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SOCIAL AND CULTURAL FACTORS

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SOCIAL FACTORS RELATED TO ACCIDENTS may be studied on the societal or on the individual level. From the societal point of view, broad social forces influence the ways in which the community or group views and deals with the hazards in its environment. Research on this level is concerned with such phenomena as the social and cultural forces which favor accident occurrence; the priorities given to the control of firearms, vehicular traffic, and poisons; the economic forces which resist the adoption of recognized safety measures, such as railroad air brakes and automobile safety belts; and the political pressures for and against safety legislation.^{1,2} Although they are to some extent removed from the direct causation of accidents, such factors are clearly significant.

From this broad point of view, accidents may be studied as a manifestation of social pathology. They are dysfunctional to the social system, interfering with its smooth operation, and they reflect and create social problems that involve most if not all of society's institutions—industry, school, home, and government. They also mirror a society's technology and the ways in which it has been integrated with its environment. For these reasons, one emphasis of behavioral research on accidents is their study as social phenomena, in much the same way that suicide, crime, and various diseases are studied in relation to the characteristics of social groups which favor their occurrence. The research worker using this approach attempts to determine the cultural and social values that influence the occurrence of accidents, the role that accidents play in social disorganization, and the institutional forces that positively or negatively influence their prevention or control.

From the individual point of view, the social scientist is interested in those social factors that affect the individual's behavior in relation to environmental hazards. Since almost all individual actions have social components, social factors may greatly influence not only the occurrence of accidents but also their type and severity. Individuals belong to groups, and group pressures may substantially determine whether individual behavior results in accidents to the individual or to others. The emphasis on vehicular speed and appearance rather than on crashworthiness (see Chap. 9) is an example of a group value. Social drinking patterns are largely group controlled. The individual who takes unnecessary risks may be trying to impress his fellow group members and, in fact, risk-taking may become a recognized and accepted group norm.

In addition to belonging to groups, all individuals occupy certain statuses and perform according to prescribed roles. All of these may impinge upon individual attitudes and behavior in regard to accidents. How well the mother and father perform their protective role in relation to their children may have a great effect upon the accident rates of their children, as the work of Read *et al.*³ and others has demonstrated. Certain occupational statuses subject individuals to unusually high risks in the performance of their work. The individual's roles and statuses define who he is and what is expected of him; to the extent that safe behavior can be made an appropriate and acceptable part of his role performance and commitment to his status position, he will tend to incorporate it in his everyday routine.

Although much research has been done on the influence of social factors on a wide range of individual behavior—voting, for example, or purchasing habits—few studies have been done on accidents. Since accidents are usually not predictable and therefore not observable in systematic fashion, such studies may have to go back one

step and examine the more readily observable behavior that precedes the accident. Thus one might study such accident-generating acts as driving when drunk, speeding, jaywalking, and leaving a baby unattended.

There is an almost complete lack of significant studies which bring to bear on accident phenomena the full force of social theory and method. The few examples reproduced below are quite elementary and are offered to illustrate what might be done rather than as good examples of what has been done. We begin with Foote's thoughtful and highly original analysis of the potential of community, institutional, and interpersonal factors in both accident causation and prevention. As Foote points out, many institutional forces in society today indirectly promote the occurrence of accidents.

Foote's general analysis of social factors in accidents is followed by a detailed formulation of a theory of "the social threshold" in accident causation. Viewing accidents as a form of deviant behavior, Paterson hypothesizes that there is a threshold of conforming behavior beyond which an individual ventures into accident-inducing situations.

Bringing together a number of studies, McFarland and Moore appraise the many social factors related to automobile accidents involving young people. Especial significance is given to the role of the automobile in the life of the young person; it obviously serves many functions besides transportation, and many of these increase its potential for causing accidents. In the next article, Case and Stewart review the literature on driver attitudes but find that current tests are inadequate to measure the full range of driver attitudes and the effect of these attitudes on accidents (see Orleans and Ross, Chap. 5). Backett and Johnston's study deals with social factors, such as family background, in relation to childhood pedestrian accidents. Accidents outside the home are found to be related to the characteristics of the home, thereby suggesting that social factors may carry over into situations beyond their immediate environment.

On a completely different level of analysis, a sociologist, Porterfield, dealing with suicide, homicide, and crime, shows that these evidences of social disorganization are statistically associated with the occurrence of accidents. At the same general level of analysis, Ross raises the possibility that attitudes toward traffic laws are a dysfunctional element in traffic safety.

Finally, we examine behavioral factors in relation to accidents in which alcohol plays a role. Although several studies have firmly established the importance of the pharmacologic effects of alcohol in the initiation of accidents, only a few have begun to unravel the pertinent behavioral correlates of its use. Increasingly, however, attention is being directed to factors of this type. The problem of the drinking driver, for example, includes such behavioral components as: (1) cultural patterns in recreation, business, courtship, and entertainment; (2) public attitudes; (3) economic and political forces that favor drinking;^{1,2} and (4) the emotional needs of the individual that favor his use of the drug.* Further, since the chronic alcoholic is now known to

* Authorities have long regarded beverage alcohol (ethyl alcohol, ethanol) as a drug and do describe it thus in the scientific literature. A committee of the WHO has stated that it has properties "intermediate between the addiction-producing and habit-forming drugs."⁴ Although not all problems associated with its use can be described in relation to its pharmacologic properties, it is important to remember that lacking these properties it would not be employed.

be disproportionately represented in drinking-driving accidents (see below), the behavioral factors of this common disease are also important in relation to accidents.

Although there have not been many pertinent investigations, the reports by Barmack and Payne document well the importance of the accident-involved drinking driver's social background. Their findings and our general knowledge of the significance of alcohol in accidents make it clear that the successful control of the drinking driver will require far greater knowledge than we now have of the behavioral factors associated with its use.

SOCIOLOGICAL FACTORS IN CHILDHOOD ACCIDENTS

—*Nelson N. Foote, Ph.D.*

Beginning with a simple description of the distribution of fatal accidents among children, Foote presents a sophisticated discussion of institutional, interpersonal, and individual factors that favor their occurrence and prevention. He states that "from the standpoint of accident prevention, the elimination of hazards through institutional action must realistically always remain the primary grand strategy." He also points out that "wherever well-recognized and widespread hazards in the physical environment remain year after year, it takes very low-powered research and little of it to discern that powerful institutional interests support their continued existence," and adds that "the appropriate question in such cases is: Who benefits from the maintenance of the hazard?" Such questions are well known to sophisticated workers concerned with accident research and prevention but are rarely, if ever, stated publicly. They point, nevertheless, to many opportunities for research of particular interest to behavioral scientists.

On the interpersonal level, Foote brilliantly discusses the role of parents in the injuries their children sustain and points out that many "accidents" are in reality the results of deliberate aggression.† This emphasizes the point that there has as yet been no adequate study of the relationships—undoubtedly numerous—between inadvertent injuries and those deliberately initiated. Forensic pathologists and some accident research workers, particularly those who study accidents rather than such secondary sources as accident reports, are quite familiar both with homicides and suicides classified as accidents and—though they are probably more rare—the reverse.² In addition, it is likely that individual accidents may be in part both inadvertent and deliberate, as Selzer's exploration of suicidal tendencies among alcoholics and others involved in motor vehicle accidents suggests.⁵

In regard to individual factors, Foote urges that social variables be considered before personality factors and the notion of accident proneness are employed as explanations of accidents. (We have already noted, in Chaps. 5 and 7, the limited usefulness of the latter emphasis.) Foote also proposes an analogy between accident

† Although long recognized on the basis of individual clinical cases, the occurrence and characteristics of such injuries are beginning to receive increased attention from the medical profession.⁶

behavior and delinquent behavior and points out that it is likely that "any strategy for prevention offers more hope to the degree that it employs generalized social controls rather than resorting to individual therapy of variable efficacy." Although he is probably correct in this view, this is one of the many points with respect to accident prevention that need careful consideration and thorough study.

Footo concludes with an outline for an interesting laboratory test of risk-taking among children, involving the observation of the behavior of children under a series of real-life situations of risk, such as crossing a road, hammering a nail, and climbing a tree.† Especially if the results were shown to correlate with accident distributions among the same children, such a test might be used to identify those who exhibit potentially dangerous patterns of risk-taking. Granted that there are difficult problems of standardization, control, and interpretation, experimental approaches of this general type might do much to provide needed information that is not being produced by most current accident research.

SUCHMAN AND SCHERZER's *Current Research in Childhood Accidents* cites the following data from the National Office of Vital Statistics, showing frequencies of the main types of accidental death by broad age groups during 1956:

5-to-14-year column is calculated as a series of percentages of the under-5 column and ranked in ascending order, an interesting sequence results:

TYPE	AGE	
	Under 5	5 to 14
All types	8,173	6,316
Motor vehicle	1,770	2,640
Falls	427	188
Fire burns	1,158	667
Drowning	748	1,327
Railroad	76	148
Firearms	79	429
Poison gases	53	33
Poison except gas	394	32
(All other— by subtraction	3,468	852)

	Percent
Poison except gas	8
(All other	25)
Falls	44
Fire burns	58
Poison gases	62
(All types	77)
Motor vehicle	149
Drowning	177
Railroad	195
Firearms	543

Because of the special care taken with mortality statistics, these are probably among the most reliable data obtainable from official records of any kind. And because accidental deaths are even more rare events than accidents, data drawn from the complete national universe deserve thorough analysis. It is not clear how thorough such analysis has been.

For example, the table above exhibits several suggestive relationships. If the

Three speculative hypotheses emerge from this ordering: First, the number and variety of hazards in the physical environment of the adult are much greater than in the segregated physical environments designed for the child. Secondly, those accidental deaths that represent failures in parental protection from the dangers in the physical environment diminish as the child learns to care for himself. Finally, those accidental deaths that represent risk-taking with known dangers in his physical environment increase as the child's range of exploration increases.

The extreme concentration of accidental deaths in the first year of life, and the very

[Reprinted from *Behavioral Approaches to Accident Research*, Association for the Aid of Crippled Children, New York, 1961, pp. 121-135.]

† See Chap. 3 for a study of responses to a "visual cliff" and Chap. 10 for a study of behavior in relation to entrapment in refrigerators. Other examples, with adult subjects, have chiefly involved driving in relation to drinking (see Chap. 3 and reference 7).

high accidental death rate during the second year, underline the degree to which such mortality is a function of dependency on parents and other guardians. For each type of death, it should be possible to draw from existing statistical data its characteristic curve of frequency by years of age. Ideally, this would break down the first year into months. Such a refinement of incidence figures, including finer categorization of the agents of death, and time series comparison, should yield further clues as to the dynamics of parental care and child development in relation to the dangers of the physical environment.

A further examination of the table above discloses that the most prevalent types of accidental death arise from highly familiar hazards: collisions, from moving vehicles; drownings, from water; burns, from fire or heat; asphyxiation, from gas; shootings, from guns. Just as conceptually it is clarifying to separate the accident as an event from the injury which may or may not result, it is helpful in conceiving future research to isolate the hazards of the physical environment from both accident and injury. A child who falls from a high place may be crushed, drowned, burned or suffocated, depending on where he falls. The height is one hazard; what lies at the bottom may be another, and both can potentially be dealt with, as in the use of landings to interrupt long flights of stairs.

INSTITUTIONAL FACTORS

Any sociological approach to childhood accidents should take extensive account of the kinds and distribution of hazards in the physical environments of children. Especially in the United States, these physical environments are rarely natural, and even those that are natural tend to be deliberately selected, segregated, and assigned for use by children. Most are artificial, although it would be a mistake to suppose that most have been designed for the safety of children.

From the standpoint of accident prevention, the elimination of hazards through institutional action must realistically always

remain the primary grand strategy. Educating parents to provide hazard-free environments and protection will always remain quite secondary, though perhaps more effective than training children themselves to avoid risk. The Underwriters' Laboratories, for example, keep childhood deaths by electrocution at such a minimum that most parents hardly regard electric cords, receptacles, and sockets as hazards at all.

From the institutional point of view, time series analysis of types of accidental death should disclose many readily understood trends in incidence based on historical increases and decreases in the incidence of specific hazards. The decline of gas lighting and the redesign of valves on gas ranges have probably diminished the frequency of asphyxiation despite increased numbers of homes using gas. The rapid increase in backyard swimming pools, however, appears to be multiplying child drownings in suburban neighborhoods faster than institutional protections can be erected.

Perhaps the most intriguing hazard for sociological research implied by the foregoing list is firearms. In the 5-to-14-year-old category, shootings rank fourth after automobile accidents, drownings, and fires as causes of death. Some children no doubt shoot themselves, and some are shot by their parents or other adults, but it seems likely that most children are shot by other children. If that is true, the problem of defining the nature of an accident is very much complicated thereby. Legally, of course, juvenile criminals are not held responsible for their actions as adults are, but, from a psychological point of view, pointing a gun at another child and pulling the trigger is very different from being struck by lightning while swimming in the rain. To whom has the accident happened in this case? Here accident and injury are indeed separate entities to consider. Apart from the interpersonal aspects, which will be dealt with later, the most interesting institutional aspect of firearms as a hazard is the possibility that in this case the community fosters shootings.

Much controversy has raged among television producers and their critics as to the effects of the profuse portrayal of violence in gangster and western melodramas. If, to the statistics on child shootings which end in death, could be added the many more shootings which do not, perhaps they would constitute a hard and objective index by which the students of mass communication could at last measure effect.

The leading type of accidental death, by motor vehicle, breaks into a multitude of subtypes when considered sociologically. Because in any motor accident involving a child it may be assumed that the child is not a driver, several other persons have to be taken into account, starting with at least one driver and one guardian of the child. Interpersonal relations tend to be patterned along institutional lines, as will be seen presently.

Meanwhile it is evident that simply as a physical hazard, apart from interpersonal relations, the moving vehicle represents a conflict of values which positively obstructs accident prevention. Speed limits low enough to make the automobile less lethal are notoriously difficult to enforce. Likewise efforts to exclude pedestrians and cyclists from roads bearing auto traffic have succeeded only on a few toll roads and express highways, not on city streets. The city planning and architecture which put sidewalks next to pavements have frozen into concrete and stone an institutional assumption that those who walk are of less importance than those who drive. The millions spent on steel for protecting motorists at every turn in the highway are not matched by comparable expenditures on physical protection for pedestrians. Pedestrian bridges over heavy traffic, like those which cross the Lake Shore Drive in Chicago, are almost oddities, and even these were installed not for the sake of pedestrians but to keep traffic flowing continuously. Perhaps someday, when vehicular congestion on Manhattan Island becomes still greater, the sidewalks will be removed altogether in order to widen the streets. Elevated walks for pedestrians may then be extended from the

second floors of buildings. The physical separation of pedestrians from motor traffic, which the architectural prophets have preached for many years, is much more likely to come about in order to make more room in the street for automobiles, however, than through concern for pedestrian safety.

Indeed, wherever well-recognized and widespread hazards in the physical environment remain year after year, it takes very low-powered research and little of it to discern that powerful institutional interests support their continued existence. The appropriate question in such cases is "Who benefits from the maintenance of the hazard?" Who benefits from the steady display of violence on television? Who benefits from firetrap housing? Who benefits from wrapping goods in thin plastic film? These may or may not be legitimate research questions. In programs of action to circumvent powerful institutional interests, it is sometimes possible to bring other powerful interests to oppose them. Ascertaining potential counterinterests may also be an investigation that would not be recognized as accident research.

It is the customary claim of publicly supported, nonprofit institutions that they exhibit a nonpartisan, public interest rather than a private and partial or partisan interest. The most popular *raison d'être* for foundations in the United States, for example, is child welfare, in the abstract. Bodies of this sort are given to research instead of reform. The old style of zeal which animated leaders in the political struggle against child labor is regarded by them as unscientific and unbecomingly partisan. In overcoming institutional opposition to the removal of hazards, however, to borrow a phrase from General MacArthur, there is no substitute for victory.

Further to trouble those who shrink from recognizing that progress in accident prevention is not postponed primarily because of lack of knowledge, it may also be noted that exposure to hazards tends to be concentrated among children whose families are shortest of economic power. These are

the families whose children must play in the streets, swim in excavations, and rustle their own meals while their mothers work to pay the rent. Although no parents can entirely control the physical environment of their children, there is enormous variation in their relative ability to do so. Any program of accident prevention thus ultimately runs up against the differential distribution of safety in society, as a concomitant of wealth and poverty.

In any evaluation of the potential contribution of research to accident prevention, therefore, it is not far-fetched to contemplate the possibility that research can actually make matters worse, by diverting attention from the basic task of removing hazards or by serving to postpone action. It is conceivable, on the other hand, that some kinds of research could be developed which would shed light on the process by which a few members of society continually emerge who seem as moved to seek justice for others as for themselves. Many of the institutional safeguards which already exist have been erected by such champions. Research into the institutional factors that account for the persistence of major hazards or disclose insights into the organization of means to remove them, however, is bound to seem further removed from recognizable accident research the more basic it becomes.

It is very likely that accident research in any form that will be recognized as proper by sponsors affecting an impartial public interest will simply concede the differential distribution of institutional hazards to child safety and thereafter ignore them. The unequal distribution of hazards will nonetheless repeatedly prove inconvenient in drawing generalizations about accident causation and prevention, because it confounds the correlations that might otherwise be found between the characteristics of children or parents and the frequencies of accidents. So even from the narrow standpoint of research exclusively on personality factors, it would be very helpful if an economical checklist of hazards in the physical environments of

research subjects could be developed, so that these hazards could be at least experimentally "controlled."

INTERPERSONAL FACTORS

In considering other persons who play important roles in childhood accidents, parents obviously deserve most attention. Injuries of children traceable to mistakes or aggression by their parents are many. By contrast, young children rarely injure other children. They do so more often as they grow older and approach adult status, the climax of their malignancy being reached when they become parents themselves. As the table at the outset showed, children are most vulnerable when they are most dependent. As they become more and more independent of their parents, they are less vulnerable to accidents and injuries caused by their parents, although they are simultaneously exposed by their own growing capacities for movement and exploration to injury by other persons outside the home.

Since we are largely concerned with physical relations among physical bodies, it should not seem surprising that small bodies suffer most from large bodies, or that such injuries diminish as body size is equalized. It nonetheless seems contrary to traditional moral expectations to recognize that parents do not, on empirical examination, appear uniformly as protectors of even their own children.

A Danish criminologist who some years ago collected statistics from several European countries on murders and murderers found that generally murderers were closely related to those they murder. One is safest with total strangers, and most in danger from husband or wife, parent or child. Every day the newspapers carry tales of clubbings, stabbings, shootings, burnings, strangulations, drownings, and starvation of children by parents, in this country as in all others. Such mayhem, a certain portion of which results in deaths, is so commonplace that its extent is not recognized. Moreover, most of it goes unreported, since it does not

come to the attention of the police. No formal study of domestic crime has ever been made. It would seem prerequisite to have such a study in order to differentiate, at least crudely, deliberate injury from accidental injury to children. This is because the claim that deliberate injuries were accidental is one of the commonest defenses of parents who are charged with maiming or killing their children. It cannot be taken for granted that accidental injuries will necessarily be found to outnumber deliberate injuries except in certain specific categories.

These observations about deliberate injury to children by parents do not include those apparent accidents which some would readily attribute to unconscious hostility on the part of parents. Moreover, drawing a line between deliberate and accidental injury of children is complicated not only by unconscious motivation but by the legitimacy with which society continues to sanctify corporal punishment of children. Corporal punishment of adults (who are presumably far more responsible for their actions) has been abolished in most civilized regions of the globe (except for the ultimate form, capital punishment) but has apparently nowhere been abolished for children. In most families it appears to begin before the child has learned to talk, and it continues until he is big enough to defend himself against it. In general it is levied without respect to the child's capacity or degree of responsibility and, indeed, usually seems to serve as a substitute for those means of discipline that would cultivate higher degrees of responsibility.

David Susskind remarked recently, "Violence is the last resort of an exhausted mind." Most parents are unaware of any alternative to its use in controlling their children, and society furnishes them little example or instruction in these alternatives. And ironically, those who are most its victims are most likely to perpetuate its practice from generation to generation. At the same time, there is a chronic undercurrent of bad conscience over it, which gives rise to its

vehement advocacy on the one hand while leading to its concealment on the other.

Injuries inflicted under the pretext of punishment are therefore difficult to detect except in the most flagrant cases, such as those that result in death or serious mutilation. Nonetheless, in determining where deliberate injuries leave off and "genuine" accidents begin, much more than is known at present needs to be known about the incidence and prevalence of corporal punishment. Meanwhile, aspiring more modestly, if somehow the frequency of childhood accidents could be associated in future research with only a crude and simple distinction among parents as utilizing corporal punishment at all or not at all, it is possible that some solid clues would be uncovered as to those kinds of injury that more often arise from deliberate parental aggression. This kind of distinction between types of child-rearing practices may well prove more discriminating as an independent variable than such distinctions as permissive-authoritarian.

Once the practice were established of gathering information on the parents as well as on the child in each accident case, as is nowadays done in sophisticated child guidance work, many additional independent variables or characteristics of parents might well be studied. For example, do younger parents have more accidents with their second and younger children than with their first? Again, what kinds? Is there any difference in the protectiveness given by parents who were themselves older or younger siblings or "only" children? Even such simple, demographic information, if fully analyzed, would apparently add substantially to existing knowledge on the roles of parents in childhood accidents. It is cheap and easy and reliable to ascertain, but only as a first step toward fuller data. The time may never come, however, when, even on a sample basis, parents of accident victims are given psychological tests. Meanwhile, if something could also be ascertained through official records about the accident histories

of the parents, in a form that would permit their association with the accidents of their children, some clues might emerge as to whether and how certain types of accidents are transmitted as a cultural pattern from one generation to the next.

From sufficient scrutiny of the associations between parental characteristics and childhood accidents, there should emerge some indications as to what kinds of action might be taken with regard to parents that could potentially alter the frequency of accidents among their children. The easiest and most obvious form of action is, of course, the purely informative kind of action that makes them aware of the existence of hazards in the environment of which they were previously ignorant. Education of this sort probably would make little difference in accident rates. There is such a ceaseless, autonomous flow of such information in the course of normal communication among people at large, hazards and accidents being standard conversation pieces and news-gathering fare, that accidents to children are rarely the result of the ignorance or naivete of their parents.

Apart from overt or disguised aggression, parents, like children, contribute to accidents primarily by the ways in which they deal with known hazards. Training in safer forms of behavior is thus not the imparting of elementary information so much as it is basic re-education, a restructuring of existing patterns of behavior. And here, of course, the ancient question arises as to whether education can be as effective in establishing new patterns of behavior in the later years as in the earlier years. Possibly it can; possibly, as with crime and delinquency, which also reach their peak somewhere around age twenty, the malignancy of parents in causing accidents to their children recedes from early adulthood onward.

To turn from the role of parents in childhood accidents to the role of nonparents is not to turn far. Since few childhood accidents can be attributed to other children, "nonparents" means other adults, and most of these other adults are or have been parents

themselves. They have also been children at an earlier time and, therefore, have embedded in their experience some acquaintance with protective behavior. Certain basic research questions thus arise from considering why and how it is that all adults do not exercise the same degree of protectiveness toward other children as they exercise toward their own—however much or little that may be.

The first and most obvious hypothesis might be that some have had no children of their own; the second, that they are hostile or uncaring toward their own; the third, that they take great risks with their own. (Classification of these other adults would seem an elementary step in research, although it probably has not been done.) After excluding all such categories, however, there will still remain a certain fraction of parents who are quite affectionate and protective toward their own children but hostile or uncaring toward other children. It is by studying these that the influence of institutional factors in designating the children of various out-groups as of less importance than the children of the in-group comes again into view. Even given the maldistribution of wealth, with which safety can be to some degree purchased, there is an additional influence on the differential distribution of childhood accidents arising from the fact that some children are less valued and therefore less protected by other adults than these other adults protect their own children.

The most overt evidence of this differential in protectiveness is the visible difference in police and fire protection given various neighborhoods of a city, but the workings of social stratification are equally visible on playgrounds, in schools, and especially on the streets. Consider the opposition which arises to every public move to provide protected play space for children whose parents cannot provide it. Or, for ease in enumerating the organized groups which represent the antichild interest in every community, the researcher may simply list those which come forth more

regularly to oppose school bond issues. It may very well be that a greater contribution would be made to reducing childhood accidents by altering the tax laws than by any program of safety education imaginable.

If it can be established that there is a positive correlation between the affection of parents for children and the protectiveness they exhibit, another large institutional matter also looms into view, where perhaps there is more room for optimism than with respect to achieving a closer approach to civic equality. That is the matter of voluntariness of parenthood. In the past, it appears that more people had unwanted children than is true now, thanks to technical progress in contraception and to diffusion of knowledge and means of contraception. Should this be true, and should the trend continue, and should it also be demonstrated that children wanted in advance receive more affection and protection than those who are unwanted, it would then seem logical to expect that future generations will on the average receive more care than have past generations. Research on planned parenthood might thus make an appreciable contribution to childhood accident research. The question of whether children loved by their parents do in fact have fewer accidents than those who are unloved is a very open one, however, and moves into the social psychology of the self.

INDIVIDUAL FACTORS

In trying to explain individual differences in behavior, refuge is too often taken in the concept of personality before the social factors involved have been fully explored. The concept of accident proneness appears to be a particular version of this tendency to overpsychologize problems of explaining behavior. Only when all the confounding influences of differential exposure to hazards, differential rates of accidents of various types at each age level, and differential distribution of parental and civic protection have been fully taken into account would it be logical to designate one person as more accident prone than another. And even if

it were possible to isolate some individuals who were demonstrably more accident prone than others, such individual differences might still be accounted for by the differential distribution of social influences other than hazards, age status, and protection. Statistically, not many social factors need to be taken into account simultaneously before the number of individuals subject to any specific combination of these is reduced to a very small number, such as one.

Perhaps the most illuminating analogy to accident behavior in children in this respect is delinquent behavior. Under what appear at first glance to be similar social circumstances, two boys in the same family may turn out quite differently, one engaging in criminal acts while the other abides by conventional rules of moral behavior. Without venturing into the controversy that still continues between sociologists and psychiatrists, it does appear likely that any strategy for prevention offers more hope to the degree that it employs generalized social controls rather than resorting to individual therapy of variable efficacy. Social science best serves social policy and practice when it performs its obligation to generalize.

At the level of the individual self, therefore, one may begin to seek generalization by starting with the concept of the social self. In an article in *Sociometry*, Morton Deutsch establishes experimentally that there are substantial differences between the behavior of people who like themselves and people who do not. The basic hypothesis appears to hold much promise for childhood accident research—at least for accidents among children old enough to possess a self which they like or dislike as an object.

The normal social environment of every individual from birth onward consists of persons who ply him with a steady rain of admonitions to take care of himself, and who reinforce these with overt actions of protection. Even hostile parents tend to express their hostility in isolated incidents, while habitually exhibiting the same standardized responses of averting injury to themselves and others.