaintance process*. New York : Holt, Rinehart

& Winston.

Newcomb, T. M. 1968 interpersonal balance. In R. P. Abelson *et al.* (Eds.) *Theories of cognitive consistency*. Chicago: Rand McNally, pp. 28-51.

Newcomb, T. M., Turner, R. H. & Converse, P. E. 1965 *Social psychology: The study of human interaction*. New York: Holt, Rinehart & Winston.

(Furuhata, K. (Tr.) *Shakai Shinrigaku*. Tokyo: Iwanami Shoten, 1973.)

N. B.: \* written in Japanese with English Abstracts.

### Organization of the symposium

Short Symposium (SS-4)

“CONSISTENCY” AS A PROCESS AND PROBLEM IN PSYCHOLOGY

Conveners

Philip G. Zimbardo, Stanford University, USA

Taisuke Mizuhara, University of Tokyo, Japan

Chairmen

Philip G. Zimbardo, Stanford University, USA

Taisuke Mizuhara, University of Tokyo, Japan

Speakers

Daphne E. Bugental, University of California, USA

“Inconsistency between verbal and nonverbal components in parental communication patterns: Its interpretation and effects”

Kazutaka Furuhata, International Christian University, Japan

“Cognitive consistency related to attitudinal aspects of mother-child relations”

Marjorie P. Honzik, University of California, USA

“Consistency and change in intellectual functioning and personality characteristics during the life span”

Discussant

Irving L. Janis, Yale University, USA

### Some comments on the paper by Dr. Irving L. Janis, Discussant (Yale University)

Professor Zimbardo, in his opening remarks, called attention to some of the new problems in research on consistent behavior.....He alluded to some research on consistency in interpersonal relations and especially in dyadic relations. And, it seems to me, that this emphasis does represent a new trend in research on consistent behavior. I see that trend running through all three of the excellent

papers that we heard today. All of them clearly deal with relations between parent and child, and all of them, in one way or another, implicate the question of communication influence, especially from parent to child. ....

.....The second paper, by Dr. Furuhashi, is one of the pioneering studies bearing on interpersonal relations, interpersonal attraction and communication patterns between parent and child. His data indicate that interpersonal attractiveness between the parent and the child is affected by some of the same variables that affect interpersonal attractiveness between two adults. As most of you know, a great deal of research during the past ten years in experimental social psychology and in some field studies have been devoted to this type of problem, but usually the problem chosen for investigation involves studying interpersonal attraction and communication between people who are initially strangers. Only recently has work begun on similar kinds of problems involving interpersonal attraction within the family and among friends. I was particularly struck by Dr. Furuhashi's results on "feedback" and its effects on the attitudes of the mother and the child. It seems to me that many of the phenomena that he describes in his studies are similar to those that are beginning to emerge in some of the field experiments that I have been involved in recently in the relationships between the counselor and a client who comes in to the clinic seeking for help. I am going to speak more about that shortly. ....

.....You will notice that throughout the three papers most of the theoretical comments pertained to cognitive processes. .... Well, I think cognitive consistency models are certainly important; I think they do account for some of the variances. But I think when we are dealing especially with the problem of socialization--the problem of the influence that the parent has on the child--or the influence that any human being has on another--then we have to go beyond the purely cognitive model and include in our model motivational and emotional processes that affect cognitive appraisal. ....

### **Summary report of the symposium**

Dr. Zimbardo, in his opening remarks, established a general context or outline of the breadth and extent of the role of consistency in psychology. He indicated that an analysis of consistency may be made at various levels, but the basic assumptions about intra- and inter-individual consistencies often lead us to overextend the domain, despite evidence to the contrary. Alluding to his own research on the relationship between subjects playing the role of guards and those playing the role of prisoners, he posed some paradoxes and raised some problems about consistency concept.

Following the presentation of the three speakers (see individual papers and/or abstracts), Dr. Janis, discussant, indicated that research on consistency in interpersonal relations, and especially dyadic relations, represents a new trend in research on consistency behavior. He further pointed out that all three papers dealt with relations between parents and child, and they indicate the question of communication influence, especially from parent to child. He commented on each of the papers, including the unique features of each study.

Dr. Janis continued by discussing his own theoretical framework concerning basic processes in social influences, referring to his own field experiments in the counselor-client type relationship in clinical settings as they relate to the findings in the three papers. When we deal with the problem of socialization, we have to go beyond the purely cognitive model and include motivational and emotional processes that affect cognitive appraisal.

He concluded that the combination of an accepting, warm relationship which is established between parent and child, or between client and counselor, followed by clear-cut but very limited norms that are set by the communicator, seems to be at the heart of social communication processes in dyadic relations. Finally, he pointed out that his type model supplements the cognitive process type of models.