POLICEWOMEN AS PATROL OFFICERS: A STUDY IN ROLE ADAPTATION

by

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Changes in values, laws and customs of people pervade life in modern America. When society's standards change appropriate modifications will follow in the culture's institutions - from families to government bureaucracies. Needless to say, organizational adaptation to change is accompanied by tension, conflict and resistance. The seriousness of the reaction varies with the threat posed to basic values or standards of the institution and the people who make it up.

Equality for women, a profound change, has been advocated in recent years. Laws now exist which challenge society's categories of "man's work" and "woman's work". In turn, the formerly well defined and unquestioned world of male-female relations has become a subject of attention.

An example of the implementation of social change within a structured organization exists in the New York City Police Department where legal requirements have influenced the experimental assignment of policewomen to patrol - previously a "male only" position.

The organizational structure, the policemen and the policewomen involved must all adapt to the substantial alterations in institutionalized relationships that such assignments imply. This is a study of that process.

THEORETICAL BACKGROUND

Group Process

Since the earliest days of social psychology, social groups have been conceived of as entities whose individual members come to behave in a coordinated fashion. In fact, the achievement of coordination results not only in the group's ability to act but also in the individual's conception of himself or herself (Cooley, 1962; Mead, 1934). From one perspective, this complex process of coordination depends upon what the symbolic interactionists call the "definition of the situation" (Thomas, 1931). Social units are seen as antecedent to the individual. Socialization consists of the individual's learning to take the perspective of the other (or group of others) in formulating and evaluating his or her behavior. Thus, he or she acquires a frame of reference based both on individual and group considerations. This facilitates consistent evaluations of the social environment ("definitions of the situation") prior to any actions (see, e.g., Blumer, in Manis and Meltzer, 1972 [a]; Gerth and Mills, in Manis and Meltzer, 1972; Mead, 1934; Meltzer, in Manis and Meltzer, 1972[a]).

To clarify this process of "defining the situation" let us examine a specific instance. A woman must decide whether or not to buy a new dress. Before buying or refusing to buy (actions) she must ask herself several questions: "Will my husband like it?", "What will my firends think of it?", "Is it appropriate to the occasion?", "Will the saleswoman give me a discount?", and so on. It can be seen from these questions that her decision will reflect both her own individual needs and social judgments she makes about the anticipated responses of others to her act. At least in part, responses of others give meaning to individual actions.

"Socialization" (no matter when in life it occurs) is the process of learning the definitions held by groups for the aspects of social life relevant to group functioning (Brim, 1966; Mead, 1934). In enduring social units, members must come to share definitions so that interaction will be predictable and the group may coordinate individuals' actions toward achieving its goal. Social roles are major vehicles for achieving this stability.

Katz and Kahn (1966) provide a definition of role behavior which includes most of the elements stressed by others:

> ...the recurring actions of an individual appropriately interrelated with the repetitive actions of others, so as to yield a predictable outcome. (p. 174)

Role, then, applies to an individual's relatively stable position in a social context; it specifies his or her relationships

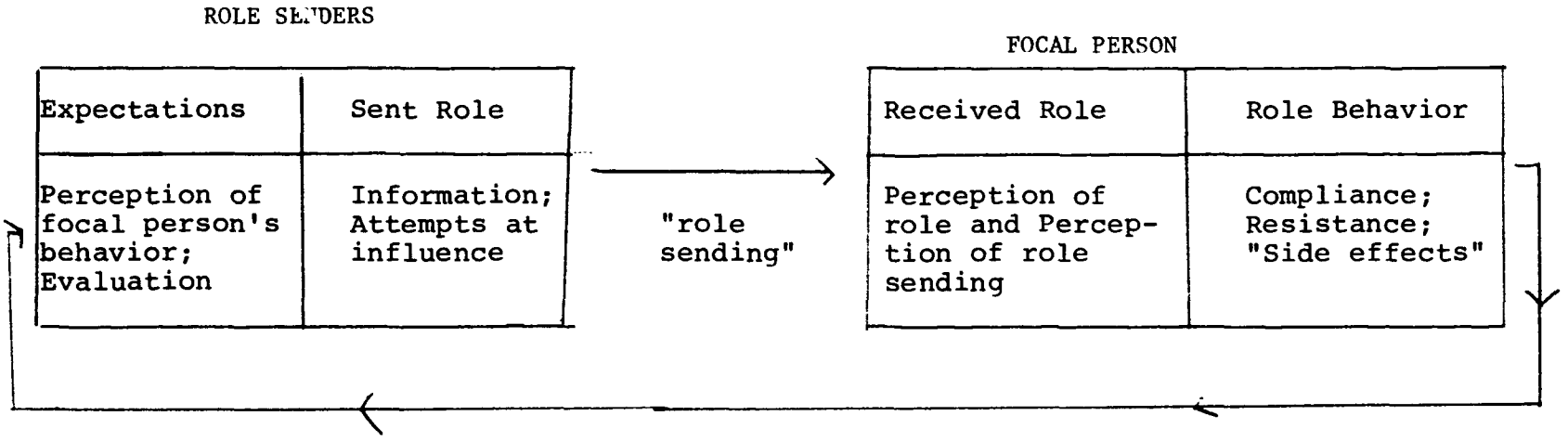
to others and thus functions to coordinate interaction among group members. Roles are both products and regulators of social interaction. (For fuller discussions of role, see, e.g., Katz and Kahn, 1966; Kahn, in Manis and Meltzer, 1972; Merton, 1957; Parsons and Shils, in Biddle and Thomas, 1966). Various definitions of role account for different types and ranges or activity. For the purposes of this study, "role" will be defined as the set of prescriptions held by members of a social unit for the overt behavior and style of performance expected of the occupant of a particular position.

From the point of view of the individual, then the learning of a role means learning the predictable responses that others in the group will make when certain behaviors are emitted or withheld. These expectations consist of relatively stable "educated guesses" about the rewards or punishments that will be delivered following an act. A newcomer learns them through interaction with others who already possess the group's expectations for the position at hand (Brim, 1966).

Clearly, not all group members will be equally important determinants of an individual's social behavior. For example, group structure, which influences the amount of interaction among individuals, will make some positions more important than others. (That the extent of contact should help to determine influence on role behavior is not surprising when one remembers that interpersonal coordination is the desired outcome.) People's individual qualities

(personal or organizational) will lead some to have greater influence than others (e.g., power, knowledge, charm). The extent to which a given individual's expectations are consistent with those of other important people will affect the influences of these expectations (Gross, Mason and McEachern, 1958; Jacobson, etal., 1951; Kahn, etal., 1964; Kinch, in Manis and Meltzer, 1972; Preiss and Ehrlich, 1966; Shibutani, in Manis and Meltzer, 1972). Merton (1957) has labeled those individuals within a social unit who influence the acquisition and maintenance of roles the "role set".

Katz and Kahn (1966) illustrate most of the concepts discussed above in a description of the "role episode". They explain that role behavior is affected by others in a role set both before and after it is performed (see Figure 1). To summarize: members of a role set ("role senders") influence the definition of the situation held by a role occupant (the "focal person") by communicating their expectations, anticipated sanctions, etc. The focal person collects these communications, interprets them, and combines them with other relevant data to produce a "definition of the situation" which acts as a basis for action ("role behavior"). The role senders "receive" the behavior and evaluate the extent to which the focal person has complied with their expectations. They then deliver sanctions or modify expectations and communicate this to the focal person. The process is cyclical and functions for all those within a group.



"feedback loop" - estimate by sender by the degree of compliance; preparation for another cycle

Figure 1. A model of the role episode (after Katz & Kahn, p. 182)

Briefly, then, stable group functioning results from socialization of individuals so that "each actor... does, and believes he should do what the other actors whom he confronts believe he should do (Parsons and Shils, 1951, 193)." One means for achieving this state is the learning of roles. Individuals come to feel the social obligation to perform in the expected fashion. They in turn act to define and enforce the roles of those with whom they interact. It is generally agreed that when group members fail to share the same expectations for one another, predictability of role behavior decreases, and with it, efficiency and satisfaction with the group (Blumer, in Manis and Meltzer, 1972 [b]; Hudson, 1970; Jacobson et al., 1951; Katz and Kahn, 1966; Kahn et al., 1964; Preiss and Ehrlich, 1966; Stryker, in Manis and Meltzer, 1972).

Problems in Group Process

Role Ambiguity. Role ambiguity occurs when there is insufficient information available to the role set (including the focal person) to enable a group to define a role consistently. In the present study it will be operationally defined as lack of consenus among the members of a role set on the proper definition of a given role. Role ambiguity leads to problems in interaction as described earlier and is characteristic of new or changing social units. When ambiguity exists, the group will attempt to evolve stable definitions to reduce uncertainty and increase efficiency. The first part of the present investigation is an attempt to verify for the case

in question the general proposition that ambiguity accompanies social change and to follow the groups processes of role definition to decrease the ambiguity.

Consequences of ambiguity That individuals seek some degree of predictability, consistency or certainty in their environments is a well documented tenet of individual psychology (see, e.g., Bartlett, 1967; Festinger, 1957; Kelly, 1955; Koffka, 1935; Sherif, 1966). Certainly it is not difficult to imagine that this principle applies to social environments as well as to physical or cognitive ones and that roles, norms, etc., arise as a group's response to an ambiguous environment.

On an individual level, ambiguity in sentences can cause subjects' response time to lengthen (Klein, 1961; McKay, 1966) and influence the coherence of the response (McKay, 1966). Sherif's study of norm formation (in Proshansky and Seidenberg, 1965) indicates that individuals seek to reduce ambiguity by establishment of group standards. His conclusions are supported by research which indicates that ambiguous stimuli increase the degree of conformity to group pressure (Asch, 1956; Ash, in Gutzkow, 1951; Coffin, 1941; Kelley and Lamb, 1957; Luchins, 1945). Kahn et al., report that experienced ambiguity at work correlates with increased emotional tension, reduced job satisfaction, loss of self confidence and feelings of futility. As was discussed earlier in another context, group correlates of individual

reactions to ambiguity are generally found to be reduced efficiency, lack of coordination, decreased satisfaction within the group and various forms of stress (Blumer, in Manis and Meltzer, 1972 [b]; Hudson, 1970; Kahn et al., 1964; Katz and Kahn, 1966; Jacobson, et a l., 1951; Preiss and Ehrlich, 1966; Stryker, in Manis and Meltzer, 1972).

Ambiguity is thus a problem state both for groups and for the individuals who constitute groups. When it exists, efforts to reduce it will be made at individual and collective levels. Effects of ambiguity are examined through the related concept of "role conflict".

Role Conflict. Role conflict occurs when pressures exist which direct a person toward incompatible behaviors (e.g., "Do X" - "Don't do X"; "Do X" - "Do Y"). Such pressures can arise from many sources and can contribute to more general role ambiguity. Because of its close conceptual relationship to ambiguity as defined here, this study will focus on one type of role conflict: "inter-sender conflict". Group members may fail to agree on a consistent definition for a role. If this occurs the different members of a role set will send conflicting expectations and will react to the role occupant's behavior inconsistently. Such situations may be called "inter-sender conflicts."

The present investigation takes role occupants as its starting points and concentrates on the effects of differences in role definition between them and the remainder of their role sets. "Inter-sender conflict" is operationally

defined as disagreement between a focal person and another role set member over what behavior is desirable in a specific job situation.

Focusing on role occupants in this way makes them central in the role definition process. Thus, theories and assumptions of individual psychology such as individuals' role conceptions, the position of role set members within a focal person's reference group hierarchy, individual misperceptions and the like become more explicitly relevant to understanding group processes (see, e.g., Cain, 1968; Deutsch, 1971; Morris, 1971).

Variables influencing the perception of the conflict.

The literature indicates that only rarely, if ever, will a role occupant perceive intersender conflicts the way an outside observer measures them. Various characteristics of groups, of individuals comprising role sets, and of situations are reportedly likely to affect how or when a focal person will experience conflict. Merton (1957), for example, lists six such factors:

1. The relative importance of the various statuses making up the role set,
2. Differences in power of those in the role set,
3. Insulation of role activities from observability by role set members,
4. Awareness by role set members of each others' (conflicting) demands,

5. Mutual social support among status occupants,
6. Abridging the role set (ease with which the role occupant can break off relations with the group).

Merton explains that a role set member with high status will have a greater impact that one with low status and one with power will be able to impose his or her will on the role occupant. Role behaviors that are not readily observable to other members of the group permit deviant behavior with little stress. When role set members are unaware that they are making conflicting demands of the focal person, each can "press his own case" with a clear conscience. Support from others in similar positions and relative ease in breaking off ties with the group can make inter-sender conflict less stressful for the role occupant. Gross, Mason and McEachern (1958) found that characteristics of the persons making the demands, specifically, the legitimacy of the person's expectations and the sanctions available to him or her for nonconformity, influenced experienced conflict. Other research supports these hypotheses (Kahn, et al., 1964: Kinch, in Manis and Meltzer, 1972; Preiss and Ehrlich, 1966; Videbeck and Bates, 1959.)

To help clarify the findings and hypotheses of previous research, the present study examines the influence that three types of factors have on the perception of specific inter-sender conflicts by focal persons:

1. Number of persons in disagreement with the focal person on a proper course of behavior. This factor is of interest because it was used by Jacobson, et al., as a method for defining the behavioral prescriptions which constitute a role. They included an item if a majority of a role set was perceived as advocating that course of action, although the authors cautioned that this was an exceedingly rough measure. The present study begins to investigate the nature of the relationship between the number of role set members in disagreement with a role occupant and her perceptions of conflict. It is expected that more perceived agreement with the focal person will be associated with less perceived conflict.

2. Source of conflict. It is expected that disagreements between a focal person and specific role set members are evaluated by the focal person in different ways. Two attributes mentioned frequently in the literature and of particular interest in the setting to be studied (see next section) are the power that the disagreeing party has over the focal person and the respect that the focal person has for his or her knowledge or ability. The present study examines the relationship between these two qualities of persons who are sources of inter-sender conflict and the focal person's perception of conflict. It is expected that when disagreement occurs between the focal person and role set members with high power and high knowledge, the conflict will be more troublesome for the focal person than should

the opposite be true.

3. Situational differences. Another factor expected to influence the focal person's perception of inter-sender conflict can be seen as a characteristic of the situation: inter-role conflict ("role strain"). It arises because people may simultaneously occupy two or more roles whose requirements differ. For the purposes of the present investigation, inter-role conflict will mean disagreement between requirements of personal (female) and professional (police officer) roles. That the working woman in this culture is apt to experience inter-role conflict is well documented (see, e.g., Epstein, 1970; Goode, 1960; Komarovsky, 1950). Epstein (1970) describes her situation as follows:

> ...women who today choose both marriage and a career face a nearly normless situation in that no formal structure or expectations exist to aid them in apportioning time and resources between their two major responsibilities. Ability to deal with the complex roles of wife, mother, working woman... is still largely a matter of individual adaptation, compromise, and personal arrangement, often characterized by strain. (p. 96-98)

In police work, even the unmarried woman faces contradictory pressures of the "masculinity"expected on the job and the "femininity" required of a woman. In situations where job cues suggest "masculine" and sex-role cues suggest "feminine" behavior, any policewoman is faced with a normlessness which she must resolve individually. Because of these additional pressures relating to sex role, the present study examines the influence that inter-role conflict has on the focal

person's resolution of inter-sender conflict.

Consequences of conflict. Two major studies report the effects of inter-sender conflict on the individual. Kahn et al., 1964, in a large-scale investigation, examined the relationship between "role conflict" and "ambiguity" (defined operationally as lack of consensus among members of a role set) and the focal person's "personal adjustment and effectiveness" (discomfort illness, self-actualization, etc.) In their intensive field study relevant role senders for 53 focal positions were interviewed concerning the activities, the style of role performance, and the general norms that the focal person was expected to live up to. They determined the composition of role sets two ways: structurally (immediate supervisors, direct subordinates, other superiors, persons adjacent in the work structure were always included) and through interviews (the focal person might mention someone significant, but without any formal connection).

Each focal person was interviewed to obtain a list of role activities and to determine his role senders. All role senders were interviewed. Finally, the focal person was given a personality inventory and interviewed again to determine his perceptions of role senders' behavior and his response to the measured stressed of his role. On the basis of data from the role senders' interviews, indices were constructed of pressure toward changes in behavior for each

focal person. Two major correlates of inter-sender conflict emerged: extent of emotional well-being, which improved when conflict was low; and social relations, which were better under conditions of low conflict. (The former was evidenced by measures of job-related tension, job satisfaction and confidence in the organization; the latter by measures of trust, respect, liking and frequency of communication). Moreover, they found that when objective conflict arose from role senders who were in the same department or who were direct supervisors, experienced conflict was greatest.

Preiss and Ehrlich (1966) studied the process of role acquisition among recruits to the state police in a midwestern area by examining the expectations of "significant others" and relating these expectations to the process of socialization. They explain that to achieve understanding of the process it is necessary to:

> locate these "others", define their sets of expectations, and specify the relationships among these sets in terms of a total role image before analyzing those temporally subsequent dimensions of role behavior. (p.2)

Yet the "role set" members studied were not determined on an individual basis. In one part of the study, self-administered questionnaires covering both formal role requirements and "expressive" or "affective" components of role behavior were distributed to members of the police department. Data were analyzed not by role set but by structural (formal) position within the organization (e.g., sergeant, captain). Results showed that among the groups of different rank that

were studied there were different constellations of role perceptions. This was interpreted by the investigators as a failure in role definition by the group:

> Despite the highly structured character of the [Central State Police] organization, there was a low order of consensus on these areas of the policeman role. (p.45)

On that basis they question the assumption that interacting groups evolve common definitions for roles.

Certainly one might suggest that the social units chosen for comparison in this case were far from meaningful ones. Kahn and his associates determined role sets for individual positions within the organizations and then looked for consensus within role sets; despite their expressed interest in interacting groups, Preiss and Ehrlich sought agreement among gross categories of people, many of whom interacted rarely, if at all. Thus their failure to find consensus is hardly surprising, since by definition, role sets were not actually observed.

Other studies indicate that inter-sender conflict can reduce a role occupant's effectiveness of job performance (Getzels and Guba, 1954), reduce his or her popularity within a group (Corwin, Taves and Haas, 1960) and can reduce ease of interaction among role set members (Jacobson, et al., 1951).

One problem in drawing conclusions from research on the effects of inter-sender conflict on the individual is the variety of methods employed and units studies. Although researchers may conceptualize the processes involved as con-

cerning individuals in interaction with significant others, each fails to fully operationalize this process. Kahn, et al., while coming perhaps closest, fail to include two important types of data in computing their indices of role conflict and ambiguity: the focal person's expectations for himself (as self-sender) and the expectations of others outside the immediate work situation (family, friends, public, etc.,). The remainder of the studies (except that of Corwin, et al., 1960) do not determine and directly compare responses within role sets. Scores are computed for groups of role sets rather than for specific ones. To give one example, Preiss and Ehrlich measure conflict about the role of "policeman" through comparing the role definitions of all policemen in the organization with those of all sergeants. The logic of their concepts, however, dictates that they compare Policeman X's role definition with that of his sergeant, ignoring those supervisors with whom he has no contact. It is within interacting groups that conflicts arise and have meaning. Certainly, any clear test of the relationship between conflict or ambiguity and any hypothesized effect must be one which examines the relevant unit - in this case the role set as theoretically defined.

Indicators of stress. It has been implicit in the previous discussions that persons and groups exposed to either role ambiguity or inter-sender conflict are likely to experience strain. Research on stress, therefore, can suggest additional effects that ambiguity or conflict may

have both on individuals and groups. In general, the stress literature suggests that individuals exhibit three types of adaptation (with the first two reflecting adjustment in interaction patterns and the last involving internal responses):

1. The source of the threat may be solved, "managed" or kept in check by various adaptive techniques such as compartmentalization of activities, changes in social participation patterns, changes in self-prescriptions, scheduling of conflicting demands, etc. (Dohrenwend, 1961; Gross, 1970; Howard and Scott, 1965; Linton, 1945; Miller, 1960).

2. The individual may withdraw from the conflict-producing situation (Gross, 1970; Linton, 1945; Miller, 1960).

3. The individual may develop physical or psychological symptoms or may learn to "live with" the stress either through adapting to increased levels of anxiety or through channeling excess tension in different ways (Bradburn, 1969; Bradburn and Caplovitz, 1965; Dohrenwend, 1961; Gross, 1970; Howard and Scott, 1965; Miller, 1960).

Brim (1966) presents a typology of group response to a strain, the presence of a deviant, which parallels the above:

1. Resocialization of the deviant
2. Alternation of group expectations to permit the "deviance"
3. Withdrawal of the deviant from the group or into a deviant subgroup
4. Continuation of the social system under conditions of stress (hostility, tension, mistrust)

Thus, one may, in parallel fashion, observe both individual and group responses to the stresses of role conflict.

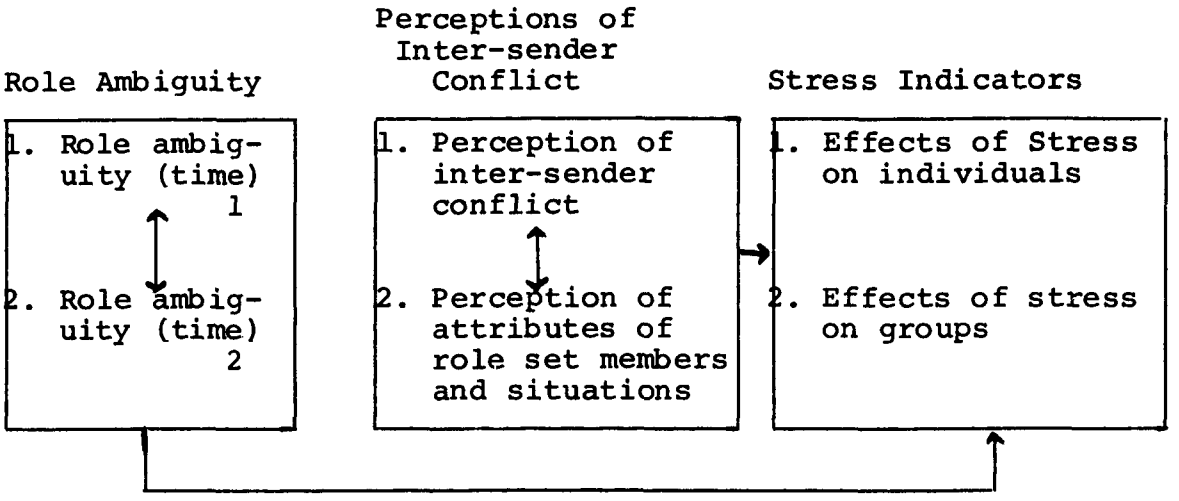
Summarizing the findings of studies of ambiguity and conflict as well as those concerning stress on the job, effects on the individual may be observed in increased tension levels, deteriorating health, decreased job satisfaction, reduced efficiency, lessened social participation and cognitive changes which reduce the strain. Similarly, effects on groups include changed cognitions of group members which act to reduce the strain, deteriorated interpersonal relations, decreased coordination and reduced efficiency of group performance. Unfortunately for the purpose of prediction, responses to stress are variable: individuals and groups are differentially susceptible to given types of stress, the effects of stress vary from person to person,and so on. The proposed investigation will include attempts to measure as many of the above effects as possible in order to observe the (probable) variety of responses by different persons and groups in the sample.

Design

To summarize, the design of the proposed investigation will consist of three parts. The first part will be an examination of role ambiguity within an organization during a period of social change. Of major interest will be the change in measured ambiguity over time. The second part will be a study of the perceptions of those persons occupying newly-created

(ambiguous) roles concerning specific conflict-producing situations. Here, the relationships between the focal person's perception of conflict and specific attributes of other role set members will be of concern. Finally, some of the expected indicators of ambiguity and conflict (stress) in social groups and in individuals will be examined. Figure 2 is a diagram of this design.

Figure 2. Research design



NOTE: Arrows indicate relationships of interest.

STATEMENT OF HYPOTHESES

This study tests three main hypothesis groupings. Within each grouping, specific predictions are made.

I. Examination of the changes in role ambiguity within an organization during a period of social change:

Hypothesis 1: Ambiguity of role definition occurs with the introduction of change in a social organization.

Hypothesis 2: Ambiguity of role definition resulting from social change will decrease with time.

II. Examination of the relationships between focal persons' perceptions of the inter-sender conflict, and both situational characteristics and the qualities of other role set members:

Hypothesis 3: The greater the number of persons in agreement with the focal person, the less will be her perception of conflict.

Hypothesis 4: The greater the knowledge and power of a role set member who disagrees with the focal person, the greater will be her perception of conflict.

Hypothesis 5: When behaviors involve inter-role conflict the perception of conflict will be greater than when they do not.

III. Examination of the relationships between indicators of stress and assessments of role ambiguity and inter-sender conflict:

Hypothesis 6: Extent of ambiguity will be positively related to measures

of tension and negatively related to measures of health, job satisfaction, efficiency, social participation, interpersonal relations, coordination and efficiency.

Hypothesis 7: Perception of inter-sender conflict will be related to stress indicators in the same manner as in Hypothesis 6.

THE SETTING

The "Policewomen as Patrol Officers" Experiment

Organizational context. In late June of 1972, the New York City Police Department experimentally assigned 14 policewomen to uniformed patrol - a position which is potentially the occupational equivalent of "Patrolman". (Since that time, in fact, the job title has been changed to "Police Officer" - male and female.) A patrol officer's responsibilities are those of the "cop on the beat". They may include any facet of law enforcement or order maintenance from policing school crossings to stopping fights, from administering first aid to catching bank robbers. Duties may be performed while on foot (either alone or with another officer) or from a radio car (typically with a partner). Although studies of the actual allocation of a patrol officer's time indicate that less than 10% is spent on law enforcement (see, e.g., Germann, 1969) it is generally assumed that patrol officers must be prepared at all times for that infrequent "critical incident."

The literature on the role of the patrol officer explains how the variety of responsibilities has led to an

unclear definition of the position. Observers of police behavior report that no guidelines exist for solving inevitable conflicts between the inconsistencies among laws, between laws and changing public standards, between private and public moralities (e.g., Black, 1968; Hudson, 1970; McNamara, 1967; Neiderhoffer, 1967; Reiss, 1971, Task Force Report, 1967; Wilson, 1968). About the only consistency in the definition of the role is that (male) police officers feel they must be strong, tough, or aggressive to be able to handle physical danger when it does occur (Neiderhoffer, 1967; Milton, 1972).

Individual discretion in each circumstance (within the context of formal regulations and a semi-military organizational structure) has marked the role definition process for the patrol officer in the past. However, additional factors must be considered if the role definition of policewomen is to be understood.

Police departments in large cities are bureaucracies. As such, they tend to resist changes (Etzioni, 1964; Weber, 1964). In the present case, therefore, one might not be surprised to find patterns of resistance to the mere presence of policewomen influencing the process of role definition by role sets.

Police work has traditionally been a "sex-typed occupation" (one in which the majority of members are of one sex). According to Epstein (1970) people in sex-typed occupations tend to transform the fact of sex-typing

into normative expectations that this is how it should be. Neiderhoffer (1967) describes the New York City Police as

> a subculture of males in the prime of life. The precinct has about it a "locker room"aura, pervaded by a strong erotic quality. (p. 119)

Thus, the introduction of females to patrol should have represented a substantial threat to cultural expectations and patterns of behavior. It would be highly improbable if the women's sex was overlooked by a subculture for whom maleness was an integral part of the definition of the patrol officer role.

Bureaucracies are organized as hierarchies. Thus, individuals may have different degrees of influence over one another. "Patrol officer", male or female, is the lowest position in the police department's formal hierarchy. As role sets begin defining the position of female patrol officer, one might expect that some members will have greater significance than others because of their positions within the larger organization.

The assignment of women to uniformed patrol in New York City was carried out within the context of another experiment: the "Neighborhood Police Team" (NPT). A group of policewomen was assigned to patrol on each of three NPTs in different areas (precincts) of the city.[1] An NPT

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[1]Four women were assigned to each of two teams; five women were assigned to the third.

is a sub-unit of a precinct which is made up of a team commander (a sergeant) and about 40 patrol officers. The NPT is responsible for policing a limited geographical area for which the team commander has 24-hour responsibility, making him an equivalent of a small town police chief. With this added responsibility, he is granted added authority over the allocation of his personnel. He may create specialists in various areas of police service; he may use uniformed patrol officers for plainclothes assignments; he may very the hours or days his personnel work, etc., The purpose of this flexibility is to enable him to tailor the service delivered to the changing needs of the neighborhood.

Such authority should be expected to make the three team commanders highly important figures in defining the roles of policewomen on their teams. Theirs was the formal responsibility of supervising the women's performance. Moreover, their responses to the reactions of the men previously on the team can greatly influence the course of the adaptation process.

Neighborhood Police Teams, however, function within precincts, and members of NPTs are also under the jurisdiction of patrol and stationhouse supervisors of the larger unit. Throughout the Neighborhood Police Team experiment there was often tension between desires of team commanders and those of patrol or desk officers - particularly when the former were absent (Bloch & Specht, Note 1.). However,

precinct supervisors not connected with the NPT could legitimately deliver sanctions to patrol officers within NPTs so their role definitions for policewomen patrol officers may also have significantly influenced emergent role definitions.

Historical factors. The process of defining the role of policewoman patrol officer may also have been affected by circumstances peculiar to the New York City Police Department and occurring prior to the actual assignment of women to Neighborhood Police Teams. Specifically, the women volunteered for patrol and were given eight weeks of retraining; team commanders were encouraged by the department hierarchy to use women in specialized capacities.

The policewomen in this experiment were members of the Police Department for between 4 and 13 years prior to patrol assignment. Selection interviews (Connolly, et al., Note 2) show that they were well socialized into sharing the prevailing beliefs of the men. Specifically, they thought that a patrol officer must be physically strong. They also felt that policewomen should be protected, indulged, catered-to and appreciated by policemen. The women did not feel that their new positions required any changes in their well-defined relationships with male officers since they did not see themselves as threats. All but one of the 15 women who started training at the Police Academy described themselves as "Not womens' Lib!". They felt that women have special capabilities in dealings with children, sick people and other women and

that these areas should receive special emphasis by women on patrol. Prior to training for this experiment, most felt that a policewoman's major contribution to Neighborhood Police Teams would be in specialized areas (plainclothes-decoy work, juvenile, etc.) None felt that women were suited to perform all the jobs of routine patrol.

After they had been selected, the volunteer policewomen were sent to an eight week training course at the Police Academy which consisted of physical training, "refresher" sessions on laws and police procedures, and sessions with consultants on areas considered of special interest or relevance for women (e.g., community relations, crisis intervention and conflict management, discussions of the social status of women in the society and in the police department). Although different instructors tended to have different information or opinions about the proper place for policewomen, there was substantial exposure to the notion that women had the ability to do general patrol. That this exposure had some impact on the womens' self-conceptions is indicated by the fact that in post-training interviews (Greenwald and Connolly, Note 3) 79 percent of the women had changed their expectations somewhat to indicate a willingness to "wait and see" whether or not they could handle all aspects of uniformed general patrol. (None had felt that success was a realistic possibility prior to training.) Most, then, left the Academy with the notion that they would be expected to <u>try</u> all the jobs of routine patrol, but that they would be performing

them with a "feminine touch"

Several days prior to the assignment of policewomen to NPT's, high ranking Police Department officials met separately with the policewomen and their future team commanders and precinct commanders to discuss department "guidelines" for the use of policewomen on patrol. As outlined at the time, three items had the status of rules: policewomen could not (1) have steady male partners for 8-hour radio car tours, (2) work late tours of duty (midnight - 8:00 A.M.), or (3) be assigned permanent clerical jobs. Furthermore, the guidelines suggested areas in which policewomen might be expected to make significant contributions: family crisis intervention, anti-crime patrol, community relations, interviewing females victims of crime, school liason work and foot patrol. During the meeting with supervisors, it was also proposed that policewomen might work well with "psychos" (mentally ill persons) because women have been known to exert a "calming influence."

The guidelines immediately assumed the status of hard and fast rules, although due to their ambiguity, their definition varied among the three teams. The team and precinct commanders in particular, whose work would be evaluated in part by how they utilized the policewomen under their supervision, took the suggestions quite literally - particularly in their verbalizations during interviews of how they planned to use the new resource.

(Actual assignments of policewomen over time tended to vary with the extent to which the guidelines proved practical or impractical for the team).

Ambiguity and Conflict in This Setting

Ambiguity. In this study ambiguity refers to a role set's failure to define consistently the requirements of a given role because of insufficient information. In the present case, one should find initial ambiguity of role definition for the several reasons discussed in the previous sections: existence of social change within a bureaucracy, inconsistent policies from within the hierarchy, violation of sub-cultural expectations.

Inter-sender conflict. Inter-sender conflict has been defined as disagreement between role-set members and focal persons about specific role behaviors. Role sets for all policewomen were initially assumed to include the following members:

1. Policewomen (as self-senders)
2. NPT Commanders
3. Other supervisors
4. Partner (if applicable)
5. NPT patrolmen (in general)
6. Other NPT policewomen (in general)
7. Family members and/or friends
8. The general public

(Needless to say, the composition of role sets for individual policewomen sometimes varied from this general model.) It was expected that different relationships between members of the role set and the policewomen, different abilities and

interests of members, and different types of behaviors would generate patterns of agreement and conflict among the members of each role set. These interactions should eventually have produced role definitions acceptable to the role sets which would have enabled the groups' goals to be achieved.

METHOD

The form of the present study derives from several traditions of inquiry and reflects the tension between the precision of experiments and the "found" qualities of naturalistic research. The study is nonexperimental because of the absence of a "treatment" - either experimentally introduced or occurring naturally. Rather, it is an observation of the relationships among adjustive processes in real-life groups, where "variables" are distributed naturally. The "variables" are conceptualized and measured by the researcher, but no control exists over their occurrence or distribution. Thus, the basic design of the study superficially resembles Campbell and Stanley's (1963) "Static Group Comparison" (a group experiencing X is compared with one which has not, for the purpose of establishing the effect of X). The resemblance, however, lies more with the type of confounding variables and rival hypotheses which exist (e.g., selection, mortality) than with the design and methods of analysis. As will be detailed in the sections to follow, this research embodies aspects of the "patched-up" experimental design (Campbell and Stanley, 1963), the case study, and the correlational study.

The study of process The presentation has, thus far, emphasized the "before-after" nature of the study for

the purposes of conceptual clarity. However, data are enriched throughout with observation of intervening group processes. In this regard, the research resembles a traditional case study: intensive, systematic, yet not in control of the occurrence of the events which it seeks to explain.

Methods for studying process may differ from those for studying independent-dependent variable relationships. Particularly in settings of complex interaction, research methods must accommodate the complexity of the events studied and take their forms from those events, rather than imposing them beforehand. Symbolic interactionists (see, e.g., Denzen, in Manis and Meltzer, 1972) favor life histories and participant observation to serve such purposes. Ethnomethodologists (e.g., Cicourel, 1964; Garfinkel, 1967; McHugh, 1968; Schutz, 1962, 1964) imply, too, that observation and analysis are primary research tools. Clinical psychology, a field similarly concerned with complex processes, stresses the unstructured interview and the case history as research methods.

If the findings of researches using such methods are to be credible, however, several complementary procedures must be employed. As many have discussed (e.g., Campbell and Stanley, 1963; Denzen, in Manis and Meltzer, 1972; Webb, et al., 1966), different research designs and techniques embody different shortcomings. Judicious combinations of methods will help compensate for deficiencies of each. As a result, the final picture will be more accurate than one

based on a single method used in isolation.

The study of naturally occurring events. Social psychology, taking the natural sciences as a model, has long used the scientific method as its research model. The complexity of naturally occurring processes was reduced and conceptual clarity increased. Sometimes, however, social life was reduced beyond its essential nature to increase experimental control.

Once the social scientist moves from the laboratory to the field, however, he or she confronts different methodological issues, primarily relating to a lack of control over the circumstances of the research (Campbell, 1969; Fairweather, 1968; Sarason, 1967). Whereas "laboratory" factors rend to affect the authenticity of the process observed, "natural" factors tend to influence the study's adequacy of design and the usefulness of the data.

The problems of research in natural settings may be clarified by mentioning several limitations imposed on the present investigation by the social system under study (the police department).

1. Sample size. The New York Police Department decided to experiment with policewomen on general patrol by assigning 14 experienced women to three Neighborhood Police Teams. Clearly the validity of generalizations is severely limited by the restricted size of this sample. However, economic and political considerations precluded any increases in number.

2. Comparison groups. Policewomen participants in the "experiment" were volunteers. Interest and cooperation were minimal for determining the extent to which volunteers differed from non-volunteers. Likewise, NPTs were chosen and women assigned to them for reasons other than their comparability. Thus, differences in adjustment or performance among precincts may be attributable to any of a multitude of possible differences in the subsamples themselves.

3. Cooperation. Subjects were not "willing" in the sense that they did not volunteer for the study, but rather for the job assignment. Thus, when they were asked to perform certain tasks (e.g. completing surveys, attending interviews) their extent of cooperation varied. When the organization did not require participation, data were incomplete; where it did require participation those cooperating willingly were not distinguishable from those doing so under threat of sanction.

4. Anonymity. Subjects felt that significant personal consequences could result from information they provided this research. Assurances to the contrary carried little weight and attempts to gain cooperation with less than complete anonymity met with failure. Thus, it was not possible to identify individuals in all cases where it would have been desirable.

5. Timing of data collection. The time most desirable for initially determining role sets' expectations for

"patrolwoman" was at or immediately prior to the inception of the program. However, several factors (vacations, other commitments, inefficiency) interfered, and whereas testing was accomplished at the appropriate time in some cases, it had to be postponed or otherwise modified in others. (Details will be presented in a later section.)

It has been a goal of the present investigation to compensate for these and other unavoidable deficiencies by "patching up" the research with the addition of similar information from other sources, with complementary measures, with any technique that seemed to help compensate for each new compromise.

Position of the researcher. The study was carried out in conjunction with an evaluation of the "Policewomen as Patrol Officers" experiment sponsored by the (national) Police Foundation and conducted by the Urban Institute (a non-profit research corporation) under contract with the New York City Police Department. The present investigator was employed as one of two research assistants for the Urban Institute on this project. This relationship may affect one's interpretation of the data in the following ways:

1. Legitimacy. To some extent, the Police Department endorsed the research and cooperated in its conduct (e.g., made records and personnnel available). Moreover, subjects felt that the research was a "job" for the investigators, and not "just a study". This status appeared a respectable one.

2. "Evaluation". This research was embedded within a program evaluation. Unfortunately, the label "evaluation" made some individuals feel that they were being personally scrutinized. Moreover, the researchers were often termed "evaluators", making them appear (inaccurately) to control sanctions within the system. At times this encouraged cooperation but at other times it may have distorted the information transmitted.

3. Partisanship. The "experiment" was sponsored by the Police Foundation as an attempt to encourage the use of women on patrol. Although strictly speaking, the evaluation was to learn about a previously underused resource, laws and politics may well have combined to make the program itself a "no fail" one. At the very least, many male officers perceived it as such. The researchers were female, and were therefore identified as advocates of the change rather than observers of the experiment. (The researchers' policy was to respond to questions of personal feelings by saying: "This is the first time its been tried. I plan to wait to see what happens. You may be right that women can't do the job. It may also turn out that those who say women can do it are right. It's just too early to tell.") Even such "neutrality" was seen as blatant partisanship by persons very opposed to the change. The major effect of such perceptions was on the type of information offered by persons of different positions: policewomen were more open and trusting than might have been expected; policemen hostile to the program may well have

been more evasive. (It is possible, however, that the latter were simply more argumentative, representing a different kind of information rather than a mere diminution.)

THE RESEARCH PROCEDURES AND FINDINGS

The study consists of three sets of hypotheses. Methods of data collection and analysis are similar within each grouping but differ substantially among the groups. Therefore, for purposes of expositional clarity, the research procedures and findings for each of the three groupings will be presented separately.

Hypothesis Group I: Examination of the changes in role ambiguity within an organization during a period of social change:

Hypothesis 1: Ambiguity of role definition occurs with the introduction of change in a social organization.

Hypothesis 2: Ambiguity of role definition resulting from social change will decrease with time.

Collection of the data. The first hypothesis grouping concerns definitions of the newly created position of policewoman patrol officers by members of various role sets. The intent was to follow changes within these groups as the experiment progressed, making comparisons between "before" and "after" measures of expectations for policewomen's performance. However, "before" data had to be gathered from role sets that were still unformed, since policewomen had not assigned to their new jobs and no interaction had taken place. For this assessment, therefore, a "standard"

role set was defined for each policewoman, consisting of persons occupying positions with explicit institutional relationships to her. Before the time of the second assessment of role definitions, policewomen were interviewed to determine which of the standard set of role senders were relevant. Appropriate modifications were made whenever necessary.

Role senders were asked their expectations for women's abilities at a series of specific job situations. In most cases, senders responded (either in writing or orally) on a five-point scale which expressed favorable to unfavorable expectations for women's performance. The form of data collection varied for different persons and groups since problems of cooperation, access, number and so forth varied. Methods used to contact and measure each of the six groups making up the "standard" role set follow.

1. Just before assignment to patrol and again after eight to nine months all 13 policewomen completed a "Role Definition Survey" modeled after that of Kahn et al. (1964). The survey included 48 specific instances of role behavior. Respondents indicated the extent to which they felt each item was part of the patrolwoman's role, how their personal behaviors and styles compared with the standard they had defined, and which items they felt that male officers' definitions of the role were likely to include. (Appendix A)

2. The three team commanders of the NPT's to which women were assigned were given an open-ended interview

during the first week of the program. They told of their plans for the use of policewomen on their teams and their expectations for performance. After seven months they were interviewed again using a modified form of the "Role Definition Survey" to structure the discussion. This instrument was used to determine in detail their definition of the role of policewomen on patrol. (Appendix B)

3. It was intended that immediately upon assignment of women to Neighborhood Police Teams, patrolmen on the teams with women would be given a survey whose form was a modified version of that completed by the women. However, the Urban Institute distributed its own attitude survey to these men during the early weeks of the policewomen on patrol experiment. Patrolmen are reluctant to complete surveys with care in any case; too many surveys in a short period was expected to cause hostility; there was a 2-% absence rate due to summer vacations. For these reasons, the department refused permission to distribute this study's "Role Definition Survey" at the time requested in the three precincts where women were assigned.

Therefore, at the outset of the experiment, the full 48-item "Role Definition Survey" (Appendix B) was administered to male officers (n=56) in neighborhoods where no policewomen had been assigned. These comparison neighborhoods were matched as closely as possible to the others on population characteristics, area, and number and type of crimes reported. The role definitions for policewomen held by patrolmen on teams

with women (n=63) at the outset of the study were instead ascertained using 17 items from the Urban Institute's "Patrol Survey" similar in nature to those on the "Role Definition Survey" (Appendix C). After eight to nine months, patrolmen on the women's NPTs completed the "Role Definition Survey" developed for this study (n=57) as well as a readministration of the Urban Institute's instrument (n=44).[1]

4. Policewomen reported significant contacts with other supervisory personnel in their precincts aside from team commanders. As a result, patrol and stationhouse supervisors were interviewed using the 48-item "Role Definition Survey" after women had been on patrol for eight to nine months. (It was not possible to contact members of this group at the outset of the experiment.) Two or three of each were randomly selected in each of the three precincts in which patrolwomen were located (n=9).

5. The reaction of citizens to policewomen's role behavior may have influenced them significantly. Cost and time factors prevented systematic longitudinal measures of public definitions of patrolwomen's roles. However, some notions of their expectations for policewomen's performance

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[1] Return rates for the four surveys were: Role Definition Survey to comparison teams (time 1) - 47%; Role Definition Survey to experimental teams (time 2) - 57%; Urban Institute Survey time 1 = 60%; Urban Institute Survey time 2 = 42%.

were gained through asking policewomen in personal and telephone interviews to describe public reactions to their work and through the Urban Institute's patrol observations, during which trained observers described citizens' responses to the policewomen's behavior and noted any reactions to an officer's sex.

6. Family members or friends with whom the policewomen discussed their jobs were also difficult to contact. One-third of the policewomen, claiming that they leave their jobs behind at the end of the day, refused even to supply the name of a family member or friend to be interviewed. A small number of those whose names were supplied were contacted either in person or by phone. Indications were that families and friends did not know anything specific about the job of patrolwomen. They did, however, provide general support of wife's or friend's career. As a result of these interviews it was decided to rely on policewomen's reports of family or friend's responses. Since first hand data were not obtained, this phase of the research should be considered as merely suggestive.

The model of the role set outlined in this study implies that comparisons among the broad range of role senders listed above should be made in assessing ambiguity. Contingencies of research in the natural setting, however, made the collection of consistent data over time for all groups impossible. Nonetheless, data from those groups most critical to an understanding of the processes involved are

available for complete analysis: policewomen, patrolmen and team commanders.

Preliminary analysis. Hypothesis 1 requires that comparisons be made among the original role definitions given by different role senders as compared with those of policewomen (focal persons). Hypothesis 2 requires that the amount of ambiguity within role sets at time 1 be compared with the amount at time 2. Since the form of data collection often varied among groups, attempts were made to establish the equivalence of different measures.

Questions common to all surveys were grouped into five subject categories (indices): situations involving "Danger", "Females and Juveniles", "Social Service", those of a "Routine" nature, and those suggesting the use of physical "Strength". (See Appendix D for list of items defining each index). The shorter survey from the Urban Institute's research did not include all the items of the 48-item "Role Definition Survey" prepared for this study. Specifically, there were no items from the "Strength" index on the Urban Institute's survey. Therefore, these data are lacking for patrolmen on teams with women at time 1.

Two major questions needed to be answered before hypothesis testing could proceed. First: Are the five indices meaningful groupings of role behaviors for all the sender groups? If not, such content areas should not be used to make comparisons among them. To verify the internal consistency of the indices, alpha coefficients (Cronbach,

1970; Nunnally, 1967) were computed for the five indices both for all subjects and for each subgroup (e.g., police-women at time 1, patrolmen at time 2, etc.) Results (Table 1) show that comparisons among all sender groups may only be made with the "Danger" index. As can be seen from the table, the "Female/Juvenile" and "Routine" indices are unreliable both for the female subgroups and for the males who responded to the Urban Institute's form of the survey. Comparisons will, therefore, only be made among groups for whom indices of interest are sufficiently reliable.

Table 1

Alpha Coefficients for Officer Groups Studied

	INDEX				
Group	Danger	Female/ Juveniles	Routine	Social Service	Strength[a]
Police-women time 1[b]	.72	.61	.33	.69	.65
Police-women time 2[b]	.52	.22	.23	.68	.63
Policemen time 1[b] (teams without women)	.89	.72	.69	.54	.86
Policemen time 2[b] (teams with women)	.90	.79	.79	.72	.86
Supervisors time 1[c]	.80	.76	.44	.78	.86
Policemen time 1[c] (teams with women)	.98	.35	.18	.12	---
Policemen time 2[c] (teams with women)	.68	.64	.37	.43	---

[a]Blanks indicate an absence of data for the groups.

[b]Measured using the 48-item "Role Definition Survey".

[c]Measured using 17 items from the Urban Institute's Survey.

Data from the Urban Institute's survey are the only direct information available for patrolmen on teams with women at the outset of the experiment. Thus, the second preliminary question must be: Is it possible to use responses to questions with slightly different format from the Urban Institute's survey as approximations of responses to questions on the "Role Definition Survey"?

It is clear from the alpha coefficients presented in Table 1 that only the "Danger" index from the Urban Institute's survey is sufficiently reliable to be considered in this context. Of prime interest is whether the variation in response attributable to the form of questions of similar content on the two instruments is greater than the variation in response due to the different samples (patrolmen on teams with women versus patrolmen on teams without women). Unfortunately, the data necessary for a direct comparison are unavailable. Table 2 presents the mean comparisons among patrolmen groups which come closest to those desired.

Table 2

Relationships among Patrolmen Groups' Scores for the "Danger" Index

Comparison	Subjects	Mean 1	Mean 2	t	p
Urban Institute Survey (time 1)	Patrolmen on teams with women	3.99	3.60	-1.06	n.s.
-vs-	-vs-				
Role Definition Survey (time 1)	Patrolmen on teams without women				
Urban Institute Survey (time 2)	Patrolmen on teams with women (both groups)	4.12	4.06	0.44	n.s.
-vs-					
Role Definition Survey (time 2)					

As can be seen from Table 2, there is no overwhelming evidence on which to base a choice of one or the other instrument-patrolmen group combination. Thus, when comparisons between the original role definitions of patrolmen and other role set members are made, data will be presented both for patrolmen on teams with women derived from the Urban Institute's survey and for patrolmen on teams without women derived from the "Role Definition Survey".

Hypothesis 1. As expected, the role definitions of policewomen, their team commanders, and their male co-workers differed substantially from one another when the experiment began. By and large, policewomen tended to expect that they would be very good at some jobs, would be adequate at many, and were unsure about others. In contrast, policemen felt that women were unfit for patrol under any circumstances. Team commanders had concrete plans and expectations, based in part on the Police Department's guidelines for the use of policewomen and in part on the needs of their own teams. One team commander expected women to help his male officers on jobs that would, in the opinion of the male officer, benefit from a "woman's touch". The second said he felt women were merely "extra manpower", but imposed regulations which made impossible the women's full participation in patrol activities. These regulations relegated women to "community relations" (publicity) positions. The third team commander planned to assign women, like men, to foot patrol either in uniform or in

plainclothes. Such patrol would generally be without a partner. This team commander, who had requested that women be assigned to his team, expected that females would be more creative than the average man on plainclothes details and would perform the bulk of patrol jobs satisfactorally. All team commanders doubted the capacity of policewomen to handle situations of possible physical danger.

Several analyses of the Role Definition Surveys (or, where appropriate, the Urban Institute's survey) provide statistical indications of the differences described, as predicted by Hypothesis 1:

1. Mean differences in role definition scores of policewomen and patrolmen. Table 3 shows significant differences in index scores at Time 1 between policewomen (as the focal persons of role sets) and the patrolmen groups.

Table 3

Difference in Role Definition Scores between Policewomen and Policemen as the Experiment Began

Index	Policewomen Mean	Policewomen S.D.	Policemen Mean	Policemen S.D.	P
Danger	1.54	.48	3.99[a]	.71	<.001
Danger	1.54	.48	3.60[b]	.80	<.001
Social Service	1.90	.34	1.79[b]	.55	n.s.
Strength	2.14	.36	3.30[b]	.64	<.001

[a]Score is for policemen on teams with women tested with the Urban Institutes Survey.

[b]Scores are for policemen on teams without women tested with the Role Definition Survey.

2. Alpha coefficients. Figures on alpha coefficients computed for the five indices were presented in Table 1 as explanation of the treatment of the data prior to hypothesis testing. However, these figures can also be seen as findings in their own right. They show that groupings of role behaviors on the "Role Definition Survey" that were meaningful for male sub-groups were not meaningful for females. Specifically, alpha coefficients computed for the five indices on the same survey for males of different ranks and at different times ranged from .54 to .90. However, only three of the five indices had alphas indicating reliability within the female groups. This suggests that, when given the same group of specific jobs to evaluate, men will expect women to perform as well or as badly on all jobs. In contrast, women's expectations will vary depending on the task. Thus, constructs may be different for officers of the two sexes.

3. Index intercorrelations. A sex difference in outlook is further suggested by the intercorrelations among the indices on which meaningful inter-sex comparisons can be made. (See Tables 4 and 5) All 30 intercorrelations among indices derived from the "Role Definition Survey" are statistically significant for males ($p < .001$) In contrast, six of the combinations available for females are not significantly intercorrelated. "Danger" and "Strength" are significantly intercorrelated for women at time 2 and "Social Service" intercorrelates significantly with "Strength" at time 1.

Table 4

Index Intercorrelations for Male Officers[a]

	INDEX				
Index	Danger	Females/ Juveniles	Social Service	Routine	Strength
Danger	1.00	.85	.80	.83	.93
Time 1		.66	.49	.59	.85
Time 2		.90	.85	.88	.95
Females/ Juveniles		1.00	.83	.79	.88
Time 1			.73	.48	.70
Time 2			.86	.85	.92
Social Service			1.00	.89	.88
Time 1				.51	.60
Time 2				.94	.92
Routine				1.00	.88
Time 1					.64
Time 2					.92
Strength					1.00

[a]Data do not include scores on indices derived from the Urban Institute's survey, since only one ("Danger") was sufficiently reliable for use. All intercorrelations for males are statistically significant ($p < .001$)

Table 5

Index Intercorrelations for Female Officers

	INDEX				
Index	Danger	Females/ Juveniles	Social Service	Routine	Strength
Danger	1.00	---	.06	---	.45
Time 1		---	.19	---	.41
Time 2		---	-.12	---	.58*
Social Service			1.00	---	.40*
Time 1				---	.79**
Time 2				---	.09
Strength					1.00

Note: Blanks indicate comparisons unavailable for female groups due to index unreliability.

* $p < .05$
** $p < .01$

The observed difference in the significance of intercorrelations may mean that, in fact, male officers do not have five constructs relating to policewomen's role behavior, but instead have only one: women as patrol officers. Their expectations for the quality of women's performance on specific items of role behavior are not distinguishable from one another. In contrast, there is greater variation in women's expectations for themselves. Many categories of behaviors for which evaluations of female performance are related in men's cognitive schemes are not so related for women. Concretely, males expect that women will be unable to do any aspect of patrol work, while women predict differential success depending on the nature of the task.

The hypothesis of one construct for males is confirmed by factor analysis. Both at the outset of the study and again after nine months, over 70 percent of the variance in patrolmen's responses to the "Role Definition Survey" can be accounted for by a general factor. The sample of women was not large enough for similar analysis, but the pattern of intercorrelations does not suggest that the same degree of variability can be accounted for by the first factor.

Hypothesis 2. Contrary to predictions, role definitions of policewomen, team commanders and patrolmen were substantially the same at times 1 and 2, and consensus within role sets was not increased significantly over the period studied:

1. Changes in policewomen over time. There were no significant changes in role definition index scores for policewomen over the period sampled. (See Table 6)

Table 6

Changes in Policewomen's Mean Role Definition Scores Over Time

	Time 1		Time 2		
Index	Mean	S.D.	Mean	S.D.	P
Danger	1.54	.48	1.53	.32	n.s.
Social Service	1.90	.34	2.03	.40	n.s.
Strength	2.13	.36	2.00	.28	n.s.

2. Changes in patrolmen's role definitions over time. The only available indicator for patrolmen on experimental NPTs at both times is "Danger". There was no significant difference in the patrolmen's mean score for this index at time 1 (3.99) and at time 2 (4.12). Both measurements were from the Urban Institute's survey. There was also no significant difference between the mean for "Danger" at time 1 as measured by the Urban Institute's survey and that at time 2 as assessed by the Role Definition Survey (4.06).

3. Changes in team commanders' role definitions over time. The role definitions of team commanders at time 2

were not substantially different from those proposed at time 1. Again, team commanders stressed their expectations for female incompetence at jobs suggesting strength or where physical danger might be involved. Likewise, they credited women with special abilities at jobs involving social service. One of the three team commanders came to estimate women's performance substantially less favorably over the period. He had originally requested that policewomen be assigned to his team and in the end, assisted them in transferring elsewhere.

4. Intergroup comparisons. Table 7 presents a comparison of the mean role definition scores of the significant categories of role set members at time 2. Significant differences exist for behavioral categories "Danger" and "Strength", while there is relative agreement on jobs of a "Social Service" nature.

Table 7

Difference in Mean Role Definition Scores for Role Set Members at Time 2

	INDEX					
	Danger		Social Service		Strength	
Position	Mean	S.D.	Mean	S.D.	Mean	S.D.
Police-women	1.53	.32	2.03	.40	2.00	.28
Patrolmen[a]	4.06	.79	2.42	.75	3.71	.61
Patrolmen[b]	4.12	.51	--	--	--	--
Team Commanders	3.44	.19	2.11	.83	3.38	.33
Other Supervisors	3.70	.58	2.30	.65	3.35	.45
F	45.07*		1.38		33.79*	

Note: Blanks indicate that data were unavailable for analysis

[a]Data are from the Role Definition Survey.

[b]Data are from the Urban Institute's Survey.

*$p < .01$

Post hoc (Sheffé) analysis of the significant differences on the "Danger" and "Strength" indices (Hays, 1973) show that they are based significantly ($p. < .01$) on the officers' sex. Scores for females are significantly more favorable than scores for males taken as a group.

There was no difference among groups on the "Social Service" index at time 2. Since comparable data were not available for all groups at time 1, it is not clear whether this observed agreement is a change toward consensus or a continuation of the situation as it was originally. The only conclusion possible at this time from examination of available indices is that there was no move toward greater agreement on expectations for women's performance in situations of physical danger.

Hypothesis Group II: Examination of the relationships between focal persons' perceptions of inter-sender conflict and both situational characteristics and the qualities of other role set members:

Hypothesis 3: The greater the number of persons in agreement with the focal person, the less will be her perception of conflict.

Hypothesis 4: The greater the knowledge and power of a role set member who disagrees with the focal person, the greater will be her perception of conflict.

Hypothesis 5: When behaviors involve inter-role conflict the perception of conflict will be greater than when they do not.

Collection of the data. Personal interviews were held with each of the 13 policewomen assigned to patrol

after they had had the new assignment for nine to ten months. Interviews included questions pertaining to 19 situations (Appendix E) which embodied different combinations of the factors of concern in Hypotheses 3, 4 and 5: extent of consensus, knowledge and power of disagreeing parties, and inter-role conflict. The interview was modeled after those of Gross, et al. (1958).

For each situation the policewoman was asked which of three response alternatives she would choose. For example:

> You (and your male partner) are dispatched to a robbery in progress at a grocery store, and yours is the first car on the scene. You pull up outside the store (Your partner is the driver).
>
> A. Go in immediately
> B. Wait for your partner before going in.
> C. Wait for another car to arrive before going in.

After each choice the policewoman was presented with a standard list of role set members and asked to indicate which behavior each would expect of her. If the subject's choice differed from any of the others' she was asked to evaluate the ability of the person(s) to deliver sanctions for non-compliance (the role set member's "power") and to describe the person or group's familiarity with the circumstances of her job ("knowledge"). Each policewoman described how greatly a reported conflict between herself and the other members of her role set bothered her. This response, as well as the "power" and "knowledge" attributed to disagreeing role set members, were rated by the interviewer on a five-point scale. For analysis, scores of 1 or 2 ("not

at all" and "very little") were coded "no" and other ratings were coded "yes".

Hypothesis 3 A chi-square test performed on the data from the conflict perception interview, as well as the magnitude of the Gamma coefficient (Mueller, et al., 1970) supports the hypothesis that a greater number of people or positions perceived as agreeing with a policewoman when her behavior conflicts with the expectations of other role set members will make a perceived conflict less troublesome for her (See Table 8). However, it is also clear that having many people in agreement with one does not preclude conflict. Nor does being relatively alone make experienced conflict inevitable. Further analyses such as those in the next sections indicate that the quality of the conflict interacts with the pattern of agreement within the role set to affect the experience of conflict.

Table 8

Relationship Between the Number of Role Set Members Agreeing with the Focal Person and whether or not a conflict is viewed by her as a Problem

Is the Conflict seen as a Problem?	Number in Agreement with the Focal Person	
	0 - 3	4 - 10
Yes	12	11
No	4	17

$X^2 = 3.872$ ($p < .05$)
Gamma = .65

Note. In some cases subjects responded that a conflict with one member bothered them but that a conflict on the same issue with another did not. These responses (n=8) were combined with the "Yes" group, since their number did not permit a separate analysis.

Hypothesis 4. A Chi-square analysis and the size of the Gamma coefficient support the predictions of Hypothesis 4. If a party who disagrees with a focal person over an item of role behavior is judged to be familiar with the circumstances of the job or to control sanctions, the conflict presents a more serious problem for her than when such is not the case. Moreover, the effect of a combination of knowledge and power is substantially greater than that of either attribute alone. Data are presented in Tables 9, 10 and 11.

It should be noted here that the relationships observed may be somewhat inflated since conflicts were combined across persons. Tables are based on 167 reported conflicts, which represents a report of between zero and ten conflicts per incident per woman. Needless to say, therefore, not all observations are independent of one another.

Table 9

Relationship between Disagreeing Role Set Member's Knowledge and Whether or Not the Conflict is Viewed by the Focal Person as a Problem

Is the Conflict seen as a problem?	Is the Disagreeing Person Credited with Knowledge?	
	Yes	No
Yes	67	11
No	27	62

$X^2 = 49.92$ $(p < .01)$
Gamma = .87

Table 10

Relationship between Disagreeing Role Set Member's Power and Whether or Not the Conflict is Viewed by the Focal Person as a Problem

Is the Conflict Seen as a Problem?	Is the Disagreeing Person Credited with Power?	
	Yes	No
Yes	51	27
No	21	68
$x^2 = 27.92$ Gamma = .72	($p < .01$)	

Table 11

Relationship between Disagreeing Role Set Member's Combination of Knowledge and Power and Whether or Not the Conflict is Viewed by the Focal Person as a Problem

Is the Conflict Seen as a Problem?	Combination of Knowledge and Power Accorded the Disagreeing Person			
	Knowledge & Power	Knowledge Only	Power Only	Neither
Yes	41	26	10	1
No	14	13	7	55
$x^2 = 69.77$ Gamma = .77	($p < .01$)			

Hypothesis 5. There were two interview items to which over half the women reported perceiving inter-sender conflict. The first concerned behavior at a race riot, where women favored full participation and described others as urging passivity or avoidance. In the second item, a policewoman is called to the stationhouse to care for a lost child brought in by a patrolman. The women generally felt that supervision of the child was the male officer's job, but felt that others in their role sets would think it was work best done by women and should therefore be performed willingly.

Since inter-role conflict depends primarily on the salience of the different roles at a given time, analysis followed lines relating to the women's usual work circumstances. Related research (Greenwald and Connolly, Note 4) reported that female officers often chose to work as partners with other women to avoid pressures by patrolmen that they play the woman's role. It is implied that the presence of a male officer increases a woman's awareness of being female, relative to being a police officer. Specialization occurs along the lines of traditional sex roles. Patrol observations and personal interviews confirm that female officers are less assertive when they have male partners than when their patrol partners are also women.

Data from the conflict perception interview were

examined in this regard. The sex role relatedness of the alternatives provided the policewomen for each patrol situation in the interview were rated by two independent judges. They categorized each alternative as a "male" response (i.e., the response an active male officer would be most likely to choose), a "female" response (traditional female role behavior such as supportiveness, non-assertiveness, or nurturance), or neither. Interjudge agreement was significantly reliable (Kappa = .42, $p < .01$; Fleiss, 1973). Differences were discussed and resolved. A woman was given one point for each "male" and "female" response she chose. Her "female" score was divided by her "male" score to yield a single ratio. Ratios for women in work circumstances characterized by different degrees of inter-role conflict were compared using t-tests.

The policewomen in the experiment were generally allowed to choose whether they would work primarily with male or female partners. Eight women had regular female partners; five usually worked with men. There was a significant difference ($t[11] = 2.47$, $p < .05$) in the mean ratio of "female" to "male" choices on the interview items between the two groups of women. Those who worked primarily with female partners made significantly more "male" behavior choices (mean ratio = .92) than did the women who worked most often with patrolmen (mean ratio = 1.83).

Another hypothesis may cover these data as adequately as that of the influence that a male officer's sex has on a

female officer's enactment of her role. Women's greater passivity, supportiveness, etc., when working with men may be related to male officers' greater experience on patrol. The women who work with them may defer on grounds of presumed competence rather than sex roles. This explanation would lead to the same difference in ratios as those noted above: female officers who worked primarily in male company would acquire the habit of deferring to more experienced partners; females working with other women of equal experience would acquire the habit of sharing workloads more evenly.

Hypothesis Group III Examination of the relationship between indicators of stress and assessments of role ambiguity and inter-sender conflict:

Hypothesis 6: Extent of ambiguity will be positively related to measures of tension and negatively related to measures of health, job satisfaction, efficiency, social participation, interpersonal relations, coordination and efficiency.

Hypothesis 7: Perception of inter-sender conflict will be related to stress indicators in the same manner as in Hypothesis 6.

Collection of the data. Records were kept or consulted concerning policewomen's and NPTs' progress throughout the period sampled. Contact was maintained with the women through periodic telephone interview, observation at monthly meetings of the policewomen held at the Police Academy ("debriefing sessions") and through visits to the precincts for

patrol observation. Team commanders were formally interviewed at least three times during the experiment; they were encountered at precincts more often. The three team commanders met as a group toward the end of the experiment to provide the department and the Urban Institute evaluation staff with a "summary discussion" of the program. This meeting was attended by the present investigator.

Specifically, data were gathered on the following (sources of information are given in parentheses):

1. Transfers by policewomen (Police Department records),
2. Absences by policewomen: (a) number of sick days taken, (b) number of sick leaves taken[1], (c) number of excusals[2] (Police Department records),
3. Job satisfaction (interviews),
4. Changes in own and perception of others' role definitions (Role Definition Survey),
5. Interpersonal conflict (interviews with policewomen, debriefings, interviews with supervisors),
6. Performance (supervisor ratings, level of activity from Police Department records).

Hypothesis 6. A summary measure of ambiguity was created and its relationships with the above indicators was assessed using the Median test, with Fisher's exact probability test for small samples (Siegel, 1956). Ambiguity within role sets was described using each policewomen as the focal point. A role set's score was equal to the percent of role set members with role definition scores that differed

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[1] Units of sick days taken in succession.

[2] E.g., vacation time, emergency leaves, etc.

by more than one point in either direction from the policewoman's on three indices. In computing this summary statistic only time 2 data were used because of their relative completeness and their comparability across groups. In addition, the composition of role sets was assumed to consist of a standard group so that rankings among the women would be meaningful.

No statistically significant relationships were found between the summary measure of ambiguity and any of the following:

- transfer at the end of the experiment by policewomen,
- number of sick days taken by policewomen,
- number of sick leaves taken by policewomen,
- number of excusals taken by policewomen,
- amount of change in policewomen's role definition,
- amount of change in policewomen's perception of the role definitions of patrolmen,
- amount of change in the relationship between own and perceived patrolmen's role definitions,
- reports of interpersonal conflict by supervisors,
- reports of interpersonal conflict by policewomen,
- supervisors' satisfaction with policewomen's performance,
- arrest and summons rate of policewomen,
- rate of response to calls for service by policewomen.

Hypothesis 7. Inter-sender conflict was also summarized with the policewoman as the focal point. From the perception of conflict interview, two scores were created for each policewoman. The first was the total number of situations in which inter-sender conflict was reported, whether or not the policewoman considered the conflicts to be problems. The second measure was the number of situations in which conflict with any role set member was reported as being a problem. No statistically significant relationships were found between either summary measure of conflict and any indicator listed in the previous section, again using the Median test, with Fisher's exact probability test for small samples.

FURTHER ANALYSIS AND DISCUSSION

Hypothesis Group I

It is clear that ambiguity as defined here existed initially in the 13 role sets under study. The major question remaining is why no decrease in ambiguity was found after nine months' time. Several explanations seem credible:

1. Length of time observed. It was assumed that, given the fundamental nature of the change introduced, the work groups would recognize and adapt to it in a relatively short time. This judgment may have been incorrect. It is still possible, therefore, that predicted accommodations would have been measured had a longer time interval been studied.

2. Nature of the groups. The paradigm of interaction leading to ambiguity reduction was based on past research with work groups. Role sets in such groups, observed mainly in industry, business or education, are generally characterized by substantial face-to-face contact. Physically, members are located within a single plant, office building or school.

In contrast, the "work groups" which made up the role sets in the present study had more fluid association patterns and occupied flexible, largely outdoor, physical

space. Although a police officer may work with a steady partner on the same schedule with a regular group of others, this is not necessarily so. In this study, most of the policewomen rotated their partners, and since department regulations excluded them from the midnight shift (which the men on their teams usually worked) their schedules were rarely the same as a constant group of patrolmen's.

Perhaps more important than the above, however, is the fact that a police officer can control his or her interaction with others in the "work group" by physical avoidance. For most of their tours of duty, two officers work together in a radio car. They spend half their time or less in specific job assignments, and most of these are handled by the pair of officers alone. The remainder of their tour of duty is spent either driving around keeping an eye on their assigned area or out of service (meals, repairs to vehicles, etc.). This work pattern gives pairs of officers a great degree of control over which of their peers they will have to deal with. (Supervisors cannot be avoided in the same way since they may observe patrol officers at their discretion.)

One may, therefore, account for observed failures of accommodation by the fact that problem interactions - except with supervisors - were avoidable for those who, in other circumstances, would have been interacting role set members.

The observed difference in role definition scores between policewomen and their team commanders was compared with the difference in scores between policewomen and the pa trolmen on their NPTs. Analysis supports the foregoing explanation of lack of change due to avoidable conflicts. The mean difference between "Strength" index scores for policewomen and patrolmen on their NPTs at time 2 is significantly greater than the difference between scores for policewomen and their team commanders ($F[1,18]=58.73$, $p < .01$). The same comparison for "Danger" approaches statistical significance ($F[1,18]=2.59$, $p < .10$).

Perhaps more enlightening, however, is the pattern of significant interactions ($p < .01$) between precinct and pattern of difference scores. For all three indices ("Danger", "Social Service" and "Strength") there is greater agreement in two of the teams between policewomen and their team commanders than between policewomen and the patrolmen they work with. In the third, however, agreement between women and patrolmen is greater than that between women and their primary supervisors. Thus, in two of the three locations disagreements with unavoidable role senders (team commanders) were resolved somewhat more than were disagreements with avoidable ones (patrolmen). Interestingly, in the location where differences in role definition between policewomen and their team commanders were not resolved, there was great dissatisfaction expressed through-

out the experimental year and all women transferred elsewhere at its conclusion.

3. Psychological methods of dealing with ambiguity. Choosing a series of individuals as points of reference for observing role sets' accommodation processes may have made central some adaptive strategies which were less apparent in former research because of different methods of measurement. Comments made by policewomen during the perception of conflict interview are relevant in this regard.

Some women denied experiencing conflicts between themselves and male officers in situations where it is extremely likely that conflict existed. For example, a policewoman might say that the average patrolman on her NPT would agree with her that she should participate fully in riot control. Since no other woman on her team chose that response and since the male index score for situations characterized by "Danger" is significantly higher than the female score, it seems likely that the woman is misjudging the men's expectations. Such misperceptions would enable focal persons to function more comfortably within the ambiguity than might otherwise have been the case.

Another pattern was to exclude from consideration whole categories of potential role senders. This was used most frequently with families and other non-police personnel, although it was sometimes applied to male officers. A woman would acknowledge a disagreement between herself and the

sender, but would deny its importance, usually by discrediting the person's knowledge of or attitude toward her job. Similarly, some women reported increasing the importance they attached to expectations of role senders who agreed with their interpretations of the job.

Phenomena such as the above suggest the adoption of methods for defining role sets that better accommodate individuals' strategies of adaptation. Instead of relying primarily on structural definitions, researchers should probably both observe actual interaction patterns in detail and interview focal persons at length to determine the evaluation placed on various role set members. Discrepancies in role definition appear to have different meaning when they occur between a focal person and a role sender who can be avoided, a sender who is defined as a member of an audience group rather than a reference group, etc. Differential knowledge, power, etc., of persons in specific conflicts with one another have long been recognized as changing the meaning of the conflict. The same kind of weighing of role senders, however, has not been incorporated into the observation of group process and, most likely, limits our understanding of what actually occurs.

4. Substitutes for consensus. The literature on ambiguity suggests that work groups must achieve consensus in role definition to function efficiently. It seems likely, in view of the present findings, that there may be

acceptable substitutes for consensus - at least in loosely structured work units. Sarbin and Allen (1969), in fact, suggest that predictability may serve a function similar to consensus. Knowledge of another's role definition, whether or not it is the same as yours, may facilitate interaction.

In the present study, a person's sex fairly accurately determined his or her expectations for the role of policewoman on patrol. In fact, sex was more strongly related to differences in role definition than was rank or membership in one of the three physically separate NPTs. Thus, whereas role sets lacked consensus on the definition of the position, they did not lack predictability. Assuming an officer (male or female) was correct in his or her perceptions, the expected behavior of another role set member could be accurately predicted merely by knowing that person's sex. Thus, senders could prepare for and accommodate discrepancies.

Another factor in the present case may have made the achievement of consensus unnecessary. Differences in role definition were sex differences; the dimension is an ascribed status. When a difference in role definition is associated with a difference in an immutable characteristic such as gender, groups may feel powerless to affect any change. Moreover, when members' different perceptions are associated with differences in sex, they may well be regarded as "natural" or "correct". In such situations

it seems likely that a role occupant's membership in subsystems outside the role set (such as a gender category) will influence senders' interpretations and evaluations of his or her role behavior. This linking of role set members to other systems may enable accurate prediction of inappropriate role behavior or even legitimize otherwise unacceptable behavior for that focal person. Thus, groups might seek to accommodate differences by avoidance, reevaluation, etc., rather than by exerting pressures to lessen intersender conflict. These alternatives would be particularly valuable when, as in the present case, expulsion of the deviant from the group is seen as impossible.

Hypothesis Group II

Predicted relationships between the perception of conflict and characteristics of groups, individuals, and situations were confirmed. However, it seems likely that patterns of interaction exist which will further clarify the ways in which individuals experience (and, therefore, act to remedy) inter-sender conflicts. Although most relationships observed were fairly strong ones, in no case did a predictor variable completely determine the outcome. Neither did a strong relationship between one variable and an outcome reduce the likelihood that an equally strong relationship would exist between another variable and the same outcome. Interaction among agreement patterns, qualities of role senders, and characteristics of situations

should be systematically examined to determine their influence on one another and their effects on the experience of conflict.

Hypothesis Group III

Many of the relationships examined between ambiguity and/or conflict and the indicator variables were in the expected directions. It appears most likely that a basic sample size of 13 simply did not permit the achieving of statistical significance. Further analyses support this interpretation.

One can rank teams A, B and C on the amount of ambiguity measured in their role sets, with A having least (ambiguity scores of four of the five policewomen on the team were at or below the median score), B second (three of four at or below the median) and C most ambiguity (four of four above the median). Analysis by precinct should suggest underlying trends.

1. Transfers. After a year, the policewomen were permitted to request changes in assignment. All requests were complied with. Although the numbers are too small to permit meaningful statistical analysis the pattern of transfers support expectations. Of the five women on Team A, four (80%) remained on the team, despite the fact that the neighborhood is thought of as difficult and hazardous. Of the four women on Team B, half transferred from patrol altogether, one stayed in a patrol assignment but in another

precinct, and the last remained on Team B. All four women on Team C transferred,with three of them leaving patrol entirely and the other requesting a patrol assignment at another precinct. Thus, the least change was made by women on the team with the least ambiguity and the most by women on the team where ambiguity was greatest.

2. Absences. The three measures of absence were sick days, sickleaves (units of consecutive days) and excusals (vacation days, emergency absences).[1] The pattern among the three teams is similar to that presented by transfers. Women on Team A were absent due to sickness or personal reasons least often (20%, 20%, 40% were above the median for sick days, leaves and excusals, respectively); those on Team C most often (75% above the median for all three measures).

3. Changes in role definition. The amount of change in role definition, which was measured by the number of items with different scores on the two administrations of the Role Definition Survey, varied in the three precincts. On Team A, four of the five women changed their responses to fewer than the median number of items (22). The number

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[1]Police officers in New York have an unlimited number of sick days available to them so there is no artificially imposed ceiling to interfere with absence rate. As a measure of absence, sick leaves are less sensitive to the effect of one long illness than are sick days. In the present study, excusals are probably not as useful as the other two because of a combination of factors including accumulated vacation time prior to patrol assignment.

of changes for women on Team B were evenly distributed above and below the median. On Team C, three of the four women made more than the median number of changes in role definition. This team difference may be interpreted to mean that, in less stressful environments, fewer personal adjustments need be made. On the other hand, the sequence may be opposite, with less stressful environments being created where women's role definitions are more "satisfactory".

OVERVIEW

The major contribution of this study to our understanding of role adaptation may be in increasing our respect for the complexity of human behavior. The problems faced by people and groups involved in role changes are far more elaborate and the solutions are far more diverse than those provided by our theories. Thus, the scientist wishing to study how role sets adapt when confronted with ambiguity and conflict must be prepared to observe a greater variety of strategies and solutions than current theory would imply. Moreover, researchers must be alert to the fact that insufficiently broad concepts predispose us to unrealistically limited observations.

People in the role sets of policewomen assigned to patrol coped with ambiguity and conflict by changing their definitions of the role of patrolwoman, by treating disagreeing individuals as exceptions to the rule, by avoiding one another, by changing their opinions of those who disagreed with them, by missing work more often, and so forth. Given such a wide range of options, the most productive research strategy would be to control those structural features of the work situation that are believed to influence the course of role adapation. With theory applied at this level, the actual observation

of role sets will be systematic, yet unhampered by a too narrow framework.

For example, the three Neighborhood Police Teams studied were located in precincts with different patterns of crime. Team A was in a high activity, ghetto neighborhood where crimes against persons were frequent. Teams B and C, both in middle-class neighborhoods, had lower activity. Team B tended to handle proportionally more traffic incidents than the others and Team C more residential burglaries and thefts of and from autos. Some police officials have suggested that the relatively more successful incorporation of policewomen into Team A than into the remaining teams can be accounted for by its high activity. Officers policing such areas are busier and face danger more often than those in relatively more peaceful neighborhoods. They must, therefor, rely on one another for support, and this interdependence promoted accommodation. A simple experiment could verify this interpretation. We would assign women to several teams in high activity neighborhoods and to several others in areas of low activity. If the former show more successful adaptation than the latter we may conclude that high activity, comprised of a large work load and an element of danger, promotes interpersonal accommodation during role change.

Similarly, "natural experiments" would help explain other variations in the adaptation process. If, as

suggested earlier, supervisors are indeed the more significant role senders, systematic differences in team commanders' role definitions should lead to different patterns of adaptation. Likewise, role sets containing male versus female supervisors and few versus many women patrol officers should adopt different strategies for coping with their ambiguity. The apparent lack of change in role definition by policemen and women in this experiment could be clarified by instituting work rules which give varying degrees of encouragement within role sets to male-female partnerships or other forms of interaction. In this way, the influence that frequency of association has on the development of people's role definitions could be assessed.

One might best conclude the discussion of this study by addressing a practical question: What is suggested by the present experience about easing the ambiguity and conflict associated with changing roles, particularly in situations where resistance to the change is substantial?

First, those within the organization who decide to institute role change must state their policy clearly and explicitly. They must specify what behavior they expect from all those affected by the change. Particularly in a hierarchical organization such as a police department, lower echelon persons seek guidance from those above them. Lack of clarity or contradictory statements

from the top will lead to similar confusion at lower levels, leading to ambiguity and conflict.

Middle level supervision is critical to the adaptation process. People in these positions figure prominantly in the role sets of all those making the transition. They tend to be role senders of high quality and to control sanctions within the system. As a result, their role definitions are difficult to discount. Furthermore, their explicit responsibility often includes reacting to and dealing with the ambiguity and conflicts of those under their jurisdiction. Organizations wishing to minimize problems associated with role change should pay particular attention to people in these positions.

Immediate supervisors of those enacting new roles must be convinced by one means or another of the organization's seriousness of intent. Supervisors must, therefore, be held accountable for the smoothness of the transition within their work groups. It does not appear necessary that each supervisor be "converted" to the extent that he or she becomes an advocate of the change. They must however, accept the change as inevitable and be expected to deal with it constructively. Supervisors might profit from training in helping those with particular hostility to the change in overcoming their resistance. They should be equipped with organizational sanctions to reward or punish those occupying the new roles and their role sets. Clearly, tools and methods will vary with the

style of the organization and the individual.

Finally, those occupying the new roles must be required to assume normal work patterns immediately. In the present experiment, all found it easier to restrict interaction with disagreeing role set members. This is, however, only a short term "solution," since, eventually, those who disagree will have to learn to deal with one another. Special treatment for the new role occupants was another "solution" which served only to foster resentment and expectations for continued special treatment. In contrast, when those whose opinions of the role definition differ are required to work together under the same work rules and with the same standards for performance some form of accommodation will result. Clearly, neither all individuals nor all groups will end up in complete harmony. However, a major implication of the present research is that, given the opportunity, people will do their best to work out livable relationships in their associations with other individuals and groups.

APPENDICES

Appendix A:

Role Definition Survey Administered to Policewomen

POLICEWOMEN

AS

PATROL OFFICERS

Confidential

In order to help to evaluate the policewomen as patrol officers program, we ask that you complete the following survey. Please answer all questions to the best of your ability and by yourself. All responses will be kept strictly confidential. Thank you.

Name_____

I. We all have some ideas about what a person "ideally" equipped to do our jobs would be like. Because of the specific requirements of our jobs, it might be very important that she do "X" well but completely unimportant that she do "Y" well. Below you will find a list of activities that any patrol officer might be called upon to perform. Please indicate how important it is to you that the ideal policewoman patrol officer be good at each one by entering a number in each blank which corresponds to a point on the scale below.

1 very important	2 important	3 neutral	4 unimportant	5 very unimportant

1.	Give directions or information	1.____
2.	Assist a police officer in trouble	2.____
3.	Handle a family dispute	3.____
4.	Drive a radio car	4.____
5.	Testify in court	5.____
6.	Help a lost child	6.____
7.	Convince the victim of a crime to cooperate with the police	7.____
8.	Handle an aided case - male	8.____
9.	Write a report (e.g. aided, accident, complaint)	9.____
10.	Handle a noise complaint	10.____
11.	Deliver a baby	11.____
12.	Escort a male prisoner who has assaulted a police officer	12.____
13.	Handle an aided case - female	13.____
14.	Handle a situation where a female is threatening someone with a knife or a gun	14.____
15.	Break up a crowd of loitering teenagers	15.____
16.	Stop and frisk a male suspect	16.____

1 very important	2 important	3 neutral	4 unimportant	5 very unimportant

17.	Back up a partner in a potentially dangerous situation	17.____
18.	Refer someone to another public agency (e.g., fire, welfare, building)	18.____
19.	Perform preventative RMP patrol	19.____
20.	Help in policing a parade	20.____
21.	Help in controlling a riot	21.____
22.	Chase a robbery suspect armed with a gun while on foot	22.____
23.	Chase a robbery suspect armed with a gun, while in a radio car	23.____
24.	Apprehend a mugger while on uniformed patrol	24.____
25.	Apprehend a purse-snatcher while on uniformed patrol	25.____
26.	Make an arrest on the street	26.____
27.	Stop and frisk a female suspect	27.____
28.	Manage a dispute in the street	28.____
29.	Manage a dispute in a bar	29.____
30.	Fire a pistol at an escaping suspect	30.____
31.	Handle a disorderly male	31.____
32.	Use a nightstick in self defense	32.____
33.	Noticy the relatives of a DOA	33.____
34.	Obtain information from an informer	34.____
35.	Obtain information from the general public	35.____
36.	Handle a disorderly female	36.____
37.	Direct traffic	37.____
38.	Issue a summons for a moving violation	38.____

1 very important	2 important	3 neutral	4 unimportant	5 very unimportant

39. Issue a parking summons 39.____

40. Do a preliminary investigation at a crime scene 40.____

41. Handle a situation where a man is threatening someone with a knife or a gun 41.____

42. Escort a female prisoner who has assaulted a police officer. 42.____

43. Do undercover work 43.____

44. Respond to a psycho call 44.____

45. Give first aid to the victim of a traffic accident 45.____

46. Search a DOA 46.____

47. Provide assistance such as changing a fuse or stopping a leak 47.____

48. Help to transport a man on a stretcher 48.____

49. Are there any other patrol jobs that you feel are particularly important or particularly unimportant for the ideal policewoman to be able to perform? If so please list the jobs and rate them using the same scale as above.

II. Although we try, very few of us live up to our "ideals". Referring to the same list of activities, please indicate how confident you feel about doing each one. Please enter a number in each blank which corresponds to the point on the scale below that best describes your feelings

1	2	3	4	5
I feel very confident about doing this	I feel somewhat confident about doing this	Neutral	I feel somewhat unsure of myself about doing this	I feel very unsure of mysel about doing this

1.	Give directions or information	1.____
2.	Assist police officer in trouble	2.____
3.	Handle a family dispute	3.____
4.	Drive a radio car	4.____
5.	Testify in court	5.____
6.	Help a lost child	6.____
7.	Convince the victim of a crime to cooperate with the police	7.____
8.	Handle an aided case - male	8.____
9.	Write a report (e.g., aided, accident, complaint)	9.____
10.	Handle a noise complaint	10.____
11.	Deliver a baby	11.____
12.	Escort a male prisoner who has assaulted a police officer	12.____
13.	Handle an aided case - female	13.____
14.	Handle a situation where a female is threatening someone with a knife or gun	14.____
15.	Break up a crowd of loitering teenagers	15.____
16.	Stop and frisk a male suspect	16.____
17.	Back up a partner in a potentially dangerous situation	17.____

1	2	3	4	5
I feel very confident about doing this	I feel somewhat confident about doing this	Neutral	I feel somewhat unsure of myself about doing this	I feel very unsure of myself about doing this

18.	Refer someone to another public agency (e.g., fire, welfare, building)	18.____
19.	Perform preventative RMP patrol	19.____
20.	Help in policing aparade	20.____
21.	Help in controlling a riot	21.____
22.	Chase a robbery suspect armed with a gun, while on foot	22.____
23.	Chase a robbery suspect armed with a gun, while in a radio car	23.____
24.	Apprehend a mugger while on uniformed patrol	24.____
25.	Apprehend a purse-snatcher while on uniformed patrol	25.____
26.	Make an arrest on the street	26.____
27.	Stop and frisk a female suspect	27.____
28.	Manage a dispute in a bar	28.____
29.	Manage a dispute in the street	29.____
30.	Fire a pistol at an escaping suspect	30.____
31.	Handle a disorderly male	31.____
32.	Use a nightstick in self defense	32.____
33.	Notify the relatives of a DOA	33.____
34.	Obtain information from an informer	34.____
35.	Obtain information from the general public	35.____
36.	Handle a disorderly female	36.____
37.	Direct traffic	37.____
38.	Issue a summons for a moving violation	38.____

1	2	3	4	5
I feel very confident about doing this	I feel somewhat confident about doing this	Neutral	I feel somewhat unsure of myself about doing this	I feel very unsure of myself about doing this

39. Issue a parking summons 39.____

40. Do a preliminary investigation at a crime scene 40.____

41. Handle a situation where a man is threatening someone with a knife or a gun 41.____

42. Escort a female prisoner who has assaulted a police officer 42.____

43. Do undercover work 43.____

44. Respond to a psycho call 44.____

45. Give first aid to the victim of a traffic accident 45.____

46. Search a DOA 46.____

47. Provide assistance such as changing a fuse or stopping a leak 47.____

48. Help to transport a man on a stretcher 48.____

49. Are there any other patrol jobs that you feel particularly confident or particularly unsure about doing? If so, please list the jobs and rate them using the same scale as above.

III. Sometimes the people we work with have different ideas than we do about how our jobs should be done. How do you think the average patrolman would characterize his "ideal" policewoman patrol officer? Referring to the same list of activities, please indicate how important it would be to the average patrolman that the ideal policewoman on patrol be good at each one. Please enter a number in the blank that corresponds to a point on the following scale.

1 very important	2 important	3 neutral	4 unimportant	5 very unimportant

1.	Give directions or information	1.____
2.	Assist a police officer in trouble	2.____
3.	Handle a family dispute	3.____
4.	Drive a radio car	4.____
5.	Testify in court	5.____
6.	Help a lost child	6.____
7.	Convince the victim of a crime to cooperate with the police	7.____
8.	Handle an aided case - male	8.____
9.	Write a report (e.g., aided, accident, complaint)	9.____
10.	Handle a noise compalint	10.____
11.	Deliver a baby	11.____
12.	Escort a male prisoner who has assaulted a police officer	12.____
13.	Handle an aided case - female	13.____
14.	Handle a situation where a female is threatening someone with a knife or gun	14.____
15.	Break up a crowd of loitering teenagers	15.____
16.	Stop and frisk a male suspect	16.____
17.	Back up a partner in a potentially dangerous situation	17.____

1 very important	2 important	3 neutral	4 unimportant	5 very unimportant

18. Refer someone to another public agency (e.g., fire, welfare, building) 18.____

19. Perform preventative RMP patrol 19.____

20. Help in policing a parade 20.____

21. Help in controlling a riot 21.____

22. Chase a robbery suspect armed with a gun, while on foot 22.____

23. Chase a robbery suspect armed with a gun, while in a radio car 23.____

24. Apprehend a mugger while on uniformed patrol 24.____

25. Apprehend a purse-snatcher while on uniformed patrol 25.____

26. Make an arrest on the street 26.____

27. Stop and frisk a female suspect 27.____

28. Manage a dispute in the street 28.____

29. Manage a dispute in a bar 29.____

30. Fire a pistol at an escaping suspect 30.____

31. Handle a disorderly male 31.____

32. Use a nightstick in self defense 32.____

33. Notify the relatives of a DOA 33.____

34. Obtain information from an informer 34.____

35. Obtain information from the general public 35.____

36. Handle a disorderly female 36.____

37. Direct traffic 37.____

38. Issue a summons for a moving violation 38.____

39. Issue a parking summons 39.____

1 very important	2 important	3 neutral	4 unimportant	5 very unimportant

40. Do a preliminary investigation at a crime scene 40.____

41. Handle a situation where a man is threatening someone with a knife or a gun 41.____

42. Escort a female prisoner who has assaulted a police officer 42.____

43. Do undercover work 43.____

44. Respond to a psycho call 44.____

45. Give first aid to the victim of a traffic accident 45.____

46. Search a DOA 46.____

47. Provide assistance such as changing a fuse or stopping a leak 47.____

48. Help to transport a man on a stretcher 48.____

49. Are there any other patrol jobs that you feel the average patrolman would consider particularly important or particularly unimportant for the ideal policewoman to be able to perform? If so, please list the jobs and rate them using the same scale as above.

Appendix B:

Role Definition Survey Administered to Supervisors and Male Patrol Officers

ANONYMOUS

PATROL SURVEY

The New York City Police Department is conducting this survey in order to evaluate its Policewomen Program and to assist in developing new programs to improve the Department. Please read this survey carefully by yourself and answer with your own opinions and to the best of your knowledge. Please put all of your answers in this booklet.

To protect your anonymity, please do not put your name on this booklet. Your cooperation in completing this questionnaire is greatly appreciated.

I. As you probably know, policewomen are currently being assigned as regular members of Neighborhood Police Teams. We would like to know how you think policewomen are best able to contribute to the patrol force. Below you will find a list of jobs that patrol officers may be called upon to perform. Please indicate how capable you think an average policewoman with 2 years of street experience would be in handling each activity. Please enter a number in each blank which corresponds to a point on the scale below that best describes your opinion.

1	2	3	4	5
A policewoman could do this extremely well	A policewoman could do this well	A policewoman could do this adequately	A policewoman could do this but not very well.	A policewoman could not do this at all

1.	Give directions or information	1.____
2.	Assist a police officer in trouble	2.____
3.	Hnadle a family dispute	3.____
4.	Drive a radio car	4.____
5.	Testify in court	5.____
6.	Help a lost child	6.____
7.	Convince the victim of a crime to cooperate with the police	7.____
8.	Handle an aided case - male	8.____
9.	Write a report (e.g. aided, accident, complaint)	9.____
10.	Handle a noise complaint	10.____
11.	Deliver a baby	11.____
12.	Escort a male prisoner who has assaulted a police officer	12.____
13.	Handle an aided case - female	13.____
14.	Handle a situation where a female is threatening someone with a knife or gun	14.____

1 A policewoman could do this extremely well	2 A policewoman could do this well	3 A policewoman could do this adequately	4 A policewoman could do this but not very well	5 A policewoman could not do this at all

15.	Break up a crowd of loitering teenagers	15.____
16.	Stop and frisk a male suspect	16.____
17.	Back up a partner in a potentially dangerous situation	17.____
18.	Refer someone to another public agency (e.g., fire, welfare, building)	18.____
19.	Perform preventative RMP patrol	19.____
20.	Help in policing a parade	20.____
21.	Help in controlling a riot	21.____
22.	Chase a robbery suspect armed with a gun, while on foot	22.____
23.	Chase a robbery suspect armed with a gun, while in a radio car.	23.____
24.	Apprehend a mugger while on uniformed patrol	24.____
25.	Apprehend a purse-snatcher while on uniformed patrol	25.____
26.	Make an arrest on the street	26.____
27.	Stop and frisk a female suspect	27.____
28.	Manage a dispute in the street	28.____
29.	Manage a dispute in a bar	29.____
30.	Fire a pistol at an escaping suspect	30.____
31.	Handle a disorderly male	31.____
32.	Use a nightstick in self-defense	32.____
33.	Notify the relatives of a DOA	33.____
34.	Obtain information from an informer	34.____

1 A policewoman could do this extremely well	2 A policewoman could do this well	3 A policewoman could do this adequately	4 A policewoman could do this but not very well	5 A policewoman could not do this at all

35. Obtain information from the general public 35.____

36. Handle a disorderly female 36.____

37. Direct traffic 37.____

38. Issue a summons for a moving violation 38.____

39. Issue a parking summons 39.____

40. Do a preliminary investigation at a crime scene 40.____

41. Handle a situation where a man is threatening someone with a knife or a gun 41.____

42. Escort a female prisoner who has assaulted a police officer 42.____

43. Do undercover work 43.____

44. Respond to a psycho call 44.____

45. Give first aid to the victim of a traffic accident 45.____

46. Search a DOA 46.____

47. Provide assistance such as changing a fuse or stopping a leak 47.____

48. Help to transport a man on a stretcher 48.____

49. Are there any other patrol jobs that you feel a policewoman is particularly qualified or particularly unqualified to perform? Please list the jobs and rate them using the same scale as above.

50. During the last month, have you worked with a policewoman patrol officer assigned to your Neighborhood Police Team?

____Yes ____No

If yes, in what capacity (e.g., radio car partner)?

If yes, how many times?____

51. You indicated how a policewoman might best contribute to a patrol team. Do you feel that, in general, the policewomen on your Neighborhood Police Team are spending their time as you would suggest?

____Yes ____No

Please explain:

52. Four or five policewomen have been assigned to your Neighborhood Police Team. Think of them as "Policewoman A," "Policewoman B", "Policewoman C," "Policewoman D" and "polcewoman E." If you can, indicate how often you think each policewoman is doing her job inthe way you feel is best. Please enter a number in each blank which corresponds to a point on the scale below.

1	2	3	4	5	N
Almost Always	Often	Sometimes	Rarely	Almost Never	I do not know this policewoman

Policewoman A_____

Policewoman B_____

Policewoman C_____

Policewoman D_____

Policewoman E_____

Appendix C:

Items from Urban Institute's Survey used in computing index scores for Male Patrol officers

A patrol officer does many different kinds of things while on duty. Below is a list of things an officer might do (#60-#76). Please indicate how well you think a female officer with a year's street experience could do these things, compared to a male officer with the same experience. PLEASE CIRCLE ONE NUMBER FOR EACH SITUATION ON THE ANSWER SHEET.

1	2	3	4	5
female would handle much worse than a male	female would handle worse than a male	no difference because of sex	female would handle better than a male	female would handle much better than a male

---

60. Writing crime reports

61. Handling aided cases

62. Handling juveniles

63. Handling drunks

64. Cruising around and observing

65. Making referrals

66. Handling disorderly males

67. Notifying relatives about a death

68. Getting information at crime scenes

69. Investigating a rape

70. Driving a radio car

71. Handling disorderly females

72. Handling threatening situations where someone has a knife or gun.

73. Handling robbery calls

74. Dealing with prostitutes

75. Handling family disputes

76. Handling auto accidents

Appendix D :

Definitions of Indices

(1)	"Danger"	:	Chase a robbery suspect armed with a gun, while in a radio car, Handle a disorderly male, Handle a situation where a man is threatening someone with a knife or a gun.
(2)	"Female/Juvenile"	:	Handle a family dispute Handle a disorderly female
(3)	"Social Service"	:	Handle an aided case - male, Refer someone to another public agency (e.g., fire, welfare, building), Notify the relatives of a DOA.
(4)	"Routine"	:	Write a report (e.g., aided, accident, complaint), Perform preventive patrol, Do a preliminary investigation at a crime scene.
(5)	"Strength"	:	Stop and frisk a male suspect, Apprehend a purse-snatcher while on uniformed patrol, Make an arrest on the street, Manage a dispute in the street, Issue a summons for a moving violation, Respond to a psycho call, Provide assistance such as changing a fuse or stopping a leak, Help to transport a man on a stretcher.

Appendix E :

Situation Descriptions from Perception of Conflict Interview

DIRECTIONS: For each of the following items, choose the alternative that you find most acceptable, even if it isn't exactly what you would do.

YOU ARE ASSIGNED TO UNIFORMED RMP WITH A MALE PARTNER. YOU ARE THE RECORDER. QUESTIONS FOR EACH ITEM BELOW CONCERN YOUR BEHAVIOR, NOT THAT OF YOUR PARTNER.

1. You are dispatched to a robbery in progress at a grocery store. It is a busy night and yours is the first car on the scene. You pull up outside the store.
   A. Go in immediately
   B. Wait for your partner before going in.
   C. Wait for another car to arrive before going in.

2. You are sent to the scene of a serious automobile accident and find a woman bleeding from a wound.
   A. Determine the circumstances of the accident and secure descriptions and witnesses.
   B. Administer first aid.
   C. Call for an ambulance and then question those involved.

3. You are sent to the scene of a past burglary in an apartment building. The elderly female who was burglarized is visibly upset. Her husband is trying to comfort her.
   A. Take the report from the husband.
   B. Take the report from the husband while your partner calms the wife down.
   C. Talk to the woman while your partner takes the report from the husband.

4. You notice a suspicious man on the street. There is a bulge on his right hip.
   A. Ask your partner to stop the car; question the man; frisk him if necessary.
   B. Ask your partner to stop the car; tell him about it and let him investigate
   C. Don't mention it.

5. It is after 11 p.m. and you are sent to address reporting a "Dangerous Condition." You find a severe leak in a water pipe in the ceiling. You can't locate the superintendent or the landlord.
   A. Ask your partner to fix the leak.
   B. Supply the name of an all-night plumber.
   C. Tell the complainant to call the buildings department in the morning.

6. A race riot breaks out in your precinct.
   A. Follow the orders given to everyone.
   B. Ask for an assignment such as guarding female prisoners or handling the switchboard
   C. Ask to be excused.

7. You are dispatched to a barroom dispute. After notifying your patrol supervisor you
   A. Enter and take charge
   B. Let your partner handle this one. providing necessary assistance.
   C. Call for assistance.

8. You are threatened by a large man armed with a knife. Your partner is in another room.
   A. Try to calm him by talking to him.
   B. Use force to disarm him.
   C. Wait until he moves, then go for your gun.

9. You are assigned to direct traffic at a major fire.
   A. Accept the assignment without question
   B. Ask that someone else be assigned
   C. Ask for assistance

10. You are assigned to a foot post without a partner on a 4PM to midnight.
   A. Accept the assignment without question
   B. Ask for a partner or a change in assignment, but comply when requests are denied.
   C. Ask for a partner or a change in assignment and do the kinds of things (e.g., complain, cajole, threaten, etc.) that will get them to change your assignment.

11. You see a motorist driving recklessly along a busy street, You ask your partner to follow and stop him. When he stops,
   A. You issue a summons.
   B. You explain why he was doing something dangerous and give him a warning
   C. You let your partner handle it.

12. A patrol sergeant is called to the scene of a job you are handling and asks you to do something. You feel that another action would be more effective.
   A. Do what he says.
   B. Do what he says, but discuss it with him later.
   C. Suggest your idea and get him to discuss it with you now.

13. You are assigned to a psycho call and find a man who is agitated. You feel that you are in danger.
   A. Talk to him and hope to calm him down.
   B. Help your partner to handcuff him
   C. Let your partner handcuff him.

14. A group of 11-12 year-old children was playing on a corner. They started fighting and broke a neighbor's window.
    A. Admonish them.
    B. Take them home to their parents
    C. Take them to the stationhouse.

15. You are assigned to a sector and are asked to report to the stationhouse. When you arrive you find a small girl (under 2 years old) who is lost. You are assigned to remain with the child until the parents are found.
    A. Accept the assignment without question.
    B. Accept the assignment, but complain afterward to your team commander.
    C. Argue that since policemen know about children, the officer who brought the child in should stay with her.

16. Your school-age child is sick with measles.
    A. Take an emergency day.
    B. Find a sitter
    C. Ask your husband to stay home.

17. You have menstrual cramps.
    A. Go to work and do your regular assignment.
    B. Go to work and ask for lighter duty.
    C. Take an emergency day or sick leave.

18. Your partner uses profanity in the car and keeps apologizing to you.
    A. Use it too.
    B. Ignore it.
    C. Ask him to try and control himself.

19. Your partner seems unhappy about having a female partner.
    A. Try and prove yourself.
    B. Discuss the problem and suggest you both try and make the best of it.
    C. Ask for a change of partner.

FOOTNOTES

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2. Connolly, H., Greenwald, J., and Sichel, J. Policewomen as patrol officers : selection interview study. Unpublished report prepared for New York City Police Department, 1972.

3. Greenwald, J., and Connolly, H. N.Y.C. policewomen evaluation: first report. Prepared for New York City Police Department, 1972.

4. Greenwald, J., and Connolly, H. Policewomen on patrol: New York City, Washington, D.C., The Police Foundation, 1975.

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