

## Chapter 10

### COLLECTIVE ACTION, RATIONAL CHOICE, AND GANG DELINQUENCY:

#### APPRECIATING SHORT AND STRODTBECK ([1965] 1974)

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#### **Abstract**

This chapter revisits Short and Strodbeck's ([1965] 1974) classic work, *Group Process and Gang Delinquency*. The book has been recognized as a classic for developing and applying the group process perspective to delinquent gangs. There is, however, a richer set of theoretical ideas and a novel mixed methods research design that have largely gone unrecognized. Short and Strodbeck began by testing subcultural theories of gangs using quantitative data, and finding little support, they then used qualitative data to develop a group process perspective rooted in structural disadvantage, gang organization, and violent situations. They treated the situation as a unit of analysis in analyzing gang violence as collective action. Finally, they developed an innovative subjective expected utility explanation of decisions to join a gang fight that presaged future work on rational choice theories of crime and Olson's (1965) theory of collective action. We conclude that a greater appreciation of these contributions will stimulate important future research in criminology.

## Introduction

In 1958, a small group of practitioners and scholars met at Chicago's YMCA to (1) discuss the Y's new detached social worker program for intervening in delinquent gangs and (2) review the state of knowledge of juvenile delinquency (Short and Strodbeck [1965] 1974). It was led by Fred Strodbeck, a social psychologist representing the University of Chicago's Sociology Department, and James Short, Jr., a recent Chicago PhD specializing in criminology. At the workshop, Albert Cohen summarized his research on delinquent boys, Lloyd Ohlin discussed his delinquency and opportunity research, and Walter Miller presented his lower-class culture argument. From this meeting emerged a research project that would use detached social workers to "open a window on the gangs being worked with" and collect observational data to test the theoretical ideas presented at the meeting. Taking the lead, Short and Strodbeck wrote a grant application to NIMH and, after receiving funding, embarked on an ambitious project—termed the "Youth Studies Program"—to use multiple methods to collect and analyze data on gangs in Chicago.<sup>1</sup> The results were published in over a dozen research articles and culminated with the publication of Short and Strodbeck's ([1965] 1974) monograph, *Group Process and Gang Delinquency*, which has become a criminological classic.<sup>2</sup>

Despite being considered a classic, *Group Process and Gang Delinquency*, and the research that led to it, has been underappreciated in the criminological literature. Although the group process perspective has become an important perspective in criminology (see Chapter 7 in this volume), particularly among qualitative gang scholars, the entirety of Short and Strodbeck's theoretical

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<sup>1</sup> For details of the origin and success of the Youth Studies Program, see Short and Strodbeck ([1965] 1974) and Short (2018, Chapter 1 in this volume). Years later, Jim returned to analyses of these data in a series of articles with Lorine Hughes (e.g., Hughes and Short 2005).

<sup>2</sup> The book alone, not counting the many journal articles published from the project, has been cited more than 1,200 times according to Google Scholar.

perspective, which includes a theory of rational choice and collective gang delinquency, has been largely overlooked.

In this chapter, we revisit the work of Short, Strodtbeck, and their collaborators, and argue for a greater appreciation of their work. Viewed in the light of contemporary developments in criminology, their research was, in many ways, ahead of its time. In addition to developing their innovative theory of group process and gang delinquency, and creatively analyzing the immediate situation as a unit of analysis, they provided an early exemplary execution of a mixed-method research design and anticipated future developments in expected utility models of crime, limited rationality arguments, and rational choice theories of collective behavior.

To develop this argument, we first review the design of the Youth Studies Program and discuss the general theoretical framework underlying the research project. Second, we present, in detail, the group process framework, including the role of status concerns, the situation as a unit of analysis, the definition of aleatory process, and the subjective expected utility model. Third, we show how Short and Strodtbeck's theory and research fits within contemporary research on rational choice and crime and how their model had parallels with the contemporaneous development of Mancur Olson's prominent economic theory of collective action.

## **Research Design and Theoretical Framework**

### *Youth Studies Program*

The Youth Studies Program targeted clients of the Program for Detached Workers of the YMCA of Metropolitan Chicago over a three-year period. The investigators collected observational data on 16 gangs ranging in size from 16-68 members, for a total of 598 gang boys. As a control group,

they used 282 non-gang boys from 14 groups (Short and Strodtbeck [1965] 1974:14-15). In addition to observational data, they collected narrative data from bi-weekly interviews of detached workers, as well as data from self-report surveys, interviews, and assessments of personality and values.

### *General Theoretical Framework*

At a broad macro level, Short and Strodtbeck assumed the problems confronted by gang boys stemmed from disadvantages rooted in social structure. Inner-city boys, they maintained, are unlikely to succeed in the conventional realms of education and the labor market, which leads them to the streets in search of a sense of social status, respect, and a sense of self in the eyes of peers. This assumption is consistent with the classic work of Cohen (1955), Cloward and Ohlin (1960), Miller (1958), and others at the time, who also specified specific subcultural theories as the causal mechanism by which structural disadvantage produced gang delinquency. Short and Strodtbeck used their quantitative survey data to test these subcultural theories of gangs. Their results were unsupportive. They found that gang members did not rate illegitimate images (e.g., pimp, fence) as more prestigious than middle-class images as suggested by Cohen (1955), nor did they emphasize the value of smartness as suggested by Miller (1958), nor did they orient to economic rewards or participate in a distinct criminal (pecuniary) subculture as suggested by Cloward and Ohlin (1960). Instead, gang members appeared to be oriented toward status rewards from within their immediate group. While Short and Strodtbeck found some evidence of retreatist and conflict subcultures, they did not find evidence of distinct criminal subcultures. Thus, subcultures did not conform to the ideal types specified by Cloward and Ohlin or Cohen and Short (1958), but rather varied both within and between gangs (Short 1963).

These negative results led Short and Strodbeck to consider alternate causal mechanisms to explain why disadvantaged inner-city youth turn to gangs and gang delinquency. Thus, for example, they argued that while parent-child relations, family processes, and schooling are important for participation in gangs, they are unable, by themselves, to explain why gang boys engage in aggressive delinquent behavior. Using their ethnographic and interview data, they developed a truly innovative micro-level explanation operating within the immediate situation of potential gang delinquency. This explanation involved group processes—including interactions among group members, aleatory risks, collective action, and rational decision-making.

### **Group Process, Aleatory Risk, and Gang Delinquency**

In this section, we will offer an interpretation of Short and Strodbeck's theoretical contribution that highlights specific issues central to contemporary criminology, including structural disadvantage of inner-city youth, social status as a key concept, selectivity into groups and situations, gang organization and group process, the situation as a unit of analysis, rational choice and expected utility, and crime as collective action.

#### *Structural Disadvantage and Social Status*

Short and Strodbeck argue that delinquent gangs emerge from a context of structurally disadvantaged neighborhoods, a thesis that was fully-developed later by Wilson (1987) and applied to race and crime by Sampson and Wilson (1995). Accordingly, broad structural conditions—producing community deterioration, poverty, disadvantage, crime, and drug use—dramatically reduces the likelihood that inner-city youth will succeed in conventional realms, including family life, education, and labor markets. Whereas affluent youth are likely to become tied into conventional institutional contexts distant from delinquent gangs and violent situations,

disadvantaged youth are likely to remain estranged from conventional settings and thereby subject to the lure of the streets. They are less likely to gain social status and a positive sense of self within educational and labor market settings. Consequently, disadvantaged youth become preoccupied with social status and are more likely to seek a sense of self-worth, respect, and esteem from other contexts, including the streets (e.g., Anderson 1999; Bourgois 1994; Horowitz 1983). Disadvantage interacts with the life-course stage of male adolescence: All adolescent males face acute concerns about self-esteem, respect, and a sense of masculinity, but such concerns are particularly acute for disadvantaged youth during adolescence, which is the age of heightened risk of selection into gangs. Such youth become consumed with what Goffman (1959) termed “impression management” and Jim (Short 1964:120) called “status management”:

Status management may be defined as behavior oriented toward the achievement of desired social positions or states of being, or the protection of desired social positions or states of being already achieved.

Much of the behavior of inner-city disadvantaged youth in general, and gang members in particular, becomes intelligible when viewed in the context of a hyper-concern with status and respect (see Chapter 9 in this volume). Anderson (1999) has provided the most vivid account of a normative structure on the streets—termed the “code of the street”—that governs interpersonal violence by allocating respect and status to those who abide by the “code.” Such a normative system provides inner-city disadvantaged youth with an avenue for gaining respect, supplies them with a way of resolving disputes on their own without recourse to the legal system, and regulates interpersonal interactions on the street. Short and Strodtbeck show how gangs are embedded in such a normative system, which touches most realms of everyday life. For example, they found

that local norms surrounding sexual activity—rewarding prolific heterosexual activity with high prestige—produces frequent sexual activity with little regard for potential pregnancies.

### *Selection into Gangs and Potentially Violent Situations*

The search for respect increases the likelihood that disadvantaged youth select into gangs, presumably through a rudimentary “matching process,” in which a youth sees a gang as a group providing social support and a sense of self as a gang member, and the gang sees promising youth as possessing the requisite comportment, toughness, physical prowess, and loyalty to be an effective gang member. Again, structural disadvantage plays an important role in increasing the likelihood of this selection process. Gangs draw members largely from their local neighborhoods, which tend to be disadvantaged inner-city areas. Most disadvantaged adolescent youth, alienated from schools and jobs, are searching for a sense of belonging. By contrast, those few local youth who manage to succeed in school and the labor market will be less motivated to seek out gang membership (Short and Strodtbeck [1965] 1974).

Structural disadvantage is not only related to gang membership, but also related to selection into violent situations. Based on their ethnographic evidence, Short and Strodtbeck described elements of situations favorable to violence common in lower-class communities: (1) high incidence of guns owned or borrowed by boys, including parents enjoining sons to keep a gun for protection; (2) milling on street corners with other similar boys; (3) emphasis on toughness and physical violence as a means of settling disputes; (4) consumption of alcohol in public; and (5) norms calling for distrust of outsiders, exploitation of situations to personal advantage, and assumptions that others are similarly motivated (Short 1963:21). Each of these elements dramatically increases the likelihood that violence will ensue. Structural disadvantage, then, increases the likelihood of

selecting into a violent situation directly through neighborhood proximity and indirectly through membership in a gang, which selects violent situations through group processes.

### *Group Process and Situational Explanation*

Situational explanations have long been recognized in criminology. In his presentation of differential association theory, Sutherland (1947:5) first distinguished between a “genetic explanation,” which focuses on the “life experience of the person,” and a “situational explanation,” a mechanistic explanation focusing on “factors operating at the moment of the occurrence of the phenomenon.” He noted that “both are desirable,” which implicates the “person-situation complex,” whereby “the situation that is important is the situation as defined by the person.” Although he argued that a situational explanation is “probably superior as an explanation of criminal behavior,” Sutherland went on to specify a developmental explanation of crime. Later, Luckenbill (1977) showed that many homicides are the result of a situated transaction in which actors seek to save face, Birkbeck and LaFree (1991) reviewed the situational analysis of crime, Clarke and Cornish (1985) developed a situational theory of crime based on rational choice, Katz (1988) analyzed how crime is seduced by situations, and Wikström (2004) developed a “situational action theory,” which emphasized the situation as a unit of analysis.

Moreover, while selection into situations is based on individual characteristics—what Short and Strodtbeck ([1965] 1975) capture with the generic term “personality”—it largely stems from structural disadvantage. Once selected, the situation takes on a dynamic of its own, which may interact with individual “personality.” Note how this echoes Sutherland’s “person-situation complex.” Their systematic analysis of the internal dynamics of situations constitutes a major innovation to criminology.



Short and Strodtbeck ([1965] 1974:255) began their situational analysis by recognizing two basic assumptions made by George Herbert Mead (1934) and other pragmatists: (1) In a problematic situation, individuals' selective perceptions narrow the "range of alternatives which they consider"; and (2) Decisions are rooted in ongoing social processes of "adjustments to elements in the situation," rather than "frozen alternatives locked into discrete units." In contrast to popular conceptions of gang delinquency as hedonistic impulsive acts with little forethought (e.g., Cohen 1955), Short and Strodtbeck argued that gang delinquency often involves group processes and—at least at some level—a rational calculation of costs and benefits associated with criminal behavior. Their rational choice model, however, differed dramatically from the classical theories of Beccaria and Bentham by emphasizing the interactions between structural disadvantage, individual personality, group processes, and the unfolding dynamics of situations.

In analyzing situations of violence among gangs, Short and Strodtbeck emphasized the role of group processes (or group dynamics) for fostering gang violence. This is perhaps the project's most memorable and highly-cited concept, often referred to as the "group process perspective" on gang delinquency. Here they were strongly influenced by William Foote Whyte's (1943) classic ethnography of street corner groups, which described group processes operating on street corners. We can think of group processes having two components: (1) gang structure, including leadership structure, normative structure, informal roles, and core versus peripheral members; and (2) a gang dynamic, which is conditioned in part by group structure but also takes on a life of its own due to

the unfolding direction the situation takes. We include group structure to emphasize that group processes not only enact structures but also reproduce and, at times, transform those structures.<sup>3</sup>

To analyze group processes operating in situations, Short and Strodtbeck specify the relevant structural and organizational features of the gang, which constrain the direction of group dynamics. Gangs tend to be informal groups that share a common space and activities surrounding hanging out on a neighborhood street corner. Activities are rarely highly-organized. Gangs typically have a set of core members who are strongly attached to the gang and tend to remain with the gang for longer durations than those at the periphery. In general, gang membership is not fixed, but tends to be fluid: members—particularly peripheral members—often move in and out of the gang. Gangs usually have a gang leader who is often a good fighter, conciliatory, and “cool,” particularly under stress. In some gangs there may be other informal roles arising from the requirements of their activities, such as a banker to hold cash from drug deals.

The organization and structure of the gang constrains the actions of members. For example, because of the fluid membership of gangs, gang leaders are unlikely to use punitive sanctions such as extreme aggression to control members, who may simply leave the gang. Instead, they use positive informal sanctions, such as approval and increased recognition to motivate members (Short and Strodtbeck [1965] 1974:196).

### *Aleatory Processes and Aleatory Risk*

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<sup>3</sup> This interpretation is consistent with Giddens' (1984) notion of the duality of social structure (see also Sewell 1992). Of course, we could separate structure from process for *analytical* purposes, but that would give the impression that process is actually separable from structure. In virtually every example of their analysis of situational group process, Short and Strodtbeck ([1965] 1974) refer to group structure.

One of the most misunderstood—and important—concepts in criminology is Short and Strodtbeck's ([1965] 1974) use of the term "aleatory" in the concepts of "aleatory process" and "aleatory risk." For example, Strodtbeck and Short (1964:127) sharply criticized Pfautz (1961) for assuming aleatory processes emphasize the "contingent, episodic and non-routinized aspects" of collective behavior and are "beyond understanding or prediction" (see also Short and Strodtbeck [1965] 1974:248). We interpret their use of the term "aleatory" to correspond to the conventional definition as a process dependent on uncertain events that have a random, stochastic, or chance component. An aleatory risk from the standpoint of the actor is an uncertain consequence of unknown probability that is not under the actor's direct control. Events that have a random component are commonplace in contemporary social science and social statistics, but criminologists in the early 1960s often dismissed the role of chance factors at the level of the individual (e.g., Sutherland and Cressey 1960). Thus, an emphasis on stochastic processes went against the prevailing intellectual grain in criminology.<sup>4</sup>

The concept of aleatory processes does not imply idiosyncratic or episodic random events that are by definition independent of other inputs into decision-making. Instead, aleatory processes may consist of a structured component plus a random component. An early example from the Youth Studies Program will illustrate this point. Short, Strodtbeck, and Cartwright (1962) examined the risk of out-of-wedlock fatherhood among gang members. They found that gang boys who had frequent sex with girls gained status in the gang. At the same time, boys tended to be uninterested in becoming fathers in the near future, and out-of-wedlock fatherhood received neither gains nor losses in status. Thus, in the decision to engage in sexual intercourse, gang boys were motivated

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<sup>4</sup> Ironically, Strodtbeck and Short (1964) note that Sutherland had suggested the term "aleatory" to Strodtbeck, who had been a student of Sutherland's.

by, among other things, the potential for increased status in the gang, but were neither motivated nor deterred by the possibility of pregnancy:

Fundamental to our argument is the conception of illegitimate fatherhood as a “state” or “outcome” rather than an action or behavior. A kind of two-stage stochastic process is involved. First there is the probability that a given boy will engage in extramarital intercourse with a given frequency. Secondly, there is the probability that these actions will eventuate in illegitimate parenthood. The term “aleatory” refers to the independence between the first and second probabilities. (Short and Strodtbeck [1965] 1974:45)

Here Short and Strodtbeck ([1965] 1974) are not arguing that the objective probability of having frequent sex is statistically independent of the probability of pregnancy—which is clearly untrue. Instead, they mean that in deciding to engage in frequent sex, gang boys do not consider the risk of pregnancy: “It makes little difference whether or not the boys become fathers, and for this reason, the outcome probabilities of the second stage are given little thought at the time of the first action” (Short and Strodtbeck [1965] 1974:45). In this realization of an aleatory process, the mechanism producing sex is independent of future pregnancy. Other males—presumably older middle-class men—may exhibit forward looking decision-making regarding sex (e.g., Becker 1996): Men consider the possibility of future pregnancy in making a decision to engage in sex in the present because illegitimate fatherhood matters to them.<sup>5</sup>

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<sup>5</sup> Short and Strodtbeck ([1965] 1974) point out that gang boys are aware of the link between sexual intercourse and pregnancy, but at the time of the decision they ignore the risk of pregnancy because it is neither a reward nor a punishment. Note that this is not an example of gang boys acting impulsively and discounting all future consequences. They discount pregnancy because it has little value or utility for them at the time of the decision. In other decisions, such as joining a gang fight, they do consider future consequences.

Short and Strodtbeck applied the concept of aleatory risk to a gang member's decision to join a fight against another gang. Here the relevant risk is that the gang fight turns violent, which draws the attention of the police, resulting in the gang leader's arrest. In this case, the gang leader does consider the aleatory risk of violence (and possible arrest) in his decision to join the fight, which induces a correlation between decision and risk. More precisely, he considers the likelihood that the event will turn violent, which could offset the rewards from joining, such as gaining greater respect within the gang. Like the pregnancy decision, this is an example of "risky behavior," which can be modeled using decision theory for risky alternatives (Luce 1962).

### *Decision-Matrix: Game Theory and Subjective Expected Utility Theory*

To explain gang violence, Short and Strodtbeck ([1965] 1974) specify a rational choice model of decision-making. They address a prototypical example of group process, aleatory risk, and rational choice: "Why do gang members decide to join an ongoing gang fight?" Stated this way, they limit their question to a specific social context—a situation of a gang fight. This is a crucial step because it allows them to identify the relevant incentives—based on their ethnographic data—for their utility function, including the rewards of status in the gang and the costs of arrest and incarceration.

To embed the model in a concrete example, Short and Strodtbeck ([1965] 1974) focus on a gang leader's (Duke) decision to join an ongoing gang fight. In this case, Duke, the leader of the gang, was not responding to a challenge to his leadership or some other threat to his status within the gang, as Short and Strodtbeck found for other examples. Instead, once the fight started, he was expected to take charge and act "in the line of duty" as a gang leader (pp. 253-254). A gun was passed to him. He thus faced a binary decision: join the fight or refuse. Those alternatives,

however, include an element of aleatory risk—the probability of violence (and potential consequences of violence), which is uncertain and beyond the control of the actor. Short and Strodbeck cross-classify the alternatives (fight or refuse) with the potential outcome of violence, producing four distinct outcomes: (a) Duke joins the fight, assailants are routed without firing the gun, and Duke's status is raised; (b) Duke refrains from joining, but the gang concludes he was not needed, and therefore, his status is unchanged; (c) Duke refrains from joining, a gang member is injured, and Duke is labeled a “chicken” for not helping; (d) Duke joins, but when assailants are not routed, he fires the gun, injuring an assailant; Duke is then arrested.

To explain the gang leader's decision to join the gang fight, Short and Strodbeck specify a subjective expected utility model for risky behavior, drawing on the utility function and notation of Duncan Luce (1959, 1962). Utility theories begin with the assumption that utilities can be assigned numerical values such that alternative  $a$  is chosen from a larger set of  $T$  alternatives when the utility of  $a$  is larger than the utility of any other alternative (e.g.,  $b$ ) in  $T$  (Luce 1962). When this holds, the person is said to maximize utility.

For risky alternatives, there is uncertainty in the costs of the alternative, which can be modeled using subjective expected utility—the actor's subjective probability (on a 0-1 scale) of the cost. Therefore, “the utility of the risky alternative is the sum of the utilities of its component outcomes, each weighted according to the subjective probability of its occurring” (Luce 1962). In the present case, there is one risk associated with each alternative—the risk of violence, which can result in arrest and incarceration. Each alternative has an aleatory risk of violence (and potential consequences of violence), in which  $\alpha$  signifies the violent event. Short and Strodbeck adopt this

model in which subjective utility as perceived by the actor is key, and the important aleatory risk is the subjective probability of risk as perceived by the actor (in this case, Duke), signified by  $\psi$ .

If we cross-classify the binary choice of joining the fight (versus refusing to join) with the subjective probability of violence  $\psi(\alpha)$  versus no violence  $[1 - \psi(\alpha)]$ , we obtain a subjective utility  $u$  for each possible outcome:<sup>6</sup>

$$u(a) = V(a)[1 - \psi(\alpha)]: \text{Assailants routed without firing a gun; Duke's status raised} \quad (1)$$

$$u(b) = V(b)[1 - \psi(\alpha)]: \text{Gang concludes Duke's presence not needed} \quad (2)$$

$$u(c) = V(c)\psi(\alpha): \text{Gang loses; Duke labeled a chicken for not helping} \quad (3)$$

$$u(d) = V(d)\psi(\alpha): \text{Assailants winning, Duke fires, injures someone, and is arrested} \quad (4)$$

Here  $u(\cdot)$  refers to the utility of the alternative,  $V(\cdot)$  signifies the preference value of the alternative,  $\psi$  is the subjective probability of violence, and  $\alpha$  indicates violence. Note that each utility is the value of the alternative weighted by the subjective probability of violence. If we let  $a \alpha d$  denote the alternative in which  $a$  is the outcome when violence  $\alpha$  occurs and  $d$  when it fails to occur, and similarly, let  $b \alpha c$  denote the alternative in which  $b$  is the outcome when violence  $\alpha$  occurs and  $c$  when it fails to occur, then the subjective expected utility hypothesis becomes the following:

$$u(a \alpha d) = V(a)[1 - \psi(\alpha)] + V(d)\psi(\alpha): \text{Join the gang fight} \quad (5)$$

$$u(b \alpha c) = V(b)[1 - \psi(\alpha)] + V(c)\psi(\alpha): \text{Refrain from the gang fight} \quad (6)$$

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<sup>6</sup> We depart from Short and Strodbeck's ([1965] 1974:254-255) first two equations by specifying the risk in brackets as  $[1 - \psi(\alpha)]$ , instead of  $\psi(1 - \alpha)$  (see Luce 1962).

In both cases, the subjective expected utility of joining (fighting) is the sum of the expected utilities of each alternative from joining (fighting). Furthermore, Short and Strodtbeck specify an ordinal preference function, in which  $a > b > c > d$ .

Figure 10.1 depicts this model in a two-by-two matrix suggested by game theory (Short and Strodtbeck [1965] 1974:254). This decision model, then, is a one-shot—that is, non-repeatable—one-person game, in which the subject (gang leader) chooses the column (join or refrain from joining) and the chance event  $\alpha$  selects the row (Luce 1959). Gang leaders choose to join the gang fight if the utility of joining is greater than the utility of refraining. The utility of joining the gang fight consists of the value of joining *without* violence  $V(a)$  (consisting of increased status, no injury, and no arrest) weighted by the subjective probability of *no* violence  $1 - \psi(\alpha)$  plus the value of joining *with* violence  $V(d)$  (consisting of increased status, but potential injury and arrest) weighted by the probability of violence  $\psi(\alpha)$ . Similarly, the utility of refraining from the gang fight considers the value of refraining *without* violence  $V(b)$  (consisting of no change in status, no injury, and no arrest) weighted by the subjective probability of *no* violence  $1 - \psi(\alpha)$  plus the value of refraining *with* violence  $V(c)$  (consisting of lowered status, plus injury and arrest) weighted by the subjective probability of violence  $\psi(\alpha)$ .

<INSERT FIGURE 10.1 HERE>

Thus, in evaluating each alternative, gang leaders are considering its value as well as their subjective belief of the probability of violence. We can specify two special cases from the utility equations. First, when the subjective probability of violence is zero,  $\psi(\alpha) = 0$ , then the utility of joining (equation 5) reduces to  $V(a)$  and the utility of refraining (equation 6) reduces to  $V(b)$ . Since  $a > b$ , the gang leader will always join the fight when he believes violence will not occur.



Second, when the subjective probability of violence is 1.0,  $\psi(\alpha) = 1.0$ , then the utility of joining (equation 5) reduces to  $V(d)$  and the utility of refraining (equation 6) reduces to  $V(c)$ . Since  $c > d$ , the gang leader will always refrain from the fight when he believes violence will occur with certainty. This model of a decision to join a gang fight is a forward-looking model (Becker 1996), in which gang leaders consider both the immediate rewards (increased or decreased status) and immediate costs (injury), as well as the long-term costs (potential arrest and incarceration).

Finally, Short and Strodbeck show convincingly that gang violence is best characterized not as short-term hedonism and inability to control impulses as suggested by Cohen (1955) and later by Gottfredson and Hirschi (1990), but rather as a rational decision evolving out of group processes in potentially violent situations. By focusing on the situation, Short and Strodbeck are holding constant individual differences in personality and self-control among gang members.<sup>7</sup>

### **Rational Choice in Criminology**

Short and Strodbeck's rational choice model was one of the first—if not *the* first—to specify a subjective expected utility model of crime. Moreover, it did so by taking into consideration the social context in which a crime is committed, isolating a specific criminal situation (instead of averaging across disparate situations) and inducing incentives from subjects themselves (rather than specifying them *a priori*). This specification was remarkable, particularly given the state of rational choice in criminology at the time.

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<sup>7</sup> The research design, however, does not rule out the possibility of interactions between, on the one hand, individual characteristics such as personality and, on the other, situations and group dynamics. A different design would be needed to rule out such treatment heterogeneity.

Rational choice theories of crime date back to the utilitarian writings of classical theorists, Beccaria ([1764] 1963) and Bentham ([1789] 1948), who developed the concept of utility and argued that all human beings acted hedonistically, maximizing pleasures and minimizing pains. Beccaria, in particular, argued that crime is best prevented by moral education, specifying laws clearly, and general deterrence, in which offenders are threatened with punishment by the state to induce conformity to the terms of the social contract embodied in criminal law. Criminologists began exploring the deterrence question in the early 1970s, focusing on the effects of certainty and severity of punishment on criminal behavior. Such research took hold as a theoretical framework, a “vague congerie of ideas with no unifying factor other than their being legacies of two major figures in moral philosophy, Cesare Beccaria and Jeremy Bentham” (Gibbs 1968:5).

In 1968, Gary Becker presented a neoclassical microeconomic theory of criminal behavior, which specified a specific mechanism by which formal sanctions deter crime. Becker’s (1968) expected utility model is:

$$E(U) = (1 - p)U(y) + pU(y - F) \quad (7)$$

where  $E(U)$  is the expected utility of a given activity;  $p$  is the probability of punishment;  $y$  is the returns to crime; and  $F$  is the penalty. According to the model, when punishment is certain ( $p = 1.0$ ), the utility of crime is the utility of returns to crime  $y$  minus the penalty  $F$ . Conversely, when the probability of punishment is zero, the utility of crime is the utility of returns to crime  $U(y)$ . Furthermore, the model implies that, all else being equal, the more certain the punishment  $p$  and the more severe the sanction  $F$ , the less likely the crime because its utility is lower.

Becker’s utility function appeared in a footnote to his article on optimizing the criminal justice system. Unsurprisingly, aside from studies by economists (e.g., Ehrlich 1973; Heineke 1978),

Becker's expected utility model had little influence on criminological research on deterrence. This changed in the mid-eighties, when Piliavin, Gartner, Thornton, and Matsueda (1986) published a test of rational choice and deterrence using longitudinal survey data, finding partial support for rational choice, and Cornish and Clarke (1986) edited a collection of essays on rational choice and crime (see also Clarke and Cornish 1985). These publications explored the relevance of expected utility models for explaining crime and addressed criticisms from a limited rationality perspective. Since then, voluminous empirical research in criminology using self-report surveys has tended to support rational choice perspectives (e.g., Nagin 1998; Pratt et al. 2006). Limited rationality perspectives argue that actors typically depart from utility maximization by considering only a few alternatives, using shortcut heuristics and rules of thumb to make decisions. Such perspectives gave rise to the field of behavioral economics, which uses experimental methods to identify patterns of departure from utility maximization.<sup>8</sup>

In this context, Short and Strodbeck's ([1965] 1974) model of decision-making specified a limited rationality model of crime, in which they focused on a specific concrete decision (join or not) within a certain situation (gang fight) for a kind of person (gang leader) and reduced the decision to a few alternatives and a few key incentives. Perhaps their most important contribution was their use of ethnographic evidence, including subjective accounts, to *induce* the relevant alternatives and incentives in a gang fight, rather than *assuming* the alternatives and incentives *a priori*.

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<sup>8</sup> Short and Strodbeck ([1965] 1974) were aware of the issues of bounded rationality and also addressed early experimental evidence on departures from rationality, the early incarnation of what is now known as behavioral economics. For an excellent review of the relevance of behavioral economics for criminology, see Pogarsky, Roche, and Pickett (2018).

By contrast, neoclassical expected utility models specify relations between general rewards, punishments, and offenses *averaged across individuals and across concrete situations*, under the assumption that general rewards (e.g., monetary returns) and punishments (e.g., arrests and incarceration), on average, are relevant for offenses averaged across situations. Short and Strodtbeck's analysis suggests that averaged models mask important heterogeneity across disparate situations (micro-social contexts).

### **Rational Choice and Collective Action: Mancur Olson**

In the same year that Short and Strodtbeck ([1965] 1974) published their rational choice theory of group process and gang delinquency, the economist Mancur Olson (1965) published his groundbreaking work, *The Logic of Collective Action*, which applied micro-economic expected-utility theory to group collective action, such as political protests and wildcat strikes. Olson's work remains as the most influential rational choice theory of collective action (Opp 2009; Udén 1983). Olson assumed that individuals maximize utility subject to constraints, and noted that if all actors acted on their own self-interest, collective action would have to overcome the free rider problem: rational actors will not contribute to the provision of a common good if they can consume it without incurring the costs of contributing.<sup>9</sup> The costs include negative sanctions applied by an organization, such as a group, institution, or state, as well as time, energy, and opportunity costs. Thus, Olson assumes a two-person game: One actor consists of the members of the collective action group; the other actor is the state or some other administrative organization capable of imposing sanctions against the group. In small groups, where face-to-face interaction reduces the costs of communication, group leaders can overcome the free rider problem by

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<sup>9</sup> Common goods are non-excludable; if the good is supplied to one group member, it cannot be withheld from other members. Unlike pure public goods, common goods have zero jointness of supply (or rivalrous consumption); consumption by one person reduces availability to others (see Oliver and Marwell 1988).

offering selective incentives for participating, including rewards—such as monetary returns and recognition leading to prestige and status—and informal punishments. Olson’s most controversial claim is that collective action will fail for large groups because (1) individual contributions are not noticeable in large groups; and (2) the costs of communication and organization are higher, which offsets the reduced costs of participating in large groups. Social scientists have challenged this proposition on a variety of grounds (e.g., Hardin 1982; Oliver and Marwell 1988; Opp 2009).

We can draw parallels between Olson’s model and Short and Strodbeck’s model of gang violence. In the absence of gang norms, sanctions, and social incentives, a gang would be subject to the free rider problem during a gang fight: Rational gang members would refrain from fighting to avoid the costs—potential injury, humiliation, and arrest—and would share in the rewards of winning the fight, such as increased prestige of the gang. From the standpoint of Olson’s model, gangs (typically through their leaders) provide selective incentives for participating in gang fights, including rewards, such as praise and approval, and punishments, such as deprecation and the threat of ostracism. Such incentives are likely administered selectively, focusing for example on gang members who are seen as tough, physical, and good fighters. These selective incentives often correspond to normative expectations, such as “always stand up for a fellow gang member.” For Olson, as gangs become larger, communication and coordination become increasingly difficult.

Olson’s model differs from that of Short and Strodbeck in important ways. Olson’s model is a two-person game, pitting the protestors against the state or institution; Short and Strodbeck’s model is a one-person game (gang leader) with an uncertain risk (violence). Olson focused on monetary and other tangible incentives, and largely eschewed soft incentives such as group status and prestige, arguing they were less important and difficult to measure. Short and Strodbeck

began with qualitative evidence about the social organization of the gang, the nuanced ways in which social status hierarchies govern the behavior of gang members, and identified incentives inductively using qualitative methods. Finally, Olson used a standard micro-economic expected utility model, whereas Short and Strodbeck used a subjective expected utility model incorporating ideas from bounded rationality. Each, however, provided a rational choice theory applicable to gang violence. Future research is needed to reconcile these two models of collective action applied to gang delinquency.

## **Conclusions**

We have argued that the work of Short, Strodbeck, and their collaborators was important for more than simply developing the group process perspective of delinquent gangs. They provided an exemplary application of mixed methods before mixed methods became fashionable. Using their quantitative survey data, they raised questions about the veracity of subcultural theories of gang delinquency that were dominant at the time. They used their qualitative data to describe the social organization of the gang and how that organization constrained gang members' behavior through group processes enacted within concrete situations. Finally, several years before Becker (1968) published his expected utility theory of crime, they specified a rational choice theory of gang violence using subjective expected utility theory and adopting a form of bounded rationality in which actors have limited information and consider only a few alternatives. Moreover, rather than assuming *a priori* knowledge of alternatives and incentives, they induced them from their qualitative data. This led them to emphasize the role of social status within the gang, which they tied to structural conditions producing social disadvantage.

We hope a greater appreciation of the work of Short and Strodtbeck ([1965] 1974) will stimulate future research building on their framework that relates micro- to macro-levels of explanation, considers the role of group organization and group processes in collective acts of crime, and capitalizes on recent advances in rational choice, game theory, and behavioral economics to specify criminal decision-making within such group processes. Such research might explore group processes using  $n$ -person repeated games to provide a more precise explanation of collective violence (e.g., McCarthy 2002). It could also explore threshold models (Granovetter 1978) of collective violence, showing how the entire distribution of actors' thresholds is important for joining a violent fight or protest (McGloin and Thomas 2016). It could explore the use of observational data on violent situations to specify quantitative vignette models to test exploratory theory. Finally, it could examine how a rational choice decision model can be made compatible with a symbolic interactionist theory of situated action (Matsueda, Kreager, and O'Neill 2020).

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