

PSYCHOLOGY and POLICING

edited by

Neil Brewer and Carlene Wilson

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Foreword

“You can’t teach an old dog new tricks,” the old saying goes. Never has this been less true of policing than at present. As social workers, law enforcers, and crisis counselors, police have always had to rely on skills such as bluff, cunning, common sense, their understanding of human behavior, and communication to enforce the law. Traditionally there has been a suspicion of academic solutions, but as more police gain tertiary qualifications and confront the reality that traditional policing doesn’t always work, they are looking to a range of new tools to add to their armory. Psychological theory and research provide a number of such tools that can benefit many aspects of policing. The following provides just a few examples.

Psychology is specifically concerned with the study of human behavior, and trying to understand human behavior is now a core component of police training. These days it is imperative that police recognize that negotiation, conflict resolution, cultural awareness, and sensitivity are *skills*, which are more valuable than the weapons and powers we equip them with. Elsewhere in policing, we have seen interviews of suspects and victims become more sophisticated, particularly with the use of audio and videotaping. But, in an era where police are dealing with sophisticated crime and a legal system that quite properly expects best evidence, it is important that interview techniques, identification tests, and the like are not only fair, but also elicit the maximum amount of accurate information. Psychological research has much to offer in areas such as these. And, at the broader organizational level, as society looks for police recruits who epitomize the community’s image of police (i.e., tolerant, patient, perceptive, nonracist, etc.), police services are using psychologists in recruiting to ensure the selection of members of the community who have those particular skills, which allow

them to survive the enormous pressures put on young police and to screen out those with inappropriate attitudes.

Likewise, psychology can make significant contributions to the increasingly tough demands of policing in areas such as the development of road toll campaigns, the evaluation of the accuracy of testimony, the training and selection of supervisors and managers, maximizing group performance, conducting performance evaluations, and the design of jobs and working conditions in order to promote positive job attitudes and psychological well-being.

In the modern policing environment where new demands require new skills and support services, any discussion of psychology's contribution to policing is invaluable. This volume represents just such a contribution, and will have an important role to play in the further professionalization of policing and the development of police science. Researchers from a number of different areas of psychology, and drawn from institutions around the world, provide comprehensive—and readable—overviews of their particular areas of psychology, focusing specifically on the implications of psychological research for maximizing policing effectiveness. What they have to say will be of considerable interest to police officers and administrators. I also imagine it would hold similar interest for psychology students and researchers, in that it illustrates how a vast array of research findings from diverse areas of psychology—laboratory and field-based, experimental and correlational, police and nonpolice in orientation—can be used to inform a wide range of practices in a particular organizational setting.

Finally, I hope that this volume will further stimulate the interests of psychology researchers in policing. In so doing, I would also emphasize how important it is for academics to “walk a mile in my shoes”—to get out and see at first hand what police have to confront, and to make sure they understand the environment they are dissecting.

**M. J. Palmer, Commissioner
Australian Federal Police**

Preface

Policing is a complex endeavor. It encompasses a diverse array of activities, many requiring specialist knowledge and skills. Many different disciplines have the potential to contribute to the development of relevant knowledge and skill bases and, in so doing, add to effective policing. This volume focuses on the particular contributions of psychological theory and research.

The first section of the book, *Psychology and Operational Policing*, illustrates the contribution of psychological theory and research to everyday policing activities including patrolling and conflict resolution, traffic law enforcement, prevention of criminal behavior, interviewing, eyewitness identification, and detection of guilty knowledge. It also illustrates how performance in many of these operational policing areas can be enhanced by judicious application of principles and techniques developed and validated through laboratory and controlled field research.

The second section, *Psychology and Organizational Functioning*, provides a guide to organizational practice based on comprehensive reviews of research on personnel selection, integrity testing, instruction and training, performance appraisal, supervision and leadership, group functioning and performance, shift-work, and job satisfaction and organizational commitment. The section concludes with a general discussion of police research that provides insights into techniques for evaluating the utility of research findings and guidance for researchers undertaking work in the police environment. The areas covered in these various chapters are not the only ones where psychology can and has made a contribution, but they provide a clear indication of the strength and breadth of that contribution.

We hope that *Psychology and Policing* will alert police researchers, adminis-

trators, and policymakers to the rich information contained in the mainstream psychological literature, and encourage them to look beyond the confines of research sponsored, carried out, and published “in-house” or within the wider police community. We also hope that it will highlight some of the dangers of being an uncritical consumer of research findings, and the importance of evaluating the reliability and validity, as well as the face appeal, of research findings.

Psychology and Policing should, therefore, be a valuable resource for police policymakers and administrators, and for students in criminal justice programs. It also should appeal to undergraduate and postgraduate students in applied psychology, especially those in the areas of forensic and organizational psychology, highlighting as it does the way in which psychology can contribute to the understanding and solution of complex real world problems. And hopefully, it will encourage these different groups to think further about how psychological theory and research can contribute to policing practices.

We would like to acknowledge the efforts of the various chapter authors. They were asked to review technical and complex scientific literatures, to highlight the particular implications for policing, and to do so in a way that would appeal to a diverse readership. Satisfying all of these objectives was not an easy task and we are grateful to our fellow contributors for the commitment they showed. Finally, our thanks to Carol McNally and Jody Fisher who assisted with the tidying up of several manuscripts and figures, and Kathy Brewer for proofreading assistance.

Neil Brewer
Carlene Wilson

PSYCHOLOGY AND POLICING



PSYCHOLOGY AND OPERATIONAL POLICING

The behavior of police at the worksite (e.g., on the street, in a private home, at the police station or in a jail cell, in the interview or line-up room) is influenced by a range of psychological factors. A knowledge and understanding of how these factors operate suggest a number of ways for enhancing the performance of the individual police officer and the police organization as a whole. The chapters in this first section of the volume provide a clear and insightful overview of research in mainstream psychology that can be used to inform police about various operational policing matters.

In the first chapter, Wilson and Braithwaite illustrate how a range of psychological variables influence the behavior of police on patrol. Police behavior during interactions with citizens is shown to be a function of the officer's personality, background, training, and socialization, and of the manner in which these variables interact with situational, environmental, and social psychological pressures. These variables determine the likelihood that an officer will succeed in acting in a way that avoids conflict occurring, or de-escalates conflict when it does occur. Police administrations concerned with minimizing the level of conflict in interactions between police and citizens will be assisted by an awareness of the psychological research that identifies the critical variables associated with aggression and conflict escalation.

Fildes' chapter on driver behavior and traffic safety (chapter 2)

provides an interesting review of psychological research which highlights the role that police can play in the prevention of unlawful driving behavior such as speeding or driving while under the influence of alcohol. This research confirms that where law enforcement procedures are grounded in sound psychological theory, validated by empirical evidence, police can expect to have an active role to play in preventing as well as reacting to undesirable road user behavior.

In chapter 3, Gottfredson and Polakowski provide a concise review of a complex literature on the determinants and prevention of crime. In reviewing some of the important correlates of crime, they argue that much crime is committed by individuals characterized by low self-control, with this being largely a product of experiences, relationships, etc. in the early childhood or adolescent years. Not surprisingly, given this position, they argue that police sanctions are unlikely to impact markedly on crime prevention, a conclusion that many police may find hard to accept. However, they do show how police efforts are likely to be more effective if they target the restriction of opportunities for criminal acts, and increasingly broaden their focus in order to recognize and to deal with the complex psychological and social determinants of crime.

Chapters 4, 5, and 6 on the topics of interviewing witnesses, face reconstruction, and eyewitness testimony and identification all provide a clear demonstration of the important role that psychological research findings should play in the refinement of operational procedures. Thus, for instance, chapter 4 (Fisher & McCauley) provides convincing evidence illustrating how interviewing eyewitnesses using the "cognitive interview" will often increase the amount of relevant (accurate) information a police officer obtains from an eyewitness. In so doing, they present clear guidelines on the basic principles associated with conducting the cognitive interview. Similarly, Bond and McConkey illustrate in chapter 5 how research on memory also has significant implications for the design of procedures used in attempts to reconstruct images of offenders' faces (cf. identikit photos), and for the purposes for which they might be used (i.e., recognition or recall). Guided by psychological research on how and what people remember (and forget), their chapter provides a critical evaluation of a number of different approaches to face reconstruction. In chapter 6, Thomson provides a detailed overview of those variables that can facilitate and distort the testimony provided by eyewitnesses. He illustrates how characteristics of the event, the situation, and the witness influence testimony, reviews the evidence on various identification procedures, and examines the effect of delay (and intervening events) on testimony and identification. A detailed knowledge and understanding of variables contributing to the accuracy of testimony and identification has important implications for the performance of police investigators.

In the last chapter in this section (chapter 7), Iacono evaluates the techniques for evaluating the accuracy or reliability of offender testimony. He highlights the problems that can arise when police depend on techniques such as polygraphy that do not stand up well to careful evaluation. Iacono also describes and evalu-

ates other techniques (e.g., the guilty knowledge test, possibly coupled with the measurement of cerebral potentials) which are typically ignored by police administrators, despite the availability of evidence demonstrating their efficacy. Thus, this chapter indicates that attention to the results of research is not only critical for developing techniques, but also critical to the ongoing evaluation of techniques currently in use.

Together, the chapters in this first section highlight the important contributions that psychological research can make to the refinement of a number of different aspects of police operations. It seems that police cannot afford to disregard what research in psychology and other behavioral sciences has to offer. At the same time, it is important that psychologists continue to evaluate results from the laboratory under the real world conditions in which police must operate.

1 Police Patrolling, Resistance, and Conflict Resolution

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Police patrol work is commonly perceived to be a dangerous undertaking, principally because it involves contact with potential and actual offenders. However, although the potential for officers to experience confrontation in their daily activities is certainly high, officers are only rarely assaulted, and full compliance by suspects to officers' requests or no contact at all with potential offenders are much more frequent outcomes (Wilson & Brewer, 1991). This is not to negate the fact that officers sometimes are placed in dangerous situations in which a conflict escalates to the point where injury is sustained by police, suspect, and/or bystander. By attempting to develop an understanding of the variables that distinguish these dangerous encounters from the more frequently occurring benign interactions, risk to both officers and the public can be minimized.

A considerable body of research in the past 2 to 3 decades has focused on the identification of those variables that impact upon the probability that conflict will escalate and, more particularly, the likelihood that a police officer will experience physical resistance. This research, originating from a wide range of criminological, sociological, and psychological perspectives, highlights a range of environmental, situational, personal, and interpersonal variables that contribute to the risk for the officer on patrol. This chapter provides an overview of these research results, focusing primarily on those variables over which the individual police officer and/or the police organization can exert some control, as opposed to variables like offender characteristics which, while having a significant influence, are largely destined to remain outside of the realm of police influence.

A BEHAVIORAL MODEL EXPLAINING CITIZEN RESISTANCE TO POLICE

We have chosen to take a behavioral approach to the analysis of resistance encountered by police while on patrol because this seems to provide the best opportunity for developing a systematic intervention model designed to minimize risk. It is our contention that risk is primarily determined by the behavior of the parties in a confrontation situation, and that this behavior in turn is dependent upon, to a greater or lesser extent, a variety of psychological influences—the personality and interaction skills of the suspect, the personality and interaction skills of the officer, situational constraints on the exchange, and a variety of social psychological factors that impact in any interaction. This model is diagrammatically summarized in Fig. 1.1.

The basic premise of this model is that the primary behavioral aim of the officer on patrol is to maintain order and, where necessary, to enforce laws, through the obtainment of suspect compliance (Richardson, 1974). Ideally this compliance will be voluntary, thereby minimizing risk to all participating parties. However, the ability of the officer to achieve the goal behavior—the voluntary compliance of the suspect—will be dependent on the characteristics of both the suspect and the officer, on some aspects of the situation, and also on factors identified in social psychological and other research, which influence the nature and outcome of interactions, especially when participants' goals diverge. The remainder of this chapter summarizes the research in psychology that bears upon

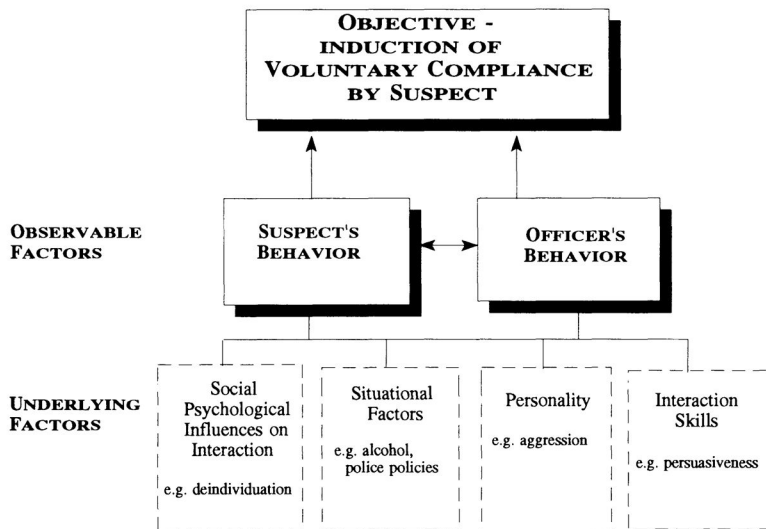


FIG. 1.1. Factors influencing the ability of police to induce voluntary compliance.

these issues—specifically research investigating social psychological and situational variables that influence outcomes in interpersonal situations, personality and conflict resolution, the skills and tactics used in gaining compliance, as well as how these sets of factors influence the behavior of the officer and of the citizen during an interaction. Sometimes these areas of research will overlap, reflecting the complexity of the factors determining outcomes in interactions. Each section includes a summary of any research that has focused primarily on police. On this basis it will be possible to attempt to integrate the findings from research in psychology into a more broadly encompassing model of police patrol, highlighting the variables that determine the nature of the police–citizen interaction. The chapter concludes with the application of the model to the development of a framework for the management of the risk associated with patrol.

SOCIAL PSYCHOLOGICAL INFLUENCES ON THE OCCURRENCE OF CONFLICT

One area of concern for social psychologists is the nature of group processes, and how these can impact upon the behavior of the individuals who constitute the group. These processes include those oriented to intergroup dynamics, as well as those involved with intragroup interactions. These social psychological processes have been shown to influence attitudes and behavior in a range of laboratory and field experiments. The most graphic demonstrations of these processes have involved conflict situations (e.g., Sherif & Sherif, 1953).

The police officer on patrol, whether he or she patrols in a group, as a pair, or even alone, is acting as a representative of a well-defined and easily recognizable group. As a consequence, the officer's behavior while acting as a representative of this group is constrained by group norms and expectations as well as by individual preferences. In addition, both the officer and the public have a set of well prescribed perceptions of the role and function of police. For example, the roles of law enforcer and peace keeper are well accepted by both police and public as legitimate police concerns which can dictate behavior in a variety of social situations. Both of these roles also serve to heighten intergroup competition and conflict with those who would wish to break the law or disturb the peace, while maximizing intragroup unity and conformity among officers upholding the law.

The specific social psychological processes involved in the development of intergroup conflict have received considerable research attention. Pioneering research in this area was undertaken by Sherif and associates (e.g., Sherif & Sherif, 1953; Sherif, Harvey, White, Hood, & Sherif, 1961) who described a process of conflict generation, later labeled “realistic group conflict theory” (R.C.T., Campbell, 1965), in which competition in the form of “real conflict of group interests causes intergroup conflict” (Campbell, 1965, p. 287). These

conflicts of interests serve to promote both antagonistic intergroup relations, and enhance intragroup cohesiveness, thereby dichotomizing in-group from out-group members.

Deindividuation

Subsequent work has focused on the specific explanatory variables that can predict the behavior of ingroup members toward outgroup members. Deindividuation is one of the variables that can be used to predict successfully the likelihood that an individual in a conflict situation will act in a way dissonant with their normal personal preferences because he or she is freed from the constraints that operate upon individual behavior (i.e., he or she is deindividuated). Deindividuation has been defined as the process whereby "antecedent social conditions lessen self-awareness and reduce concern with evaluation by others, thereby weakening restraint against the expression of undesirable behavior" (Prentice-Dunn & Rogers, 1980, p. 104). It is particularly potent in situations where the potential for violence is high.

The process of deindividuation is facilitated by circumstances that highlight group cohesion and by situations in which arousal is maximized. In the former situation it would appear that a sense of shared identity, a common role, or both, may serve to accentuate group unity and the salience of out-group differences; and consequently to increase the likelihood of deindividuation. Evidence for this comes from a number of sources, including descriptions of mob behavior and laboratory situations set up to study the process. Other studies that have attempted to foster group cohesiveness have reported that successful manipulations of this sort increased perceived unity.

Police are a strongly cohesive group in the community brought together by a common role, and easily identifiable as a distinct group. Occupational socialization, together with a strong paramilitary component to training, ensures the cohesiveness of the group. In addition, participation in duties that can in some circumstances be described as highly arousing, serves to accentuate the influence of deindividuation, thereby increasing the likelihood of impulsive responding (Guttmann, 1983; Mark, Bryant, & Lehman, 1983).

Experimental evidence further suggests that commitment and belief in in-group membership does not depend upon the presence of a large number of fellow ingroup members, with two members sufficient to produce a more competitive untrusting orientation towards an outsider in certain situations (e.g., Pylyshyn, Agnew, & Illingworth, 1966; Rabbie, Visser, & van Oostrum, 1982). This finding suggests that the typical two-officer patrol is not immune to influence from social psychological variables like deindividuation.

This brief summary of theory and research in deindividuation provides us with the framework from which we can make a number of predictions about the behavior of police on patrol. Police patrolling in groups, even small groups (e.g.,

a pair), and/or those officers dealing with more than one suspect, will be influenced by the constraints of group membership and, consequently, demonstrate the influence of deindividuation. Thus it can be predicted that such an influence should be evidenced as a more aggressive approach to the resolution of a patrol activity undertaken by two or more officers, in comparison to the approach taken by a solo-officer, especially if the activity is highly arousing. In addition, it should be evidenced as greater resistance from the suspect in these circumstances.

While the evidence in this area is slight, there are a number of general findings that are consistent with the prediction, as well as one study which has directly tested the proposition. For example, an investigation by Phillips and Cochrane (1991) of assault on police concluded that assault was more likely the larger the number of officers present. Similarly, other studies comparing solo with two-officer patrol have generally indicated greater resistance from the public, assault, or murder of police officers for activities attended by two or more officers (Dalley, 1974, 1986; Dart, 1989; Moorman & Wermer, 1983; Meyer, Magedanz, Chapman, Dahlin, & Swanson, 1982a, 1982b, 1982c; Meyer, Magedanz, Dahlin, & Chapman, 1981; Meyer, Magedanz, Kieselhorst, & Chapman, 1979) although contradictory results have also been documented (Chapman, 1976; Little, 1984; Stobart, 1972). In a review of the general police literature, Wilson and Brewer (1992) concluded that there was no reason to believe that two-officer patrol was inherently safer than solo-patrol and that future research should look at the influence of other variables on the outcome, including the nature of the patrol activity.

In addition, other research has indicated that, consistent with theories of deindividuation, the visibility of the encounter to peers and public influences the probability of the police using force. Friedrich (1980), in a reanalysis of Reiss's (1971) observational data of police on patrol, observed that those incidents that were more visible to the public (i.e., the out-group) and other police (i.e., other in-group members) were associated with significantly higher levels of force than were the encounters with lower visibility. Consistent with this, McNamara (1967) observed that a civilian was more likely to assault an officer following the issuance of a traffic ticket when the motorist was accompanied by his family. Similarly, Hudson (1970) concluded that about 70% of all encounters between citizen and police, which result in complaint, occur when others are present.

A direct attempt to test the proposition that deindividuation is associated with increased conflict in the police-citizen encounter is provided in a study by Wilson and Brewer (1993). In this study, the level of resistance that police experienced was compared for activities of differing anxiety levels and in situations where one or two officers attended. In addition, the influence of the number of bystanders present was also examined. The results indicated that resistance was highest in high-anxiety taskings attended by two officers, consistent with the hypothesis that deindividuation would be maximized in small group situations

where arousal was heightened. Similarly, the number of bystanders significantly influenced the officers' experiences of resistance, with resistance greatest in high-anxiety taskings involving a large number of bystanders (6 or more).

Wilson and Brewer (1993) also investigated the method of resolution adopted by the officers, arguing that the more confrontational tactic—arrest (cf. warning or caution)—would be preferred in situations where deindividuation had occurred (i.e., two officer, high-anxiety situations, and many bystanders, high-anxiety situations). The results partly confirmed these predictions, with a significantly increased probability of arrest for the two officer patrol attending high-anxiety taskings. In contrast, arrest was also the preferred means of resolving the task when bystander number was smaller, regardless of the anxiety level while warning was preferred when there were more people observing. It was suggested that this result may reflect the influence of other variables, such as the need to defuse a situation where there were a large number of potential participants present (i.e., the bystanders).

Both direct and indirect evidence of the influence of deindividuation on police behavior is evident in the research literature on police. This evidence suggests that the outcome of an interaction involving police and citizens will be at least partly a function of the influence of powerful constraints operating upon group behavior, which exist over and above those influences determining individual preferences and strategies for conflict resolution.

Deference Exchange

Status hierarchies and the process of deference exchange are other social psychological influences that have been shown to determine the nature of the interactions between individual members of different groups. Differential social status has associated rules of interaction which tightly constrain individual behavior, and the influence of these constraints has been demonstrated in a number of investigations of police behavior. Sykes and Clark (1975), in a major observational study of police–citizen interactions, argued that the activities of the participants are organized “by virtue of the positions they occupy” (p. 585). Specifically, police–citizen interactions are governed by asymmetrical status norms in which the police, by virtue of their authority, can be viewed as exhibiting higher status than most of the citizens with whom they interact.

Sykes and Clark (1975) analyzed the dynamics of the deference exchange exhibited between police and citizens by examining approximately 1,500 encounters over a period of 15 months. Their results indicated that as the status of the citizen, as defined by ethnic, geographic, and socioeconomic factors, declined, the level of deference displayed by the citizen declined. Furthermore, regardless of the status of the citizen, the officer always displayed less deference than the citizen. This result was confirmed in other studies in which it was observed that reassuring behavior from police during an interaction with a citizen

was rare, with deference from police even more rare (Southgate, 1987), and that police were more often rude and hostile to the public than the public were to them (Reiss, 1971). These differences in the perceived obligation to act in a particular way in an interaction increase citizen dissatisfaction with the police, Hudson (1970) reporting that failure to justify or to explain their actions was the most frequent cause of citizen complaint, particularly in officer-initiated encounters. Furthermore, lack of deference by citizens has been demonstrated to be a powerful influence on the actions taken by police in circumstances where their decision to act is largely discretionary (e.g., Lundman, 1980; Reiner, 1985; Stradling, Tuohy, & Harper, 1990), with arrest the more probable outcome where citizens display less deference.

These findings on the nature of police–citizen interactions are consistent with theories in social psychology that relate conflict between groups to differential power (Apfelbaum, 1979). The greater the power differential between two groups, the easier it is to make the distinction between ingroup and outgroup. Thus, where the participants in the conflict are clearly distinguishable as representatives of the wider groups of “law enforcers” and “law breakers,” the deference hierarchy is clearly established, particularly in the eyes of the police. The picture is clouded somewhat when the police are interacting with members of the community who may, or may not, have broken any laws.

As we have discussed, an asymmetrical status norm in which the police are viewed as more dominant than the citizen has associated patterns of behavior. However, information about status that is additional to that associated with the roles of law enforcer and law breaker, specifically details like age, gender, and demeanor of the citizen and complainant, will have an influence on the manner in which a task is resolved (e.g., Smith & Klein, 1984; Wilson, 1993). For example, the officer is more likely to take a more punitive approach, including arrest, if the citizen is of low socioeconomic status (Black, 1980; Smith & Klein, 1984), fails to show the “appropriate” respect (Piliavin & Briar, 1964), or is male or young (Wilson, 1993).

The potential for conflict to arise is also heightened by perceived unfairness in the manner in which deference behavior may be demanded by the police from the citizen. For example, research (Bordua & Tifft, 1971; Groves, 1968) indicates that citizens are frequently unwilling to cooperate in a field interrogation (i.e., an officer initiated contact for the purpose of seeking information). Wiley and Hudik (1974) contended that this was because “the amount of cooperation given by the citizen is considered a reward to the police officer” (p. 119). This reward was less likely to be forthcoming when no reason was provided for the interrogation, or where the reason supplied was not considered “appropriate and valuable” by the citizen involved.

The process by which deference is sought and exchanged has a powerful influence on the nature of police–citizen encounters. Like deindividuation, these social processes are hypothesized to have an effect independent from individual

preferences for styles of conflict resolution although the latter may mitigate the strength of social psychological influences. The extent to which behavior is governed by intergroup factors as opposed to interpersonal factors is generally thought to depend in part upon the intensity of the intergroup conflict—"the more intense is an intergroup conflict, the more likely it is that the individuals who are members of the opposing groups will behave toward each other as a function of their respective group memberships, rather than in terms of their individual characteristics or interindividual relationships" (Tajfel & Turner, 1979, p. 34).

SITUATIONAL INFLUENCES ON THE OCCURRENCE OF CONFLICT

A variety of environmental and situational antecedents to aggression have been documented in the research of psychologists. These extend from, but are not limited to, the more global aspects of the physical environment including temperature, noise and population density. Within the police arena they include aspects like the nature of the police organization, specific situational influences such as the nature of the activity being policed, and the influence from drugs and alcohol. Although it is important to document these factors, it is also wise to bear in mind that these factors are primarily influences on, rather than determinants of, behavior with this influence varying across individuals and time.

Environmental Conditions

Both the cultural and physical environment have been shown to relate to the probability of conflict occurring. Although most cultures sanction some degree of violence, the extent of this sanctioning varies both between and within cultures. For example, acknowledging that aggression as a form of problem solving is widely accepted within the American culture, Mulvihill and Tumin (1969) reported that 78% of respondents to an attitude survey agreed with the statement "Some people don't understand anything but force." Within the wider culture, specific subcultures are more likely than others to use violence to solve their problems—with the behavior of the individual to some extent mandated by the values, beliefs, and attitudes of the prevailing subculture (Toch, 1992; Wolfgang & Ferracuti, 1967). For example, local "codes" that prescribe violent conduct and which are promulgated from one generation to the next, can be observed in slum locations in most major cities, localities within Sardinia and Sicily, and in areas of Mexico and Columbia. Thus the cultural environment may dictate the probability that coercion will be seen as a viable conflict resolution tactic.

Irritating and stressful environmental circumstances, particularly when outside of the control of the individual, may elicit aggressive reactions by producing

negative affect (Glass & Singer, 1972). For example, Uniform Crime Reports produced by the Federal Bureau of Investigation in the United States indicate that the peak occurrence of common crimes of violence (such as assault, rape, and murder) occur in the hottest summer months (Cohn, 1993; Geen, 1990). Similarly, experiments relating ambient temperature to feelings of anger and preparedness to act aggressively suggest that, although the relationship may not necessarily be a simple linear one (Baron & Bell, 1975; Palamarek & Rule, 1979), the probability of aggression does increase with increases in temperature up to a certain point.

Police studies have produced evidence consistent with the aggression research, showing that the risk of officer injury and assault varies with the time of the year, generally indicating heightened risk in summer months (Meyer et al., 1979, 1981; Moorman & Wermer, 1983; Noaks & Christopher, 1990; Wright, 1990), although contradictory results have also been reported (Metropolitan Police, 1990). Noise has also been shown to have a stressful influence, serving primarily to intensify ongoing behavior, including aggression, that is elicited by other features of the situation (Geen & O'Neal, 1969). Although the influence of this variable is yet to be documented in police studies, heightened resistance by citizens is generally reported in public places such as hotels and sports stadiums where noise could be assumed to reach higher than average levels.

A range of other environmental factors have been related to the probability of aggression (e.g., crowding, pollution). The interested reader is referred to Geen (1990) for a review of this work. In addition, police research suggests that police vary their style of policing according to geographic location, providing different services in different neighborhoods (Cumming, Cumming, & Edell, 1965; Smith, 1986). To summarize, the research indicates that certain environmental conditions influence the probability of aggression in certain individuals rather than act as direct causes alone. It is hypothesized that the possible mechanisms by which the environment acts upon behavior may consist of an increase in arousal, a stimulus overload resulting in frustration of ongoing behavior, and/or an aversive state of negative affect associated with the unpleasant nature of the environmental circumstances.

Organizational Influences

Although a large part of police activity is discretionary in nature (Davis, 1975; La Fave, 1975), a significant proportion is well routinized ensuring that outcomes of some police–citizen encounters are at least partly dependent upon the rules for behavior prescribed by the department. In addition, police organizations vary considerably in the ethos they attach to law enforcement, both at the formal and informal levels. Investigations of the influence of this variable on the outcome of police–citizen interactions indicate that departments characterized by a bureaucratic approach with a strong emphasis on the enforcement of laws pro-

duce a police workforce characterized by a confrontational style, more citizen complaints, and more assaults on officers, than does a department with a stronger emphasis on the maintenance of order (Phillips & Cochrane, 1991). Similar results have been documented in the work of Smith and Klein (1984), Friedrich (1980) and Wilson (1968) who have suggested that the more legalistic departments are characterized by higher arrest rates than the less bureaucratic departments.

As with the environmental factors discussed before, the organizational influence on police–citizen conflict described here illustrates how situational factors can influence individual and group behavior and thereby influence outcomes in interpersonal situations. In other words, while the causal relationship between situation and conflict is not direct, situational factors can be strong influences on behavior of both police officers and citizens.

Activity Preceding the Assault

Recent studies of assault on police have attempted to examine the extent to which aggression is associated with the specific situation in which the police–citizen interaction occurs. These studies indicate that certain patrol activities have a heightened risk of police–citizen conflict. Specifically, a study by Wilson and Brewer (1991) which operationalized the risk attached to 32 separate patrol activities, indicated that the amount of resistance experienced by the police officers varied significantly between the activities, the highest levels being recorded for “a hotel brawl in progress” and “a request for urgent backup.” Other higher resistance patrol activities included “a domestic argument,” “assisting a home-owner/business proprietor to remove an unwanted person,” and “a crowd assembled in a hotel car park,” among others.

Additional data from the Wilson and Brewer (1991) study showed that the level of resistance experienced in some patrol activities varied according to the time of day at which the activity was undertaken. Significantly higher levels of resistance were experienced in six of the activities when they were undertaken at night (e.g., “a high speed pursuit,” “a domestic argument,” and “an assault in the street”).

Other investigations of the activity preceding assault on police officers have consistently suggested that attempting arrest is the one activity most likely to result in officer injury (e.g., Chapman, 1976; Little, 1984; Noaks & Christopher, 1990; Stobart, 1972; Swanton, 1985; Wright, 1990). Given that the activity of arrest is, by definition, a confrontational dispute resolution procedure, resistance would seem a probable outcome. The issue of conflict resolution tactics and their impact upon the outcome of a police–citizen interaction are discussed in more detail in a later section.

Alcohol and Drug Involvement

A number of studies in the area of aggression have indicated a positive correlation between alcohol use and violent crime. Wolfgang and Strohm (1956) examined homicide records held by police in Philadelphia between 1948 and 1953 and concluded that alcohol was a contributing factor in 64% of the cases. Laboratory studies further suggest that alcohol may play a causal role in aggression (e.g., Shuntich & Taylor, 1972; Taylor & Gammon, 1975), although they also indicate that the effect of alcohol is not invariant, depending upon other situational, cognitive, and personality variables.

Police studies examining assailant characteristics have identified alcohol involvement in many citizen assaults on police (e.g., Jager, 1983; Meyer et al., 1981; Wright, 1990). The involvement of alcohol is also consistent with the finding that the probability of assault on officers varies significantly with the time of day, being highest in the late hours of the evenings and the early hours of the morning, particularly on the weekends (e.g., Moorman & Wermer, 1983). The results with regard to other drugs have been far less conclusive. Very few studies have revealed significant drug involvement in assaults on police although it is possible that the evidence for drug involvement, by comparison with alcohol involvement, is more difficult to judge, particularly without the appropriate blood testing.

Situational variables are significantly related to the probability of police-citizen conflict. However, in most if not all circumstances, the influence of situational constraints is primarily to affect the probability of confrontational behavior by the officer or citizen, with that probability in turn mitigated by a range of other variables (i.e., personality and interpersonal skills) that are described in the sections that follow.

PERSONALITY INFLUENCES ON THE OCCURRENCE OF CONFLICT

One approach to the psychological study of conflict has been to identify personality variables that may influence the behavior of individuals in a conflict situation. In any interaction between police and public, the personality of the participants will have an influence on the manner in which the encounter proceeds and is resolved. Both participants can act to escalate or diminish any conflict inherent in the situation, and any individuals with aggressive, hostile, or confrontational styles will exacerbate the risk associated with the encounter. To the extent that police, as a group, can be characterized as possessing this type of personality, they can contribute to the risk of violence associated with the contact.

Much has been written about the "police personality" and the extent to which

police officers can be distinguished from other occupational groups. Assessment of applicants for police positions, as well as other studies concerned with profiling working officers, have provided some limited support for the suggestion that police are more authoritarian, suspicious, cynical, dogmatic, and secretive than the general population (Evans, Coman, & Stanley, 1992; Lefkowitz, 1975). In addition, other researchers have found police officers to be high in heterosexuality and low in abasement, succoring, and counseling readiness (Murrell, Lester, & Arcuri, 1978).

Studies of applicants for police work suggest that certain types of individuals, in particular those who are authoritarian and conservative, are attracted to police work (Colman & Gorman, 1982), although other studies have failed to discern any differences (e.g., Carlson & Sutton, 1975; McNamara, 1967). Cross-sectional studies examining the profiles of working police, differing in levels of experience, provide evidence for the suggestion that these personality traits are developed through the process of socialization within the police culture (Bennett, 1984; Van Maanen, 1975). The ambiguity in the results to date prevents any conclusion as to the origin of the police personality. The specific traits linked to tenure within the police occupation include authoritarianism (Carlson & Sutton, 1975; Dalley, 1975; McNamara, 1967; Skolnick, 1966), dogmatism (Teasley & Wright, 1973), conservatism (Dalley, 1975; Teasley & Wright, 1973), and cynicism (Niederhoffer, 1967). Each of these traits has important implications for the manner in which a police officer will typically deal with a member of the public, particularly one they suspect of involvement in an offense.

Authoritarianism and Police–Citizen Conflict

The most compelling of the relationships just described is that between authoritarianism and employment as a police officer. Given the nature of the job, this is not altogether surprising, with Balch (1972) concluding that “The typical police officer, as he is portrayed in the literature, is almost a classic example of the authoritarian personality” (p. 107). An authoritarian personality is one characterized by a dependence upon clearly delineated lines of authority. It includes a constellation of traits, each of which can impact upon behavior during an interaction, these consisting of a conservative/conventional, dogmatic, and cynical attitude or approach to others. Adorno, Frenkel-Brunswick, Levinson, and Sanford (1950) also included authoritarian aggression, cognitive rigidity, and a preoccupation with power as important constituent components of authoritarianism.

The nature of the traits associated with authoritarianism have implications for the likely behavior of those police officers who score high on measures of this personality variable. For example, authoritarian aggression is described by Adorno et al. (1950) as consisting of the sadistic component of aggression and is generally evidenced as hostility towards members of the outgroup (cf. Wilson &

Brewer, 1993). Thus, to the extent that an authoritarian officer views the public as outgroup members, his or her interactions may be confrontational.

High levels of conservatism and dogmatism should also impact on behavior during a police–public interaction, with indirect support for this proposition reflected in the deference exchange research described earlier. Specifically, those officers who approach an interaction with a conservative and dogmatic perspective are likely to expect, and possibly demand, a level of deference neither anticipated nor sought by the more liberal and amenable officers.

Studies detailing the precise implications of authoritarianism for behavior in an interaction have employed a variety of methodologies. A number have looked at how this personality dimension relates to preference for various types of tradeoff strategies through use of the Prisoners Dilemma Game. Using this paradigm, a dilemma is presented to two participants, or one real participant and a simulated participant, in the form of an abstract matrix in which the pairs of numbers represent the “payoffs” for each person. The choices made by these individual participants represents different strategies including competition and cooperation, and changes to choices on a trial-by-trial basis represent an individual’s manner of responding to the behavior of the other (Nemeth, 1972).

Deutsch (1960) examined the influence of authoritarianism on choices made during the Prisoners Dilemma Game. Individuals who scored low on authoritarianism chose strategies that were both trusting and trustworthy. High scorers were more likely to behave in a suspicious and untrustworthy manner. Other research examining bargaining behavior has found that dogmatic individuals are more resistant to compromise in a bargaining situation, and are more likely to view it as defeat (Druckman, 1967).

Research with other game measures in a laboratory setting has also indicated that authoritarian individuals are more problematic in their interactions. For example, Driver (1965, cited in Terhune, 1970) concluded that authoritarian individuals were more prone to aggression in a laboratory game situation. Laboratory work also verified that authoritarian people were more likely to notice differences in the structure of power in a situation, and were more punitive in their use of power (Smith, 1967). Generalization of these findings to police in the natural setting would suggest that more authoritarian officers, when in contact with civilians of low status or power, may use the power attached to the position of law enforcer in a manner that escalates rather than diminishes the likelihood of resistance. Attempts to link personality, in particular authoritarianism, to instances of aggressive behavior have tended to be limited to the laboratory. Individuals scoring high on authoritarianism have been shown to be more willing to obey instructions to administer electric shocks to a fellow volunteer (Elms & Milgram, 1966), and more tolerant towards the instigator of aggression, especially if the recipient was of low status (Thibaut & Riecken, 1955). Further research is needed to establish whether police administrations could best deal

with this link between authoritarianism and confrontational dispute resolution via selection procedures tailored to exclude these individuals or training procedures designed to provide officers with a range of nonconfrontational skills for resolving conflicts.

Personality and Individual Styles of Handling Conflict

Other researchers have examined the extent to which personality variables can predict the communication tactics an individual may prefer to use in conflict situations. Results have illustrated substantial individual differences in the styles adopted which can be related back to personality traits. For example, individuals with personalities that could be described as verbally aggressive (i.e., predisposed to “attack the self-concepts of other people instead of, or in addition to, their positions on the topic”; Infante & Wigley, 1986, p. 61), argumentative (i.e., predisposed to “recognize controversial issues, to advocate positions on them, and to refute other positions”; Infante & Wigley, 1986, p. 68), dogmatic or negative (cynical) showed distinct preferences for various types of techniques for gaining compliance (Boster & Levine, 1988). Those individuals who could be described as verbally aggressive and cynical indicated, through self-report, little concern for the emotional impact of their messages on their audience. By contrast, individuals high on argumentativeness and dogmatism were characterized by a persistence in their attempts at gaining compliance which was independent of the level of concern for the emotional impact of the message. Similarly, Infante and Wigley (1986) reported that personality variables could be used to predict the need to achieve compliance, with people described as “verbally aggressive” expressing a high need to have people conform to their wishes.

Terhune (1970) in a review of the relationship between personality and cooperation and competition concluded that specific aspects of personality like authoritarianism do correlate with these behaviors. However Terhune, together with subsequent researchers in the area, has highlighted the complexity of the relationship and the important influence situational factors play in explaining responses to interpersonal conflicts (Utley, Richardson, & Pilkington, 1989). As Berkowitz (1989) has argued “human aggression is largely reactive, a response to situational conditions” (p. 91), thus while some latent qualities may enhance the likelihood of aggressive responses in a police-citizen interaction, situational factors will provide the impetus for the expression of personality traits.

The behavior displayed by police in contact with the public may therefore be predicted by aspects of their personality, in interaction with situational variables as well as the variables we have previously discussed (e.g., social psychological factors). In addition, while the manner in which an individual officer handles an interaction is partly a function of his or her personality, other factors, like training and experience, will influence the choice of tactics on any one occasion.

THE INFLUENCE OF INTERACTION SKILLS ON THE OCCURRENCE OF CONFLICT

Research in psychology has established that individuals vary greatly in the skills that they bring to any task. This applies to basic motor skills such as driving, to cognitive skills such as completing a report, and even to interpersonal and social skills such as dealing with a complainant's query. As a consequence, performance success in all areas will vary with the skill level of the individual. This is not to say that people cannot be taught specific techniques for undertaking certain tasks, but it does indicate that without the appropriate training and intervention designed to provide all individuals with appropriate task specific behaviors, effectiveness will be less than optimal and vary considerably between people.

Interaction skills constitute one major set of behaviors that will impact upon the effectiveness with which a police officer deals with members of the public. Interaction should be viewed as a process whereby the behavior of any of the participating actors at any point in time, and particularly at commencement of the exchange, will have a direct influence on the behavior of the other parties. Two basic techniques for investigating interaction skills are documented in the literature. They consist of direct observational recording of interactions and questionnaire measures detailing the tactics an individual prefers to use. The exchange process has been documented in a number of observational studies of police–public interactions (Brent & Sykes, 1979; Sykes & Brent, 1980, 1983; Sykes & Clark, 1975; Wiley & Hudik, 1974), results indicating that particular behaviors increase the probability that violence will result (Binder & Scharf, 1980).

The verbal behavior of police has been shown to have a strong influence on the behavior of the citizen and the course of the interaction. Good communication, which can be defined as providing an *acceptable* and reasoned explanation for police behavior, may *set the tone* for subsequent behavior and steer the interaction along a path toward a resolution. For example, Wiley and Hudik (1974) demonstrated that by simply offering an explanation for a field interrogation to a citizen, officers were able to prolong the amount of time the citizen spent cooperating with the officer. Other behaviors shown to improve the quality of the police–citizen interaction include expressions of concern, attention to the problem at hand (demonstrated through appropriate questioning), provision of a service or informal sanctions (McIver & Parks, 1983).

A number of behavioral investigations of the tactics police use during interactions have attempted to discriminate possible differences between skilled and unskilled officers. Bandy, Buchanan, and Pinto (1986) compared a group of officers who completed a 5-day training program designed around techniques for dealing with family crises with a sample of untrained officers. Pairs of officers intervened in a simulated dispute, and were rated on a number of behavioral dimensions. The overall performance of the trained officers was judged to be significantly better than the untrained officers although this difference was pri-

marily due to better skills in *defusing* a tense situation. Information on the manner in which this outcome was achieved was not provided.

Bayley and Garofalo (1989) compared officers described by their peers as skilled in handling difficult encounters with a cross-section of officers who were not nominated. Participants were observed during 467 encounters with the public which were described as "potentially violent." Skilled officers could be discriminated from the unskilled on the basis of a higher level of activity, an inclination to take the lead role during an encounter and the exhibition of a greater range of tactics for dealing with problematic encounters.

The behavioral studies have, to some extent, been validated by questionnaire based investigations of the tactics police favor for the resolution of conflicts with the public. For example, Wilson and Gross (1994) reported an association between the effectiveness ratings given to specific tactics and the amount of resistance that officers reported experiencing while on patrol. In this study, the participants were asked to rate the effectiveness of 12 different conflict resolution tactics (e.g., wait and see, confrontational discussion, and arrest) in 16 scenarios describing minor conflicts between police and the public. Officers also completed a retrospective survey describing the amount of resistance that police reported while completing a range of patrol activities. From this survey, a group of "resistance prone" officers was selected and compared with officers reporting a low level of citizen resistance. The results indicated that those officers who rated confrontational tactics (e.g., arrest) as more effective experienced higher levels of resistance. Conversely, officers who preferred a problem-solving or compromising approach reported less resistance. The inference of this result is that certain behavior on the part of the officer will produce a noncompliant response from the citizen, while other behavior will maximize citizen compliance.

The literature reviewed here clearly indicates that the "success" with which an officer interacts with members of the public is, in part, attributable to the interaction skills he or she brings to the situation. In general, those officers who are more effective show greater versatility in the tactics they use, are less confrontational, and more able to defuse the tension in a situation. Differences in the ability of various officers can be attributed to variables like personality, while differences within the one officer over time can be attributed to the influence of situational demands and social psychological influences on performance. Research in the police arena is yet to describe the specific verbal and physical behaviors that will inflame a previously benign interaction, or escalate an existing difference into a full confrontation although, as Bayley and Bittner (1984) have pointed out, "only rigorous testing of the efficacy of tactical choices can at last transform police lore into the wisdom practitioners think it to be" (p. 53).

In recent years research in psychology has provided some indication as to the type of verbal behaviors associated with effective communication and the gaining of compliance. Tracy, Craig, Smith, and Spisak (1984) have shown that the best

communicators can influence others via the verbal strategies they use and that individuals vary considerably in their ability to perform this skill. Persuasion strategies involve a variety of techniques including threats, promises, deception, sarcasm, hinting, insult, and apology (Seibold, Cantrill, & Meyers, 1985). On the whole, the effectiveness of certain strategies is determined by the roles of those in the interaction, and the process of strategy selection itself will have a profound influence on the ongoing nature of the relationship and the responsibilities attached to the various roles (Fitzpatrick & Winke, 1979; Kearney, Plax, Sorenson, & Smith, 1988). Integrative communication tactics (e.g., support, empathy) that attempt to satisfy the interests of all parties have been associated with positive outcomes (Sillars, Coletti, Parry, & Rogers, 1982) with such tactics described as more effective and appropriate (Canary & Spitzberg, 1987). These tactics are also associated with greater satisfaction with conflict resolution, a greater likelihood of conflicts being resolved, and a decrease in the average duration of conflicts (Newton & Burgoon, 1990; Sillars, 1980).

The observation that individuals vary in the messages they use to seek compliance in accordance with the situation and the person (Marwell & Schmitt, 1967) has resulted in the proliferation of investigations designed to identify specifically how situational variables influence message selection. These studies indicate that the tactic used to gain compliance will vary according to the status of the target of the influence attempt (Kipnis, Schmidt, & Wilkinson, 1980; cf. deference literature), and the familiarity of the target (Cody & McLaughlin, 1985). Individuals who occupy the dominant position in the relationship have more strategies open to them (Kipnis & Cohen, 1980, cited in Cody & McLaughlin, 1985) and are more likely to use confrontational strategies (Kipnis, Schmidt, & Wilkinson, 1980; Putnam & Wilson, 1982).

This research suggests that the interaction skills exhibited by a police officer will be dependent on social psychological and situational constraints as well as personality and training. The police officer is in the dominant position during the exchange and, given the level of discretion attached to an officer's actions, is in a position to use confrontational strategies to ensure compliance. Effort by the citizen directed at resisting the attempt at influence can initiate a cycle whereby the level of hostility in the interaction may increase to the point where violence results. Even where the officer commences the interaction in a conciliatory or persuasive mode, the strategies used by the officer can become more coercive in the face of noncompliance.

Research in the police literature reinforces the notion that a police-citizen interaction is a process that can deteriorate at any point. Cody and McLaughlin (1985) observed that when citizens perceived police officers to be hostile and resistant to persuasion, they were more likely to make excuses, denials, and challenge the authority of the officer. When police find that their attempt to establish influence meets resistance, the tactics employed may become increasingly antisocial (Conrad, 1991), threatening (de Turck, 1985), and may involve

physical violence (de Turck, 1987). The possession and implementation of interaction skills that deescalate existing hostility (e.g., via humor) or that prevent confrontation from occurring at all (e.g., via successful persuasion) are the most useful ways of minimising the risk associated with interaction between police and citizens.

CONCLUSION—THE PATH OF LEAST RESISTANCE

A number of issues have been raised in this chapter that have direct implications for police organizations attempting to minimize the risk associated with general duties patrol. Most importantly, police officers and the police organization need to recognize the lack of utility in focusing risk management exclusively on the behavior of the citizen or suspect. Although it is certainly true that the citizen has a crucial role to play in determining the outcome of any interaction between police officer and citizen, it is also true that the police organization can have very little influence on the behavior of individuals independent of their organization. Furthermore, many of these people, by virtue of the reason for their contact with the police, will commence their interaction in a hostile or defensive frame of mind. The goal of the police officer is to manage these interactions in a way that mitigates the effect of the citizen's state of mind and behavior.

According to the model presented here, the behavior of the officer is the critical tool in effective risk management. As described earlier, the officer's behavior at any one point in time is determined by social psychological and situational pressures as well as personality and background (e.g., training and socialization) factors. The challenge for the police organization is to influence behavior through manipulation of these factors and thereby manage the degree of confrontation in interactions between police and citizens (refer to Fig. 1.2).

The risk associated with an interaction has been shown to be heightened under specific environmental and situational conditions. The officer will be more at risk when the weather is hot, where he or she is in a crowded, noisy place, where there are many onlookers and many police. Because avoidance of these conditions is not possible, police have two options for managing this risk. Officers can attempt to manipulate the conditions (e.g., disperse the crowd) although often this may not be feasible, or they may simply attempt to monitor their own behavior in recognition of the extent to which it is influenced by the unpleasantness of the prevailing circumstances. Thus, self-monitoring and control are critical aspects to managing the pressures associated with the environment and situation. These skills are easily taught through appropriate instruction in behavioral self-management (Manz, 1983) and could easily be incorporated into basic pre-service training.

Social psychological pressures upon individual behavior are ubiquitous although they vary in their intensity between situations. Research suggests that an

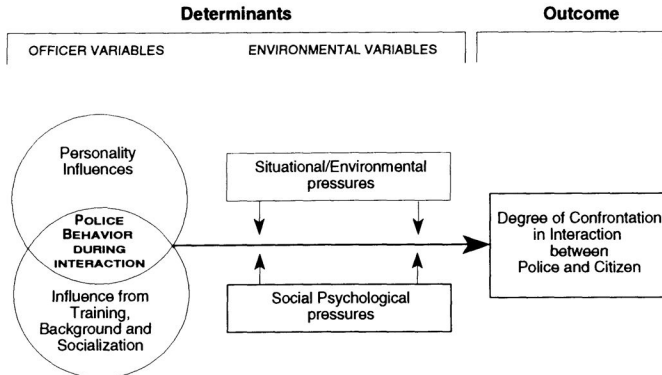


FIG. 1.2. Officer and environmental variables as determinants of police-citizen interactions.

individual's behavior will be most strongly influenced by identification with the ingroup in situations where the conflict is intense and arousal is heightened. Where a confrontation is mild, or an interaction proceeds in a conciliatory manner, behavior will be more closely linked to the personality and style of interacting of the participants. Officers need to be aware that their own behavior will be strongly influenced by identification with their role and this will influence both their propensity for aggression and their search for deference in circumstances where emotions are labile. As with situational and environmental pressures, self-monitoring and control are critical to dealing with social psychological pressures. In order to achieve this control officers should be made aware, through training, of the extent to which their behavior is influenced by all of these variables.

While the behavior of the officer will be subject to influence from both situational and social psychological pressures during the course of the interaction, the behavioral repertoire the officer takes to the interaction will be a function of his or her personality, training, and socialization. Risk from these variables can be directly controlled by the police organization through the mechanisms of selection and education. Police administrations need to develop a selection policy and procedure that minimizes the level of aggressiveness, hostility, and cynicism of its recruits. In addition, they need to select individuals with a level of maturity that is sufficient to resist the pressures from socialization which follow entry to the police culture, and which maximizes the chances that the officer can achieve a high level of self control and self monitoring. A description of how such selection procedures are devised is provided in Chapter 9.

Education is the other key component to successful risk management. The police organization needs to ensure that officers have the communication skills and problem-solving abilities that both prevent conflicts from arising and deesca-

late existing confrontations. Work in developing this type of curriculum has commenced with training packages designed to enhance patrol officer skills in defusing potentially violent situation already in existence in some police jurisdictions. Although work in psychology and police research described in this chapter provide some grounds for suggesting which behaviors might form the focus of the training endeavours, additional behavioral research that examines successful and unsuccessful conflict resolution involving police and citizens is important for the development of a truly comprehensive and effective risk management strategy. When a comprehensive body of knowledge is accumulated the opportunity should exist to teach, monitor, and assess behavioral repertoires that will minimize the experience of resistance for officers on patrol.

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2 Driver Behavior and Road Safety

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Driver behavior has long been recognized as a major cause of road crashes. Treat et al. (1977) and Sabey (1980) pointed out that human factors, either alone or in conjunction with the road environment or the vehicle, accounted for roughly 90% of crashes in the United States and Great Britain at that time. Recent estimates suggest that the situation has not changed appreciably in recent years (Bowie & Walz, 1991; Haworth & Rechnitzer, 1993).

There have been impressive reductions in the road toll over the last 30 years throughout most of the Western world. In Australia, Vulcan (1990, 1993) and others have reported reductions in the rate of fatal crashes from over 8 to well below 2 persons killed per 10,000 registered vehicles during this time period. Much of this improvement is claimed to have been derived from indirect changes in road user behavior through programs such as improved vehicle safety, better roads and cars, and greater use of seat belts, the so-called “engineering measures.” However, there is some evidence that behavioral change through police enforcement has also contributed to reductions in the road toll over this period. Campaigns aimed at reducing the incidence of drink-driving¹ and speeding have had some influence, particularly in recent years in Australia (this evidence is reviewed later in this chapter).

Nevertheless, given the overwhelming preponderance of human factor causes in road crashes, there is clearly an urgent need for new programs aimed at changing motorists behavior on the road if current trends are to continue. Obviously, the role of police enforcement (in conjunction with greater education and

¹The term drink-driving is used throughout and refers to driving while intoxicated.