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CHAPTER 5

The Measurement of Social Norms

WILHELM F. KEMPF & REINHARD HILKE

5.1 The Model

Traditionally, the concept of social norm has been a very broad one. It comprises legal prescriptions as well as more implicit standards that are inferred from the actual behavior of the members in a society or group. Sociological research tends to consider the imposition of sanctions on divergent behavior as the principal characteristic of social norms (SACK, 1966; LAUTMANN, 1971), while social psychology tends to emphasize regularities in behavior (THIBAUT & KELLEY, 1963). Thus, social psychology regards norms not so much as prescriptions but as frames of reference (SHERIF, 1936; NEWCOMB, 1950) or standards (LOOMIS & BEEGLE, 1957; KOLLER & COUSE, 1965).

Despite this difference in outlooks, sociology and social psychology use largely the same methods in assessing social norms and usually define a norm operationally as the average behavior – or as the average judgment – of the members in a group. However, it turns out that this operationalization is inadequate as a basis for formalizing the concept of norm in either sociology or social psychology. If we agree with LAUTMANN (1971), "... that one should speak of a social norm only when some concrete behavior that deviates from this norm elicits sanctions of some sort" (LAUTMANN, 1971, p. 62; translated from German), then it is not important how the members of a group behave "on the average" but, rather, how much freedom in behavior the group grants its members before sanctions are inflicted upon them. If we consider norms as standards for the judgment of behavior (KOLLER & COUSE, 1965), the average judgment of the group members is likewise not an adequate operationalization: Means are purely descriptive statistics whose calculation in no way presupposes any group-specific regularity of behavior or behavioral judgments. Average behavior or judgments can also be determined when the group has not arrived at a norm at all.

Some studies have followed SHERIF (1935) in taking the convergence

of individual judgments as an indicator for the formation of a norm, but this method is applicable only when the formation of new norms is investigated, not in the study of existing norms. Moreover, BRANDT & KÖHLER (1971), have quite correctly noted "... that the relation between the concepts, 'norm' and 'conformity', is theoretically and empirically rather vague" (BRANDT & KÖHLER, 1971, p. 1711; translated from German). It seems therefore appropriate to seek evidence for the existence of a norm in group-specific regularities of behavior and to take these regularities as the basis for the identification and measurement of the norm.

We will adopt a relatively narrow concept of norm (following LOOMIS & BEEGLE, 1957) by considering norms as standards that prescribe what is socially acceptable and what is not. The norm that a group has developed with respect to a certain situation can be equated with the "acceptability" of this situation to the members of the group. However, since the group members usually do not judge uniformly but differ both in their actual judgments and in their underlying attitudes, the question is: What kind of group-specific regularity should judgments show, in order to justify the assumption of a norm and to make it possible to measure the group-specific acceptability of certain situations in a methodologically satisfactory way? To speak of group-specific norms on the one hand and of individual attitudes on the other hand – both of which should be recognizable in the same behavior – makes sense only when these two determinants of behavior can be measured separately and independently of each other (cf. SCHEIBLECHNER, 1971). As KEMPF (1974) has shown, this "specific objectivity" (RASCH, 1966) is a necessary prerequisite for establishing a clear-cut relationship between theoretical and empirical findings. If it is not met in the measurement of social norms, any assumption about the norms of a group can be maintained against the data. The concept of "social norm" then no longer meets the requirements of an empirical science. On the other hand, the postulate of specific objectivity leads necessarily to a very special type of measurement model whose applicability to the concept of social norm has yet to be investigated.

It is widely believed that norms differ between different societies and between different subgroups within a group or society. A person typically belongs simultaneously to several groups (although this is sometimes not possible, e.g., with political parties), which may have developed divergent norms, and he or she will then respond to the same situation in different ways, according to his or her reference group at a particular time (cf. SHOMER & CENTERS, 1970). A measurement model for

social norms must therefore be able to explain the relation between group norms and subgroup norms, and how the latter are differentiated from the former.

If we apply the Rasch model to the measurement of social norms, we arrive at a simple model in which subgroup-specific norms are not yet represented:

$$(5.1) \qquad p(+ \mid v\epsilon G; i\epsilon S) = \frac{\exp(\xi_{vS} + \epsilon_{iG})}{1 + \exp(\xi_{vS} + \epsilon_{iG})},$$

In this model, ϵ_{iG} is a common group norm that is valid for all members of group G. S is a class of situations towards which group member v has developed a homogeneous attitude ξ_{vS}, i. e., an attitude that remains invariant for all individual situations in S. $p\{+ \mid v\epsilon G; i\epsilon S\}$ stands for the probability that group member v finds situation i acceptable. The group norm ϵ_{iG} is not absolute. Since it is measured on a difference scale, it describes the acceptability of a situation only relative to other situations.

The simplest way to include subgroup-specific norms in the model would be to assume that group norms and subgroup norms refer to different classes of situations: the group develops norms with respect to certain classes of situations but leaves it up to its subgroups to form their own norms for certain other classes of situations. However, it is much more interesting for social psychology when group norms and subgroup norms refer to the same situations. The question is then how the group norms are reflected in the subgroup norms, and in which way subgroups may change the norms of the larger group or society they belong to.

A first hint in this direction comes from SHERIF (1936) who proposed that group norms regulate the attitudes of the group members. The differentiation of subgroup norms from group norms will therefore be described as the formation of subgroup-specific relations between the individual attitudes of the group members towards certain classes of situations. According to our assumptions, subgroups develop new "acceptability relations" between whole *classes* of situations, while the relations between individual situations *within* these classes are taken over from the group.

This mechanism of norm differentiation by subgroups has been suggested in similar form by BISHOP (1940). In accordance with our measurement model (5.1) it can be given the following mathematical formulation:

$$(5.2) \qquad p(+ \mid v \epsilon G_\alpha \subset G;\ i \epsilon S_\mu) = \frac{\exp(\xi_{v\mu} + \epsilon_{iG})}{1 + \exp(\xi_{v\mu} + \epsilon_{iG})}$$

$$= \frac{\exp(\xi_{v\alpha} + \eta_{\alpha\mu} + \epsilon_{iG})}{1 + \exp(\xi_{v\alpha} + \eta_{\alpha\mu} + \epsilon_{iG})}$$

$$= \frac{\exp(\xi_{v\alpha} + \epsilon_{i\alpha})}{1 + \exp(\xi_{v\alpha} + \epsilon_{i\alpha})}.$$

From (5.2) we see that one can factor the attitude $\xi_{v\mu}$ (of person v in subgroup G_α towards a class of situations, $S\mu$) into an individual "basic attitude" $\xi_{v\alpha}$ and a subgroup-specific "normative factor" $\eta_{\alpha\mu}$, so that

$$(5.3) \qquad \xi_{v\mu} = \xi_{v\alpha} + \eta_{\alpha\mu},$$

whereby a common norm ϵ_{iG} is assumed that is valid for all members of the larger group G. Alternatively, and depending on one's viewpoint, one may speak of a subgroup-specific norm $\epsilon_{i\alpha}$ that is an additive combination of the common norm ϵ_{iG} and the subgroup-specific "normative factor" $\eta_{\alpha\mu}$:

$$(5.4) \qquad \epsilon_{i\alpha} = \epsilon_{iG} + \eta_{\alpha\mu}.$$

From this "symmetry" between attitudes and norms, the relation between the concepts, "norm" and "conformity", becomes clear.

Before this relationship is discussed in more detail, some comments on the relation between our model (5.2) and the model discussed by Fischer in Chapter 4, Section 4.6 may be in order. Both models describe changes in attitudes or norms, and the formal equivalence of the equations (5.2) and (4.24) shows that Fischer, too, assumes at first that a common group norm exists (in the sense of the model 5.1–5.2) in the group investigated (c = 1, ..., N) with respect to a number of questions or situations (g = 1, ..., i) at the time l = 1. However, the influence of a campaign destroys this common group norm in Fischer's model unless the members of the group all have the same amount of contact (q_{cj}) with the media. Fischer's model may be extended by assuming that, after the campaign, the group members will again form stable norms under the influence of communication, whereby the group may or may not split up into subgroups, i.e., a "polarization" might take place. Only with this additional assumption is it possible to describe the starting point (l = 1) of a later campaign again in the form (4.24).

5.2 Norms and Conformity

A proper measure of the "judgment conformity" of a (sub)group G_α with respect to a situation i is the variance of judgments within the group, $\sigma^2_{\alpha i}$. From (5.2) we obtain:

$$(5.5) \qquad \sigma^2_{\alpha i} = \frac{1}{n_\alpha} \sum_{v \epsilon G_\alpha} \frac{\exp(\xi_{v\alpha} + \epsilon_{i\alpha})}{1 + \exp(\xi_{v\alpha} + \epsilon_{i\alpha})} \left(1 - \frac{1}{n_\alpha} \sum_{v \epsilon G_\alpha} \frac{\exp(\xi_{v\alpha} + \epsilon_{i\alpha})}{1 + \exp(\xi_{v\alpha} + \epsilon_{i\alpha})}\right)$$

where n_α is the number of individuals in subgroup G_α. This equation shows that the development of a subgroup-specific norm $\epsilon_{i\alpha}$ will not always lead to an increase in judgment conformity. The variance of judgments within a (sub)group is also significantly influenced by the distribution of the individual basic attitudes, $\xi_{v\alpha}$.

It therefore seems appropriate to supplement the concept of "judgment conformity" with a concept of "attitude conformity" which can be operationalized as the variance of the individual basic attitudes within the group, $\sigma^2_{\alpha\xi}$. However, perfect attitude conformity ($\sigma^2_{\alpha\xi} = 0$) is not a sufficient condition for perfect judgment conformity, ($\sigma^2_{\alpha i} = 0$), either. $\sigma^2_{\alpha i}$ is maximal when the average probability of a positive judgment

$$(5.6) \qquad \bar{p}_{vi} = \frac{1}{n_\alpha} \sum_{v \epsilon G_\alpha} \frac{\exp(\xi_{v\alpha} + \epsilon_{i\alpha})}{1 + \exp(\xi_{v\alpha} + \epsilon_{i\alpha})}$$

equals 0.5, and this may be the case even when there is perfect attitude conformity ($\sigma^2_{\alpha\xi} = 0$), i.e., when the "average basic attitude"

$$(5.7) \qquad \bar{\xi}_\alpha = \frac{1}{n_\alpha} \sum_{v \epsilon G_\alpha} \xi_{v\alpha}$$

is equal to $-\epsilon_{i\alpha}$.

Thus, judgment conformity cannot be explained either by formation of a group norm or by attitude conformity alone, but it depends on the distribution of the individuals' basic attitudes relative to the group norm. Given "neutral" basic attitudes with values around zero, the judgment conformity will be the stronger the more extreme the norm $\epsilon_{i\alpha}$ is that the group G_α has formed with respect to a certain situation. Situations that are either highly acceptable or highly unacceptable will be judged with the greatest conformity.

If the model (5.2) is also to be applied to subgroups of subgroups of a large group, we obtain for $G \supset G_\alpha \supset G_\beta \supset \ldots \supset G_\gamma$ and $i \epsilon S_\mu \subset S_\lambda \subset \ldots \subset S_\kappa \subset S_\iota$ the equations,

$$(5.8) \qquad p(+ \mid v \epsilon G_\gamma; i) = \frac{\exp(\xi_{v\mu} + \epsilon_{iG})}{1 + \exp(\xi_{v\mu} + \epsilon_{iG})} = \frac{\exp(\xi_{v\alpha} + \eta_{\alpha\mu} + \epsilon_{iG})}{1 + \exp(\xi_{v\alpha} + \eta_{\alpha\mu} + \epsilon_{iG})}$$

$$= \frac{\exp(\xi_{v\beta} + \eta_{\beta\lambda} + \eta_{\alpha\mu} + \epsilon_{iG})}{1 + \exp(\xi_{v\beta} + \eta_{\beta\lambda} + \eta_{\alpha\mu} + \epsilon_{iG})}$$

$$= \ldots\ldots\ldots\ldots\ldots$$

$$= \frac{\exp(\xi_{v\gamma} + \eta_{\gamma\kappa} + \ldots + \eta_{\beta\lambda} + \eta_{\alpha\mu} + \epsilon_{iG})}{1 + \exp(\xi_{v\gamma} + \eta_{\gamma\kappa} + \ldots + \eta_{\beta\lambda} + \eta_{\alpha\mu} + \epsilon_{iG})}.$$

Thus, the concept of an "invariant basic attitude" is always to be understood relative to a certain group. In heterogeneous social groups, common norms and invariant basic attitudes exist only within relatively narrow classes of situations. The more homogeneous a group is, the broader will be the classes of situations for which it has formed common norms and for which the basic attitudes of its members are invariant. For example, in (5.8), $\xi_{v\gamma}$ is valid for all situations $i \epsilon S_\iota$, while the "basic attitude" $\xi_{v\alpha}$ is valid only for situations $i \epsilon S_\lambda$.

Since the concept of "basic attitude" describes only the source of variation in judgments between individuals, the variation of "basic attitudes" – and thus the attitude conformity of a group – can be partially explained by the diversity of the norms of subgroups to which the group members simultaneously belong. Thereby, an "individual attitude component" may remain which cannot be attributed to norms of even more homogeneous subgroups. By assuming such "individual norms", we can also apply to them our basic conception that the norms of a person regulate his or her attitudes. Norms can then generally be defined as those regulating factors that determine the attitudes of a person. The homogeneity of judgments is completely determined by the norm structure of a group, i.e., group norms, subgroup norms, and individual norms. The extent of judgment conformity is thus a function of the norm structure and not an indicator of whether the group has formed its own norm or not.

5.3 Applications

The present model was first applied in an investigation of "negatively intended" (aggressive) acts in educational settings (KEMPF & HILKE, 1973). Since MERZ (1960) has shown that the evaluation of aggressive acts in family contexts depends significantly on the relation between the acting and the affected person, the test situations were restricted to father-son relationships.

5.3.1 The First Study

It was the goal of this investigation to find homogeneous classes of situations, i.e., classes of situations for which there exist common norms within a heterogeneous group of people, according to model (5.5). For this purpose, a questionnaire was constructed whose items consisted of stories whose form and content followed a strict schema: Because of certain events, the father acts "negatively" against the son, in order to attain a certain educational goal. For each story, the testees had to give three evaluations:

a) "Goal evaluation": In view of the events described, should the father have undertaken anything at all to reach the intended educational goal?
b) "Normative evaluation": Was the father's actual behavior correct, i.e., acceptable?
c) "Instrumental evaluation": Was the father's behavior likely to lead to the educational goal?

These three evaluative dimensions were analyzed separately. Thus, the concept of norm was applied not only to goal evaluation and normative evaluation, but also to instrumental evaluation whose dependence on social conventions is less evident. Intuitively, the instrumental evaluation of an act might seem to depend more on individual experiences than on social conventions. This is also reflected in most psychological models of action. TOLMAN (1959), for example, considered individual experiences as entities in the "means-end readiness", i.e., in the conception of means-end relationships, and he did not consider the normative dependence of individual experiences. In the sociological literature, however, this aspect has special importance. For example, the concept of "value orientation" (PARSON & SHILS, 1951) comprises not only standards that lead an actor to consider the consequences of his actions

but also standards for the validity of cognitive judgments as well as standards that determine the adequacy of certain objects for need satisfaction and, thus, their "instrumental" evaluation.

The present investigation was concerned with two homogeneous classes of situations and a relatively heterogeneous group of persons. The subjects, aged 18–65, were 317 male employees in a large electronic corporation and in municipal offices of the city of Erlangen. Almost all testees belonged to the middle and lower middle classes (in terms of the social structure of West Germany).

In the selection of the classes of situations and in the construction of items, the following considerations were important:

1) The existence of common norms for a heterogeneous group of persons is to be expected only within relatively narrow classes of situations. Therefore, it was necessary to find classes of situations that were as homogeneous as possible.
2) In order to eliminate noise variables, the form of the items was standardized.
3) In order to prevent the subjects from realizing that the items followed a standard schema, additional "filler items" were inserted which followed similar but less strict principles.

Altogether, there were two homogeneous classes of situations, with three "stories" in each. Items 1, 3, and 7 belonged to Class I, items 5, 9, and 11 to Class II, and the six even-numbered items were fillers[1].

Each item consisted of a three-page test booklet. On the first page, a conflict situation between father and son was described: The son has done, or intends to do, something that the father does not approve of. The subject had to decide whether the father should do anything in this situation *(goal evaluation)*. The relevant question always started: "Do you think the father should do anything to ...?" As in all other evaluations, the subject had only the choice between a "yes" and a "no" response.

What the father actually did was described on top of the second page. In all stories, this act was "negatively intended". According to the definition in HILKE & KEMPF (1976), an act is negatively intended when the acting person knows that his or her behavior will bring about an "unpleasant inner state" in another person. In the test item, this was expressed in the following phrase: "..., although he [the father] knows

[1] The complete questionnaire is reproduced in KEMPF & HILKE (1973).

that this is unpleasant for his son." The subject was now asked whether he accepted the father's behavior or not *(normative evaluation)*: "Do you think it was correct that the father ...?"

Instrumental evaluation was assessed independently of the normative evaluation ("Do you think that, by his action, the father will succeed in ...?") for, it is quite conceivable that the subject rejects certain acts although he is convinced of their effectiveness, while he approves of others that he may expect to be less successful.

Within each class of situations, certain contents and formulations were held constant, while other aspects were varied systematically between classes.

Class I: Here the son is a college student aged 22. Because of his studies, the son is financially dependent on his parents[2]. He plans to make a decision that would jeopardize or prevent the conclusion of his studies, but for this undertaking he needs the financial support of his father. The father thinks that the son should wait until after graduation. He therefore *prohibits* the realization of his son's plans and does not provide the necessary financial support.

Class II: Here the son is 16 years old and attends high school. The father supports his son's hobby by providing him with the necessary (financial) means and by *allowing* him explicitly to pursue his hobby *in his free time*. However, the son pursues his hobby so excessively that he has problems keeping up in school. The father *fears* that this situation might worsen and therefore prohibits the further pursuance of the hobby and withdraws his financial support for it.

Results

In order to prove the existence of common norms within homogeneous groups of items, the validity of the model structure (5.2) had to be tested separately for each of the item groups and for each of the evaluation dimensions. The test of the model followed ANDERSEN's (1973) method. The results are summarized in Tables 5.1–5.3. As can be seen, the model could be maintained for each of the evaluation dimensions and within each of the homogeneous classes of situations. Therefore, the assumption of common norms within classes of situations was justified for each of the three evaluation dimensions.

[2] Translator's note: Naturally, these test items were constructed to describe the typical situation in West Germany, where the study was conducted.

Table 5.1: Goal evaluation: Test of the model (5.2) within and between homogeneous groups of items

Item Group	$-2\ln(\lambda)$	df	p
I	0.37	2	>0.75
II	1.45	2	>0.25
I + II	6.24	5	>0.25

Table 5.2: Normative evaluation: Test of the model (5.2) within and between homogeneous groups of items

Item Group	$-2\ln(\lambda)$	df	p
I	3.47	2	>0.10
II	2.71	2	>0.25
I + II	35.68	5	<0.01

Table 5.3: Instrumental evaluation: Test of the model (5.2) within and between homogeneous groups of items

Item Group	$-2\ln(\lambda)$	df	p
I	1.43	2	>0.25
II	4.89	2	<0.10
I + II	27.33	5	<0.01

Subsequently, it was tested whether there were also common norms between the two classes of situations.

If there are common norms between classes of situations, then the model (5.2) should still hold when these classes are grouped together. The Results of ANDERSEN's (1973) test are summarized in the last rows of Tables 5.1–5.3. They show that the assumption of common norms between classes of situations had to be rejected with high statistical significance for normative and instrumental evaluation. However, it could be maintained for goal evaluation.

This result could be explained by the fact that the subjects made goal evaluations on the basis of only part of the information underlying normative and instrumental evaluations. By the time the latter were made, the subjects knew how the father actually acted; for the goal evaluation, on the other hand, only the son's behavior was relevant. The situations

were therefore much more specific with regard to normative and instrumental evaluation than with regard to goal evaluation.

In summary, these results support our model of norms, although only one aspect of the model was tested. It was shown that within homogeneous classes of situations there can be common norms even in heterogeneous groups of persons, and that the existence of these common norms is tied to the homogeneity of the classes of situations. On the other hand, the aspect of the model that says that homogeneous groups of persons can form common norms between classes could not be tested in the present design, since no homogeneous subgroups were defined in the group of persons investigated. This question was studied in the second study (KORTHALS-BEYERLEIN, HILKE, & KEMPF, 1975).

However, the data of the first investigation allowed a rough estimate of whether the assumptions about the differentiation of subgroup-specific norms are realistic.

If we consider that the combined class of situations, I + II, is still relatively homogeneous in content, one should expect from the model (4.1.3) that, for this combined class, common norms will be found in relatively large sociological groups which can be identified according to demographic characteristics. By reversing this argument, we may also group together persons whose basic attitudes with regard to Classes I and II are in a fixed relation $\xi_{v1} - \xi_{v2} = \eta$ to each other, and thereby we can form "artifical groups" with "synthetic norms" between the classes of situations. These groups can then be compared with each other and it can be assessed whether they differ systematically in demographic characteristics that are relevant to the formation of attitudes and norms with respect to negatively intended acts in father-son relations.

A necessary condition for such a comparison is that distinct groups of persons can be formed whose norms between the classes of situations do not overlap in their regions of variability. Table 5.4 shows all possible outcomes for the relation $\xi_{v1} - \xi_{v2} = \eta$ when three items from each of the classes are evaluated. A point estimation of the norm parameter η can be made only in those cases represented by the four center squares in Table 5.4. If a person has not evaluated any item from a class positively, only an upper bound can be estimated for the basic attitude of this person with regard to this class. If a person has evaluated all items positively, only a lower bound can be estimated. If $r_1 = r_2 = 0$ or $r_1 = r_2 = 3$, η cannot be estimated at all.

As can be seen in Table 5.4, groups of persons with nonoverlapping distributions of η can be obtained only after excluding some of the subjects, which considerably reduces the power of the statistical test when

Table 5.4: Estimation of a person's norm between Classes I and II from his or her (estimated) basic attitudes within classes. r_j is the number of positively evaluated items in class j. $\hat{\xi}^{(r)}$ and $\hat{\tilde{\xi}}^{(r)}$ are the estimated basic attitudes with respect to the situations of Class I and Class II, respectively, given that the subject has positively evaluated exactly r items from this class. $\hat{\eta}$ is the estimated norm between Classes I and II

r_{II} = \ r_I =	0	1	2	3
0		$\hat{\eta} > \hat{\xi}^{(1)} - \hat{\tilde{\xi}}^{(1)}$	$\hat{\eta} > \hat{\xi}^{(2)} - \hat{\tilde{\xi}}^{(1)}$	$\hat{\eta} > \hat{\xi}^{(2)} - \hat{\tilde{\xi}}^{(1)}$
1	$\hat{\eta} < \hat{\xi}^{(1)} - \hat{\tilde{\xi}}^{(1)}$	$\hat{\eta} = \hat{\xi}^{(1)} - \hat{\tilde{\xi}}^{(1)}$	$\hat{\eta} = \hat{\xi}^{(2)} - \hat{\tilde{\xi}}^{(1)}$	$\hat{\eta} > \hat{\xi}^{(2)} - \hat{\tilde{\xi}}^{(1)}$
2	$\hat{\eta} < \hat{\xi}^{(1)} - \hat{\tilde{\xi}}^{(2)}$	$\hat{\eta} = \hat{\xi}^{(1)} - \hat{\tilde{\xi}}^{(2)}$	$\hat{\eta} = \hat{\xi}^{(2)} - \hat{\tilde{\xi}}^{(2)}$	$\hat{\eta} > \hat{\xi}^{(2)} - \hat{\tilde{\xi}}^{(2)}$
3	$\hat{\eta} < \hat{\xi}^{(1)} - \hat{\tilde{\xi}}^{(2)}$	$\hat{\eta} < \hat{\xi}^{(1)} - \hat{\tilde{\xi}}^{(2)}$	$\hat{\eta} < \hat{\xi}^{(2)} - \hat{\tilde{\xi}}^{(2)}$	

the distributions of demographic variables are compared. Such comparisons were made for (a) normative evaluation and (b) instrumental evaluation. No comparison was necessary for goal evaluation, since here the assumption of common norms between situations could be maintained. The demographic variables that entered the comparisons were age and level of education of the subjects, as well as the question whether the subject himself was a father of one or more sons.

In normative evaluations, there were significant differences in the distributions of the two variables, "Education" and "Sons". There were no significant differences in the age distributions.

Among those subjects whose normative attitude towards the situations in Class II was more positive than towards the situations in Class I, there were more persons with higher education (60.7%) and more persons who had no sons themselves (71.0%) than among those subjects whose attitudes towards the two classes, I and II, showed little difference (the corresponding percentages for the latter were 38.1 and 51.5). To the former, a son's difficulties in school seemed to be so "shocking" that they saw a negatively intended action of the father justified. One should not overinterpret this result; however, it points to attitudes and prejudices that seem to be characteristic of the "middle class" in West Germany: As long as a child (son) is subject to the parents' right of educating him, he must satisfy the parents' (father's) expectations, since

they bear the "responsibility" for his "correct" education. Since such expectations about a son concern especially his future professional (and, hence, social) status, and since successful completion of school is a necessary prerequisite for the attainment of this goal, developments that could endanger it are suppressed from the beginning.

In the instrumental evaluations, there were no significant differences for any of the demographic variables. This result possibly derives from the fact that instrumental evaluations depend more on *individual* experiences, so that the formation of subgroup norms presupposes subgroups with intensive communication between members, and such subgroups cannot be recognized or reconstructed from the demographic variables analyzed here. This contention was one of the reasons why the second investigation (KORTHALS-BEYERLEIN et al., 1975) studied subgroups whose members were likely to be in intensive communication with each other, viz., married couples.

5.3.2 *The Second Study*

If the model assumption of subgroup-specific norms is to be tested empirically, it is necessary to find subgroups (e.g., married couples) that are likely to exhibit different norms. This is important because the model is "merely" a measurement model: It does not provide a definition of groups, nor does it indicate which groups have formed norms for which classes of situations. It is therefore important to have an independent theoretical conception that specifies the conditions under which such groups may be found.

Such a theoretical framework was derived from THIBAUT and KELLEY (1963). It permits some assumptions about the conditions that may lead to subgroup-specific norms in a two-person group: 1. The group must have high coherence in order for norms to be developed. As soon as one or both of the partners have no interest in maintaining their relationship, problems will lead not to a search for mutually acceptable rules, but to the dissolution of the group. 2. Norms must be rules that are accepted by both partners. When one partner is not willing to give up certain interests or goals that are in contradiction to such a rule, it cannot become a norm. 3. Norms are formed only with respect to situations that are relevant to the group. When norms serve to control or substitute for interpersonal influence, they will be formed only for those situations where the partners find it necessary to influence each other.

In order to operationalize these three postulates, a three-part question-

naire was developed, two copies of which were mailed together with an explanatory letter to 2000 married couples in the city of Nuremberg. Every couple had a ten-year old son, and their marriage had lasted at least ten years. Husband and wife were asked to fill out and return the questionnaires independently of each other. 446 couples responded. Of these, those who seemed to satisfy the Thibaut-Kelly criteria were selected for further study. These 294 couples were individually visited by an interviewer who made sure that husband and wife responded to the test stories independently of each other.

In many respects this sample was more heterogeneous than that in the first study. In the first study, the sample contained only males, while the present sample necessarily contained equal numbers of males and females. In the first study, the persons in the sample were mostly from the middle class, while, in the present sample, all classes and professional groups of the social structure of Nuremberg were represented. In one crucial point, however, the second sample was more homogeneous than the first one: all testees were parents of ten-year old sons, and all showed interest in educational problems.

Results

As in the first study, it was first tested whether common norms existed for the whole group within the classes of situations but not between them. Again, the validity of the model was tested separately for each evaluation dimension, and separately for the two groups of items as well as for both groups of items together. The results are summarized in Tables 5.5–5.7. As can be seen, the assumption of a common norm could be maintained for all forms of evaluation, and the assumption of a common norm between classes of situations could also be maintained for goal evaluation and normative evaluation. In the case of instrumental evaluation, there were no common "norms between" but only "norms within".

Table 5.5: Goal evaluation: Test of the model (5.2) within and between homogeneous groups of items

Item Group	$-2\ln(\lambda)$	df	p
I	2.27	2	>0.25
II	2.71	2	>0.25
I + II	2.11	5	>0.25

Table 5.6: Normative evaluation: Test of the model (5.2) within and between homogeneous groups of items

Item Group	$-2\ln(\lambda)$	df	p
I	2.89	2	>0.20
II	1.63	2	>0.25
I + II	2.43	5	>0.75

Table 5.7: Instrumental evaluation: Test of the model (5.2) within and between homogeneous groups of items

Item Group	$-2\ln(\lambda)$	df	p
I	2.02	2	>0.25
II	1.78	2	>0.25
I + II	16.58	5	<0.01

Thus, goal evaluation and instrumental evaluation yielded the same results as in the first study. For normative evaluation the results seem to differ: in the first study the assumption of common "norms between" had to be rejected. However, this contradiction can be resolved upon closer examination.

It will be recalled that, among those persons in the first study whose normative attitude towards the first class of situations ("college student") was uniformly more positive than towards the second class ("high-school student"), there were many more who had a son than in the other group. Thus, the hypothesis that emerged during the first study was confirmed by the second study: Persons who themselves have a son judge the educational situations more uniformly in terms of normative evaluation, i.e., they follow a common norm for the two classes of situations.

Thus, all parents tested – having a ten-year-old son – were a homogeneous subgroup as far as normative evaluation was concerned. Although they agreed about which educational behavior was correct in a certain situation, they nevertheless differed in their instrumental evaluations of whether this behavior would bring about the desired goal.

This result also agrees with the first study, which did not reveal any significant differences in the distributions of demographic variables for instrumental evaluation. This indicates that subgroup-specific norms of instrumental evaluation are formed only in subgroups whose members communicate intensively about the subject matter concerned, such as

husband and wife. The central hypothesis of the second study was that those couples who satisfy the three selection criteria should have specific norms of instrumental evaluation between the two classes of situations.

In order to test this hypothesis, consider the model equation for a total group consisting of m subgroups:

$$(5.9) \qquad p(+ \mid v\epsilon G_\alpha \subset G; i\epsilon S_\mu) = \frac{\exp(\xi_{v\mu} + \epsilon_{iG})}{1 + \exp(\xi_{v\mu} + \epsilon_{iG})} = \frac{\exp(\xi_{v\alpha} + \eta_{\alpha\mu} + \epsilon_{iG})}{1 + \exp(\xi_{v\alpha} + \eta_{\alpha\mu} + \epsilon_{iG})}.$$

The individual couples constitute the m subgroups G_α, and all couples together the total group G.

If the model (5.9) holds, then all members of a subgroup should have a constant group parameter $\eta_{\alpha\mu}$ which determines the relation between two classes of situations for this subgroup, so that situations from each class are judged in the same way by all members of the same subgroup. This assumption was tested by using likelihood-ratio tests.

For these tests, the sample was dichotomized according to four criteria:

1. The score for the norm between the classes of situations (couples who responded to Class I more positively than to Class II vs. those who did the reverse).
2. Husband's education as an index of the social status of the couple (primary & secondary school vs. higher).
3. Equality vs. inequality of husband's and wife's education, as an index of the relationship in social status between the two partners.
4. Wife's occupation (professional vs. household), since marriages in

Table 5.8: Instrumental evaluation: Test of the assumption of subgroup-specific norms

Test according to	$-2\ln(\lambda)$	df	p
Score	2.14	4	>0.50
Education	2.30	4	>0.50
Equality of education	1.06	4	~ 0.90
Wife's occupation	4.26	4	>0.25

which the wife is dedicated solely to the education of the children and to the household may differ in their norms about educational questions from marriages in which both partners are working. The results are summarized in Table 5.8.

As can be seen in Table 5.8, the model could be maintained in all four tests at $\alpha = 0.05$; in fact, the fit was very good.

This confirmed the hypothesis that the couples tested had formed specific norms for the instrumental evaluation of educational methods, so that husband and wife judged the situations from both classes according to a common norm.

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