

HIGH-SPEED PURSUIT

The Offenders' Perspective

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Precious little research on law violators who fled from the police has previously been conducted or reported. The only research findings available were generated from official records and included limited descriptive characteristics. These data from police records were based on the pursuing officers' reports and lacked information from suspects who had escaped. This neglect of the suspects' perspective of pursuit limited our understanding of pursuit as a police tactic. This article explored the law violators' perspective and added their attitudes and beliefs into the knowledge base concerning pursuit.

Pursuit driving has remained a hotly debated police tactic. Previous research on pursuit concentrated on official reports of pursuits and interviews with officers. In recent years, there has been an

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increasing amount of information gathered from these sources. This literature included estimates that 75% of the pursuits resulted in the capture of a suspect, 40% of the pursuits ended in an accident, 20% of the pursuits resulted in an injury, and 1% terminated with a death (Alpert & Fridell, 1992; Alpert, Kenney, Dunham, Smith, & Cosgrove, 1996; Auten, 1994a, 1994b; Falcone, Wells, & Charles, 1992). The important questions about police pursuit that were generated from the literature were the following: (a) When was a pursuit reasonable to fulfill a law enforcement function, and (b) When should a pursuit be terminated? These questions were important because of risks to public safety created by pursuit driving. The controversy that surrounded pursuit involved the balance between the need to immediately apprehend a suspect and the risk created by the chase. The arguments were based on empirical findings and the differential interpretation of the facts (Falcone, 1994; Hannigan, 1992). There were those who interpreted the data and concluded that the human and financial costs of pursuits were justified by the need to apprehend suspects and the deterrent value to those who might flee (Hannigan, 1992), whereas others placed more value on life than property and believed pursuits must be restricted (Alpert & Fridell, 1992).

There was little or no controversy around the fact that during a pursuit, the fleeing law violator created a serious threat to himself or herself, the public, and the police by not stopping his or her vehicle for an officer who displayed emergency lights and/or siren (Morris, 1993). The police officer's response to this law violator was at the center of the pursuit controversy, and the actions of the fleeing suspect, the police officer, and the public created an interactive triangle (Alpert & Smith, 1992). Should the officer have focused on pursuing and apprehending the violator, emphasized his or her own safety, or concentrated on the safety of the public and terminated the pursuit? Although there was considerable literature discussing this issue, information on the law violator was deficient. Very little was known about the offenders or suspects who fled and eluded the police. This lack of information forced policy makers to speculate on the reasons why offenders fled the police. Prior research findings from surveys of officers indicated that many believed suspects fled only because they had committed serious offenses (Falcone et al., 1992). The lack of information from the eluders impeded appropriate guidance to policy makers concern-

ing suspects' reaction to emergency lights and/or sirens when they were first turned on or subsequently turned off.

Police officers' actions and attitudes were studied, and a general understanding of their views toward pursuit has been attained. It was the offenders' attitudes and responses to being pursued that needed to be understood to guide policies, training, and supervision. Data from eluders could be instrumental in helping police understand why they did not stop for the police, the decisions they made, and the risks they took to avoid apprehension. Armed with more complete information on suspects, policy makers began to close the knowledge loop of the pursuit interactive triangle. This study explored the characteristics, attitudes, and beliefs of those who had run from the police.

PRIOR RESEARCH ON THOSE WHO ENGAGE THE POLICE IN PURSUITS

The only published material on those who fled the police came from three sources that included the data as part of related research and one police agency that reviewed and reported official records on suspects. It was disappointing that only four data sources were located and that these data were limited to those who were apprehended. Unfortunately, neither of the studies reported comprehensive profiles of the suspects. Each source looked at different variables, which made comparisons awkward and detrimental.

The California Highway Patrol pursuit study reported officers' impressions of the suspects' reasons for avoiding arrest (California Highway Patrol, 1983). Although the data were based on the arresting officers' judgment, they provided an interesting point to begin an inquiry. The most frequent reasons that officers cited for suspects' fleeing were the following:

1. To avoid a DUI-drug arrest,
2. To avoid a citation,
3. To avoid being caught in a stolen vehicle, and
4. To avoid a penal code-related arrest.

Other responses included that the suspect was afraid of the police, disliked the police, or enjoyed the excitement of the chase, and one officer reported that the suspect ran because he was naked.

Alpert and Dunham (1990) recorded traditional demographic variables of suspects who were apprehended in their study of pursuits in south Florida. That study reported that 97% of those who ran were male, the mean age was 23.5 years, and 28% were Anglo, 50% were Black, and 21% were Hispanic.

Brewer and McGrath (1991) reviewed official police files and presented the results of a study of suspects who fled from the police in Adelaide, South Australia. This research included the following profile of those who fled and indicated that suspects were mostly male, were unemployed or working at an unskilled job, and had been drinking. The criminal background of these law violators was extensive but included mostly traffic, registration, and license violations. It was interesting to note that only 5% of those law violators had previous armed offenses (and only an average of .29 convictions). Brewer and McGrath raised several important research questions that related to a fleeing suspect's level of desperation and experience. Their data supported conventional wisdom and suggested that those who fled from serious crimes took more risks than those who attempted to elude for other reasons. Similarly, those who escaped were likely to be more experienced at running from the police than those who were caught.

In 1995, the King County, Washington Police reviewed a sample of the criminal histories of those law violators who ran from officers during the years 1992 to 1995 and were immediately apprehended (Black, 1995). In a two-page memorandum, the criminal records of 110 suspects were summarized. "Only 11.8% of arrested suspects had fewer than three prior arrests, whereas 67.3% had more than three felony arrests. . . . The profile that emerges is that those arrested in pursuits are hard core criminals" (Black, 1995, p. 1) Unfortunately, these data did not differentiate property crimes from violent crimes, but they did contradict the data reported in the South Australia study and raised the need to conduct further research about the criminal background of those who fled the police.

Although the previous research findings revealed some important, albeit conflicting information, they were limited to a small set of

variables that described some aspect(s) of suspects who had been apprehended. The present study advanced our knowledge about those who eluded and attempted to elude the police and contributed attitudinal information on both groups. Our data explored the characteristics, attitudes, and beliefs of those who ran from the police and included those who had been apprehended as well as those who had escaped.

METHOD

PARTICIPANTS

As part of a larger study (Alpert et al., 1996), jail inmates from three sites were interviewed concerning any recent experience of being in a vehicular pursuit. Interviews were conducted in Omaha (Nebraska), Miami (Florida), and Lexington and Richland Counties (South Carolina). In all three sites, data were collected from arrested individuals who admitted having fled from the police within a year before the date of the interview. As in any retrospective measurement, there is a possibility of a subject failing to remember all details of an event, and it is possible that a subject could reconstruct the event differently than it actually occurred. These potential problems should be considered when interpreting the findings.

Omaha. To gain access to this sample of respondents, interviewers from the Omaha Drug Use Forecasting (DUF) project included a brief suspect questionnaire with that project's ongoing jail survey. Conducted quarterly (February, May, August, and November), the DUF interviewers contacted all persons arrested during the survey month (n estimated at 100) for a voluntary interview about drug use, drug involvement, and crime. This project's pursuit and excessive force questionnaire was added at the conclusion of the DUF instrument.

It is interesting that during the first and second administration, overall response rates for both DUF and the pursuit surveys were good. During the third administration, however, DUF staff reported some reduction in the number of suspects who acknowledged having fled.

This pattern continued during the final period. It was interesting to note that this change in suspect responses (August) corresponded closely to changes in the police division's policy on pursuits (July). That change was a revision of earlier procedures that permitted greater discretion for officers in their response to suspects who fled for nonviolent crimes, misdemeanors, and even traffic violations. In all, 38 individuals completed surveys in 1994.

Miami. As in Omaha, members of the Miami DUF project were asked to administer the suspect interview. The DUF project conducted quarterly interviews of a sample of individuals arrested and detained at the Dade County jail. These interviews were conducted for 15 consecutive days every 4 months. During 1994, all arrestees were asked if they attempted to elude the police during the past 12 months while they were driving a vehicle, and suspects who fled the police were interviewed at the conclusion of the DUF interview. All suspects who admitted fleeing from the police consented to participate in the study, and a total of 74 completed surveys were collected in Miami.

South Carolina. Jail inmates in Lexington and Richland Counties (in metropolitan Columbia area) were interviewed. The inmates were visited in their cells and asked if they would cooperate and answer some questions. The initial screening question was, "Have you fled from the police in your vehicle during the past 12 months?" The interviews were held in January and February of 1994 and resulted in 32 completed surveys.

A series of logistic regression analyses discriminating between pairs of cities revealed almost no differences among the cities. There were no differences between Omaha and Columbia and only minor differences surfaced between Miami and the other two cities, as shown in Table 1. In any case, none of the differences involved dependent variables (risk and escape), and only one independent variable was in the risk model (punish), and only one was in the caught/escape model (gender). Furthermore, when city was included in the logistic regression analyses for the two models, it was not significant. Based on these analyses, it was determined that combining the sites for further analysis would be appropriate.

TABLE 1: Variables Showing Significant Differences Among Cities

<i>Miami-Columbia</i>	<i>Miami-Omaha</i>	<i>Columbia-Omaha</i>
Drivers license suspended/revoked	Drivers license suspended/revoked	Ran because possessed drugs
Thought about punishment	Thought about punishment	
Ran if police chased aggressively	Ran because car stolen	
Thought would get caught	Previously chased by police	
Gender of suspect		

RESULTS

The findings will be presented in four categories. First, the suspects’ profiles are provided. Second, the pursuit outcome events are reported. Third, reasons given by suspects for not stopping for police are considered, and reported fourth is what the suspects were thinking during the pursuit. In all cases, these data represented attitudes and beliefs of suspects who were apprehended and those who escaped.

SUSPECT PROFILE

The suspects who ran from the police averaged 26.2 years of age, and 94% were male. When grouped by race, 57% were White, 37% Black, and 7% Hispanic. A cross-tabular analysis of the demographic differences between those who were apprehended and those who escaped revealed nonsignificant chi-square statistics. The age difference between these two groups was 1.9 years; the mean age of escapees was 27.4, and the mean age of those apprehended was 25.5. One hundred thirty-seven males reported being involved in pursuit, and 86 (63%) were apprehended whereas 49 (36%) escaped. In two cases, the data were not available. Nine women were involved in pursuits. Eight (89%) of the women were apprehended and 1 (11%) escaped. Eighty-three Whites were involved in pursuits, 52 (63%) were caught, and 30 (36%) escaped. Fifty-three Blacks were involved in pursuits, 36 (68%) were caught, and 16 (30%) escaped. Ten Hispanics (all from Miami) were involved in pursuits, 6 (60%) were

apprehended, and 4 (40%) escaped. There were few demographic differences between those who were apprehended and those who escaped, but the differences between these groups surfaced in the outcome measures.

PURSUIT OUTCOMES

In the present study, there were 146 chases, 30% of which were terminated when the suspects stopped and either ran on foot or gave up. The data presented in Table 2 report how the pursuits ended for both those who were apprehended and those who escaped. Thirty percent of the pursuits ended because the suspect's vehicle crashed. In 25% of the chases, the suspect outran the police and got away, at least temporarily. The chases most likely to end with the suspect getting caught were the ones the police concluded themselves. The next group most likely to get caught were suspects who crashed.

Fifty-four (57%) of the suspects apprehended reported to interviewers that the police had beaten them at the conclusion of the chase. Nonetheless, only 13 (24%) of those "beaten" filed an official report of the incident, even though most said they had injuries as a result of the beating. Fifteen, in fact, described injuries that were serious, and one said his was life threatened. Twenty-two said they received treatment for their injuries. It was interesting to note that nearly 42% of the suspects said they were impaired with alcohol or drugs at the time of the chase.

WHY SUSPECTS FLED POLICE

Suspects were asked why they initially ran from the police instead of stopping the car. The information displayed in Table 3 demonstrates that suspects most frequently stated they fled because they were driving a stolen car (32%). Twenty-seven percent said they were driving with a suspended driver's license, and another 27% stated they did not stop because they were running from a crime scene or running to avoid an arrest. Twenty-one percent reported they did not want to face the police as they were driving under the influence of drugs or alcohol, and another 21% said they were afraid of being beaten.

TABLE 2: How Chase Ended by Suspect Getting Caught or Escaping

<i>How Chase Was Terminated</i>	<i>Escaped n (%)</i>	<i>Caught n (%)</i>	<i>Total n (%)</i>
Suspect terminated	10 (23)	33 (77)	43 (30)
Outran police	31 (86)	5 (14)	36 (25)
Police concluded	1 (7)	13 (93)	14 (10)
Crashed	8 (19)	35 (81)	43 (30)
Other		8(100)	8 (5)
Total	50 (35)	94 (65)	144

NOTE: Sign = .000.

WHAT SUSPECTS WERE THINKING DURING THE CHASE

To get an idea of the mind-set of the those who fled from the police, the suspects were asked what they were thinking during the chase. This information is reported in Table 4. The first three questions assessed whether the suspect would have slowed down or stopped if not chased aggressively by the police. In this situation, an aggressive chase was defined as one that involved high risks and evasive maneuvers. When asked what it would have taken for them to slow down, about 75% said they would have done so only when they felt safe. The suspects reported, on average, that to feel safe, they had to be free from the police show of authority by emergency lights or siren for approximately 2 blocks (2.2) in town, between 2 and 2.5 miles on the highway (2.3 miles), and 2.5 miles on a freeway.

IDENTIFYING HIGH-RISK SUSPECTS

The next stage of the analysis was to determine if some types of suspects were more willing to take extreme risks than others to escape the police. For example, it was possible that certain characteristics of the suspect (i.e., age, ethnicity, being previously chased or caught by the police in other chases, and being under the influence of drugs or alcohol during the chase) may have been related to a willingness to take extreme risks to get away from the police. The suspects were asked three questions that indicated a willingness to take a greater or lesser degree of risk in fleeing the police:

TABLE 3: Reasons Suspects Initially Ran From Police

<i>Reason</i>	<i>n (%)</i>
Driving a stolen car	46 (32)
Suspended driver's license	40 (27)
Running from crime scene or to avoid an arrest	39 (27)
Under the influence	31 (21)
Afraid of being beaten	30 (21)
Scared—to avoid embarrassment	29 (20)
Possession of drugs	25 (17)
Miscellaneous reasons	19 (13)
Possession of a weapon	16 (11)
Driving car without permission	3 (2)

NOTE: Suspects could list more than one reason, resulting in a total higher than the number of suspects.

1. "Once the police started chasing you, would you ever have stopped on your own?" Answering "yes" to this question may have indicated a reluctance on the part of the suspect to continue to flee and a willingness to stop on his own if the circumstances were right.
2. "Would you have run from the police if you had known they would chase you aggressively until you stopped or crashed?" Answering "no" to this question indicated an unwillingness to be involved in an aggressive and dangerous chase.
3. "Were you willing to run at all costs?" This question directly asked the suspect if they were prepared to take great risks in fleeing the police.

A factor analysis of the responses to these three questions concerning risk showed that the last question—"Were you willing to run at all costs?"—accounted for the variance in the other two. As a result, only the last question was used in further analyses examining the relative influence of various factors on risk taking.

A logistical regression analysis revealed six variables that were strongly related to the suspects' willingness to take extreme risks to elude the police. The coefficients and odd ratios computed by the logistical regression are reported in Table 5. The model (including the six variables) was able to correctly classify 77% of the suspects as either willing or unwilling to take extreme risks to elude the police. Because the risk variable was dichotomous, this model improved prediction 22 percentage points above chance.

TABLE 4: What Suspects Were Thinking During the Chase

<i>Reason</i>	<i>N (%)</i>
Would have stopped on their own	85 (58)
Would have run knowing police would chase aggressively until caught	98 (67)
Were willing to run at all costs	78 (53)
Were concerned for own safety	103 (71)
Were concerned for the safety of others	91 (63)
Thought they would get caught	50 (35)
Thought about the punishment if caught	85 (59)

NOTE: Suspects could list more than one reason, resulting in a total higher than the number of suspects.

The logistic regression analysis calculated odds ratios from the beta coefficients. The models are estimated by using maximum likelihood estimates (MLE) and result in a single vector of beta coefficients and a constant. The coefficients in the dichotomous case can be interpreted as the change in the log odds of taking extreme risks to elude the police by suspects for each unit change on the independent variable of interest. Overall, results indicated that compared to a base of suspects who were not previously caught by the police, suspects who were previously chased and caught were nearly seven times more likely to be willing to take extreme risks to escape apprehension. This was a very strong relationship that indicated that experience with police in previous pursuits acted as an incentive to try all the harder to escape and did not act as a deterrent as one might expect.

Suspects who said that during the chase they thought about the punishment they might receive, if caught, were nearly five times more likely to take extreme risks to elude the police than suspects who did not think about punishments. Again, rather than providing a deterrent effect, thinking about the punishment apparently acted as an incentive to try harder to escape.

Suspects who were concerned about their own safety during the chase were nearly two times more likely to take extreme risks while fleeing the police than suspects who were not concerned for their own safety. Our initial interest in the safety questions was in reference to the dangers of high-speed chases to the driver and passengers. Under this interpretation of safety, the more concerned suspects were for their safety, the less reckless they were and the less risk they were willing

TABLE 5: Logistic Regression for Determinants of Suspects' Willingness to Take Extreme Risks to Elude the Police

<i>Variable</i>	<i>Coefficient</i>	<i>Odds Ratio</i>
Previously caught by police	2.07	7.95**
Thought about punishment	1.78	5.95***
Concerned for own safety	1.04	2.83***
Driving under the influence	1.02	2.77*
Concerned for others safety	0.82	2.26**
Fleeing to avoid arrest	-0.59	0.56***

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

to take to escape the police. The suspects' interviews demonstrated they were more concerned for their safety after they got caught than during the chase. Their concern was with the possibility of being beaten and the consequences of going to jail. Concern for safety resulted in the suspects' being even more anxious to escape apprehension and to avoid a possible beating.

Suspects who stated they initially ran from the police because they were high on alcohol or drugs were one and three fourths times more likely to take extreme risks to elude the police than suspects not initially fleeing for that reason. Being under the influence of alcohol or drugs increased the suspect's risk taking.

COMPARING SUSPECTS CAUGHT WITH ESCAPEES

One of the problems in the pursuit literature was that the information on pursuits had been customarily obtained from police files and interviews with officers. Because of this methodological shortcoming, there was almost no information on suspects who escaped the police. In most studies, approximately 25% of the suspects who fled escaped immediate apprehension. This left unanswered the question of whether escapees and suspects who were caught and arrested had different characteristics or attitudes. In the present study, 35% of those who had attempted to elude the police escaped. The fact that there was a higher percentage of escapees in our study (10 to 15 percentage points higher than studies using police data) indicated either that the police did not always fill out reports when suspects escaped (Payne &

TABLE 6: Logistic Regression for Determinants of Being Caught by the Police

<i>Variable</i>	<i>Coefficient</i>	<i>Odds Ratio</i>
Fleeing because afraid of being beaten by police	0.39	1.48*
Gender of suspect	-0.85	0.43*
Fleeing because under the influence of alcohol or drugs	-0.67	0.51**

* $p < .07$. ** $p < .01$.

Corley, 1994), or that officers and suspects had different interpretations about what constituted a pursuit. In any case, a comparison of those who escaped to those caught allowed us to find out what may have been missing in the other studies.

A logistical regression analysis was used to identify which variables discriminated between escapees and arrestees. The results are reported in Table 6 and indicate that only three variables differed when comparing escapees with arrestees. The model, using the three variables, was able to correctly classify nearly 70% of the suspects as either escapees or arrestees. This prediction was 20 percentage points above chance.

Suspects who said they initially ran because they were afraid of being beaten by the police were 48% more likely to be caught by the police than suspects not initially fleeing for this reason. Male suspects were 57% less likely to be caught by the police than female suspects. The criteria for significance was relaxed slightly (.07) for this variable because so few female suspects were in the sample. However, this association was important and should have been reported, although it needed further examination with a larger sample of female offenders. Finally, suspects who stated they initially ran from the police because they were under the influence of alcohol or drugs were 49% less likely to be caught than those who did not initially run for this reason.

DISCUSSION

This study represented the first systematic research on suspects who had been both successful and unsuccessful in their attempts to elude the police in vehicular pursuits. In addition to our goal of identifying personal characteristics and attitudes of those who fled, the suspects

we interviewed reported several important observations about their role as one of the corners of the pursuit interactive triangle.

First, the number of pursuits may have been greater than the number reported in official police records. In other words, there may have existed a dark figure of pursuits that was created by nonreporting of the incidents by police when the suspect was not apprehended. However, this difference may also have reflected the *trigger point*, or the point at which an agency required an officer to define a pursuit as such and to officially report a pursuit.

Second, several issues raised by Brewer and McGrath (1991) were addressed by the present research and should be mentioned. From their research, Brewer and McGrath hypothesized that escapees were more desperate or were involved in more serious offenses than those who were arrested. Our data failed to support this contention. Those running because of a crime were no more likely to escape than those running for other reasons. Escapees were no more likely to have thought about the punishment during the chase when compared to those apprehended by the police. Furthermore, escapees were no more likely than those apprehended to “be willing to run at all costs.” Brewer and McGrath also hypothesized that escapees would have been more practiced or have had more experience at fleeing the police than offenders who were apprehended. Our data failed to support this hypothesis as well. The more-practiced fugitives, as measured by involvement in previous chases, were no more likely to escape than those with chase experience. It should be emphasized that escaping or getting caught depended on numerous variables, many of which were out of the offender’s control. Certainly, many of these factors—such as traffic density, area of pursuit, weather and other environmental conditions, pursuing officers’ training, background and characteristics, supervisory strategy, and pursuit policies—all affected the process and outcome of pursuit. For example, it was possible that the police pursued more vigorously suspects who showed a willingness to be more reckless or desperate because they evaluated them as being more dangerous to the public.

Although our data suggested that the characteristics and attitudes of the suspects did not predict escaping or being apprehended by the police, several variables had a strong influence on the willingness of suspects to take extreme risks to escape. And it was risk taking that

was at the very center of concern over pursuits, because risk taking increased the likelihood of a negative outcome of a pursuit. These negative outcomes, including wrecks, injuries, and deaths, led many police officials and interested citizens to wonder whether the police should chase suspects at all. Our risk model was very strong, predicting 77% of the risk takers and producing explanatory factors that significantly increased the odds of taking risks. Previous experience of being chased by the police, thinking about the potential punishment during the chase, concern for one's own safety and the safety of others, and driving under the influence of alcohol or drugs all increased the odds of risk taking to various degrees. It was interesting that these factors greatly affected risk taking but did not necessarily affect whether the suspects got caught or escaped. Getting caught seemed to have more to do with what the police did, which may have affected what the suspect thought or did. Additionally, a concern for one's safety seemed to give a suspect a greater incentive to take extreme risks to escape apprehension as opposed to acting as a deterrent to flee.

The police, the suspect, and the public constituted an interactive triangle of pursuit. The actions of the police have been controlled by policy, training, and supervision; however, the behavior of the suspect has been more difficult to influence. The findings from the present research, which included the attitudes and beliefs of the fleeing suspects, could have helped direct the police officers' responses to the pursuit environment. Armed with information about likely actions of the suspect, the pursuing officer could possibly have determined his or her actions intelligently, based on empirical data rather than speculation.

Understanding the interaction patterns between officers and suspects becomes central to controlling the negative outcomes of pursuits. We know that the pursuing officer's actions may have influenced those of the suspect. If the officer continued to pursue, it was likely that the suspect would have continued to flee. However, if the officer terminated his chase by turning off his emergency equipment and removing his show of authority, the suspect would also be likely to slow down in a short distance and reduce the risk to the public. Perhaps the officer's most powerful tool to protect public safety would be to turn off his emergency equipment! The results of the present research contributed to understanding this process of action and reaction by

focusing on a neglected area of research: the suspect's attitudes and thought processes during the chase.

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