

Competitiveness, Risk Taking, and Violence: The Young Male Syndrome

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Sexual selection theory suggests that willingness to participate in risky or violent competitive interactions should be observed primarily in those age-sex classes that have experienced the most intense reproductive competition (fitness variance) during the species' evolutionary history, and in those individuals whose present circumstances are predictive of reproductive failure.

Homicidal conflicts in the city of Detroit in 1972 are reviewed in the light of the above perspective. Homicide in Detroit, as elsewhere, is overwhelmingly a male affair. Victim and offender populations are almost identical, with unemployed, unmarried, young men greatly overrepresented. The most common conflict typologies are described, and it is suggested that many, perhaps most, homicides concern status competition.

Other manifestations of "taste for risk," such as daredevilry and gambling are briefly reviewed. The evidence suggests that such a taste is primarily a masculine attribute, and is socially facilitated by the presence of peers in pursuit of the same goals.

Such dangerous, competitive acts as the classic "trivial altercation" homicide often appear foolhardy to observers. However, it remains unknown whether the typical consequences of such acts are ultimately beneficial or detrimental to the perpetrators' interests.

Key Words: Homicide; Risk-taking; Young male syndrome.

Homicidal conflicts, in America and elsewhere, usually involve men who already know each other. Most cases are not robbery related, and the issues of contention often seem ludicrously small to police, and to criminologists.

The classic study of American homicide is Wolfgang's (1958) analysis of 588 criminal hom-

icides in Philadelphia. Wolfgang classified 560 of the killings into 12 motive categories. "Altercation of relatively trivial origin; insult, curse, jostling, etc." accounted for 37% of cases, and was far and away the leading motive type. Eighty-seven percent of offenders in these altercations were men. Wolfgang's findings have been corroborated in many subsequent studies. According to an authoritative staff report on criminal homicide in 17 American cities, presented to the National Commission on the Causes and Prevention of Violence "Altercations appeared to be the primary motivating forces both here and in previous studies. Ostensible reasons for disagreements are usually trivial, indicating that many homicides are spontaneous acts of passion, not products of a single determination to kill" (Mulvihill, Tumin, and Curtis 1969, p. 230). The report then quotes a Dallas homicide detective: "Murders result from little ol' arguments over nothing at all. Tempers flare. A fight starts, and somebody gets stabbed or shot. I've worked on cases where the principals had been arguing over a 10 cent record on a juke box, or over a one dollar gambling debt from a dice game" (Mulvihill, Tumin, and Curtis 1969, p. 230). The authors of the report go on to describe a series of astonishingly petty but fatal disputes.

These altercations have intrigued many commentators, but to call them "trivial" is surely to misunderstand them. The participants behave as if a great deal more is at stake than small change or access to a pool table. Our own study of similar cases in Detroit has convinced us that something important *is* at stake: Violent male-male disputes are really concerned with "face," dominance status, and what Goffman (1959) calls "presentation of self" in a highly competitive

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social milieu. This interpretation of altercations is not original with us; it has been developed especially by Toch (1969), Luckenbill (1977) and Felson (1978), each of whom describes the typical, almost tragic, progression of events, in which neither victim nor offender finds it possible to back down and a violent resolution seems almost agreed upon. But just *why* men should value intangible social resources like "face" enough to risk deadly conflict over them is a profound question that we think can best be addressed from the broad comparative perspective of evolutionary biology.

SOCIOBIOLOGICAL THEORY OF MALE COMPETITIVENESS

Dangerous, confrontational competition among males is not unique to our species. Violent conflict with attendant mortality risk is widespread in the animal kingdom, and it is usually a male affair. To the evolutionist, such ubiquitous behavioral inclinations demand explanation in terms of their adaptive functions for the actors: How can competitiveness and a taste for risky confrontation contribute to male fitness?

The principal body of relevant sociobiological theory has been developed and discussed by various authors, especially Bateman (1948), Williams (1966) and Trivers (1972). This theory attributes male competitiveness and related phenomena to different selective pressures producing distinct female and male behavioral strategies. In most animal species, including *Homo sapiens*, male fitness is limited by access to fecund females, whereas female fitness is limited by physiological and energetic constraints. It follows that very successful males can enhance their fitness by monopolizing the reproductive performance of several females, whereas the fitness of females cannot profit from multiple mates to the same extent. Females are therefore a "resource" for which males compete. This competition need not take the form of a direct contest for females. Instead males are in competition for those resources, including feeding territories, nest sites, and more intangible "resources" like political influence and social status, that can be converted into reproductive opportunity, whether because they are directly attractive to females or because they help quell rival males.

Recently, several writers have protested that this orthodox view of intrasexual competition is unsound because it implies that females do not compete or because it ignores nonagonistic avenues of competition (see, e.g., Wasser 1983). These complaints are directed against an alleged bias in the literature. Perhaps male-male competition *has* been overemphasized, but such complaints, whether justified or not, do not seriously challenge the theory. Of course females compete, but there is a straightforward logic according to which males compete *more intensely*.

The intensity of reproductive competition can be conceptualized in terms of the within-sex variance in fitness. Competition is generally more intense among males than among females in that male fitness variance exceeds female fitness variance. And although competition need not be confrontational and dangerous (or indeed direct at all), the likelihood of risky competitive tactics increases as the payoff variance increases: in any competition, the more disparate the outcomes for winners versus losers, the greater the expected expenditure of effort and tolerable risk.

Where within-sex fitness variance is large, some individuals are monopolizing reproduction while others are losing out. The degree of such monopolization of females by males is the degree of "effective polygyny" of the breeding system, and the more polygynous, the more intense the male-male competition. The more intense this competition, the more we can expect males to be inclined to risky tactics, and hence the more excess mortality they should be expected to suffer in comparison to females. These theoretical expectations are amply verified by studies comparing groups of related species within an order or family: The degree of polygyny characteristic of the various species tends to be correlated with the extent to which males are larger and better armed than females, and with the extent to which male mortality exceeds female mortality (e.g., Leutenegger and Kelley 1977; Wittenberger 1978; Alexander et al. 1979; Clutton-Brock, Albon, and Harvey 1980). In those rare cases, primarily certain birds, in which the breeding system is polyandrous and females compete to monopolize the parental effort of several males, the females tend to be larger and more combative (Jenni 1974; Maxson and Oring 1980).

THE CASE OF HOMO SAPIENS

Placed in comparative perspective within the primates, *Homo sapiens* exhibits sex differences

in body size, armament, pugnacity, age at puberty, rate of senescence and life expectancy, all of which suggest a natural selective history of effective polygyny. This is also the implication of the ethnographic record: In most extant human societies, women are a contested resource. Successful men routinely convert high status and power into monopolization of multiple women (e.g., Betzig 1982). It follows that males at the other end of the scale are likelier than females to suffer complete reproductive failure (e.g., Howell 1979).

Men in all cultures find themselves involved in networks of significant relationships with other men within which face and relative status are at issue (e.g., Jayawardena 1963; Safilios-Rothschild 1969; Tiger 1969; Fox 1972; Horowitz and Schwartz 1974; Paige and Paige 1981). Typically, these networks are arenas of alliance, rivalry, marital exchange politics, obligation, reputation, and resource distribution. We would expect a man's performance within the local competitive-cooperative male milieu to have important fitness consequences. It follows that both appetite for and aptitude in this milieu should be basic evolved attributes of masculine psychology.

If variations in the intensity of sexual selection have indeed been relevant to the evolution of competitive inclinations and dangerous risk taking, certain predictions about violent conflict would seem to follow. The participants should be mostly males; in the case of homicide, that means a preponderance of men among both victims and offenders. In an effectively polygynous breeding system, competition for access to reproductive status is most intense among young

adult males, and so we might expect that age class to be most conflictual and prone to risk. Furthermore, insofar as status and face disputes constitute a significant proportion of homicides, we expect that victims and offenders will often be peers and will exhibit similar demographic and socioeconomic profiles, except that victims may tend to be wealthier than offenders where robbery is involved. Both victim and offender populations should include disproportionate representation of the segment of society that is relatively "disenfranchised" (reproductively and otherwise), and therefore has the least to lose in escalated conflict over status:—unemployed, single, young men. With respect to these demographic characteristics, we may furthermore expect participants in *other* dangerous activities to resemble the principals in homicides.

HOMICIDAL CONFLICT IN DETROIT

The homicide bureau of the Detroit police department investigated 690 nonaccidental homicides committed in 1972. By October, 1980, 512 of these cases were closed, which means that the police had identified a perpetrator to their own satisfaction regardless of whether a conviction or prosecution had been attained. Police files on all 690 homicides were examined in detail during 1973–74 by Marie Wilt, a sociologist who coded cases with respect to 70 variables, including ages, sexes, victim-offender relationship, and a set of conflict typologies of her own devising (Wilt 1974). We have examined the police files to make additional codings, and have updated the data from files completed since Wilt's study.

Table 1. Five Hundred Twelve Closed Homicide Cases in the City of Detroit, 1972, Classified by Type of Case and by Victim-Offender Relationship

Victim-Offender Relationship	Type of Case		
	Crime Specific	Social Conflict	Unknown
<i>Relatives</i>			
Genealogical kin	1	31	0
Spouse	1	79	0
Affinal or step	0	15	0
<i>Nonrelatives</i>			
Friends and acquaintances	47	193	3
Strangers	119 (34 by police; 6 police victims)	19 (2 by police)	0
Unknown	0	2	2
TOTAL	168	339	5

Wilt categorized homicides as "crime specific" (incidental to the commission of another crime, usually robbery) or "social conflict." In 508 closed cases, the relationship between victim and offender was known. These two categorizations of cases are cross tabulated in Table 1. It is clear from Table 1 that homicides involving strangers usually occur incidentally to the commission of another crime. (Of closed cases, 32.8% are "crime-specific," but circumstantial evidence suggests that a much larger proportion of the 178 cases remaining open are also of this type.) Cases involving relatives have been analyzed elsewhere (Daly and Wilson 1982; Daly, Wilson, and Weghorst 1982).

PARTICIPANTS IN HOMICIDE

Table 2 breaks down the 512 closed homicides according to the sex of offender and victim. Figure 1 presents age-specific homicide rates for men and women relative to the population of the city of Detroit (U.S. Bureau of the Census 1971, Table 24). As expected, participants in homicidal conflict are predominantly young men. Victim rates are based on 682 cases; excluded are six cases where the victim was a police officer, plus two cases where the body was not identified. Offender rates necessarily exclude the 178 open cases, and also exclude 36 police-action homicides.¹ The figure is based on 467 cases where offenders' age and sex were known. In 53 multiple offender cases, we have included only the first offender in the police records. Ten offenders killed two victims each, and four killed three; for the sake of consistency in treating each victim as a "case," we have included these offenders multiply.

The huge sex difference in homicidal violence is not peculiar to Detroit. Figure 2 presents homicide victimization rates for the United States as a whole. (Offenders cannot be similarly portrayed, since national data are based only on major convictions and exclude self-defense and justified homicides, among others.) The sex dif-

¹ Police are excluded from subsequent analyses of both victims and offenders, since their involvement in dangerous conflict is peculiar to their profession rather than being indicative of the demographic categories to which they belong. The city of Detroit employed 6148 police officers in 1972 (U.S. Department of Justice 1973, Table 71), six of whom were homicide victims in the line of duty. Thirty-six homicides were committed by police in the line of duty.

Table 2. Five Hundred Twelve Detroit Homicides by Type of Case and Sex of the Principals

Type of Case	Offender-Victim ^a			
	M-M	M-F	F-M	F-F
Social conflict	195 ^b	61	67	16
Crime specific	148 ^c	13 ^d	7	0
Type unknown	5	0	0	0
All closed cases	348	74	74	16

^a M, male; F, female.

^b Includes 2 by police.

^c Includes 33 by police, 6 police victims.

^d Includes 1 by police.

ference is furthermore not peculiar to America—indeed it appears to be a cross-cultural universal (Daly and Wilson, in press).

Victim and offender populations are remarkably alike—and not just in age and sex. Forty-three percent of adult male victims and 41% of adult male offenders were unemployed, compared to 11.2% of adult men in the city of Detroit (Fig. 3). Sixty-nine percent of male victims and 73% of male offenders over 14 years of age were unmarried, compared to 43% of same-age men in Detroit (Fig 4). Among both male victims and male offenders, 36% had previous criminal records (excluding convictions for motor vehicle vi-

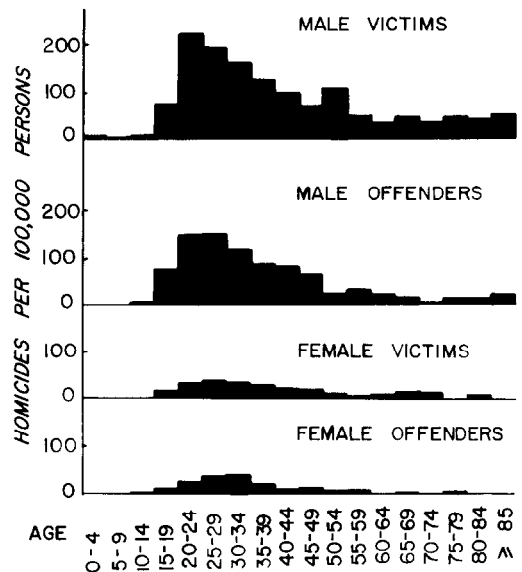


Figure 1. Homicide rates per 100,000 persons for the city of Detroit in 1972, by age and sex.

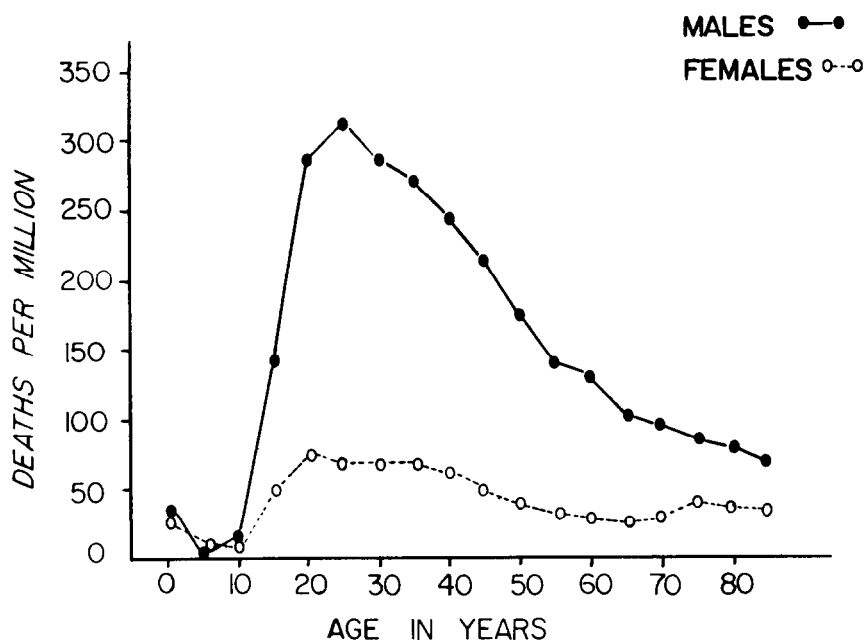


Figure 2. Homicide victimization rates by age and sex for the United States in 1975. Data from U.S. Department of Health, Education, and Welfare (1979) and U.S. Bureau of the Census (1977).

olation, drunkenness, and narcotics offenses). Our expectations about the participants in homicidal conflicts are confirmed: They indeed tend to be unemployed, single, young men. Further insight will require further categorization of conflict typologies.

SOCIAL CONFLICT HOMICIDES

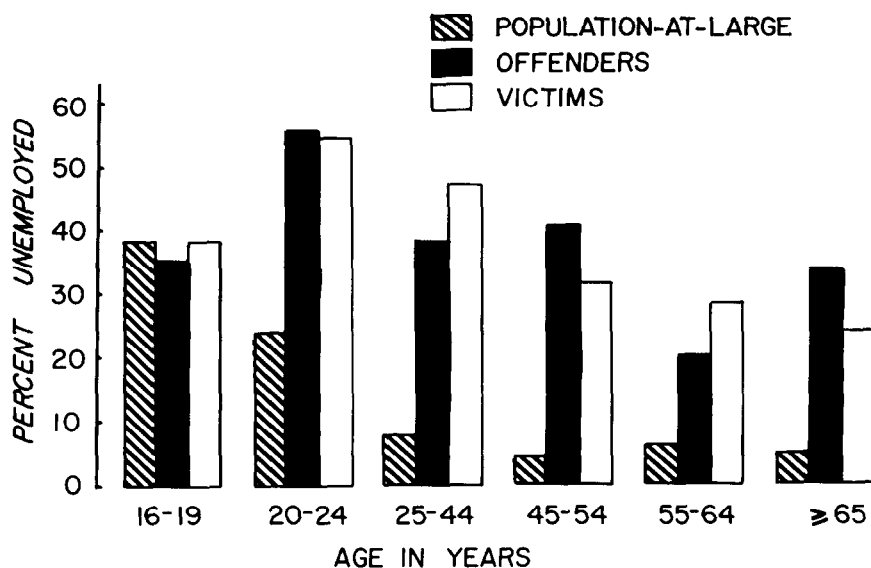
Three hundred thirty-nine cases out of our sample of solved homicides were "social conflicts," not incidental to the commission of another crime. In 125 of these cases, victim and offender were "relatives" (Table 1); these familial homicides have been discussed elsewhere (Daly and Wilson 1982). Here we wish to focus upon the 214 cases in which victim and offender were unrelated. (Spouses, whether legally married or common-law, are considered "relatives" and excluded from present analysis, as are in-laws.)

Wilt originally classified Detroit social conflict homicides into four categories, atheoretically derived from her preliminary reading of a hundred cases. These she called "jealousy conflicts," "business conflicts," "family conflicts," and "arguments between friends, acquaintances, or neighbors." Each of these major categories was subdivided into a number of narrower substantive types. We have retained the

"jealousy" and "business" categories, and reorganized the other classifications into similarly broad classes of motives. The resulting classification is outlined in Table 3.

A total of 58 homicides in this study were attributed to sexual jealousy: the 34 cases in Table 3, plus 24 cases in which victim and offender were related (23 spousal homicides and 1 involving intervention by an in-law). Among the sexual jealousy cases in Table 3, the predominant variety involved two men contesting a particular woman. We have reviewed the 58 sexual jealousy cases, and the prevalence of this motive in homicide generally, in another paper (Daly, Wilson, and Weghorst 1982). In addition to the 13 business conflict cases in Table 3, an additional two intrafamilial homicides could be so classified.

More than half of the 214 cases summarized in Table 3 are of the sort that criminologists have called "trivial altercations." These include what we have called "escalated showing-off disputes" (29 cases; 16.1% of the 180 classifiable,



nonrelative, social conflict homicides) and "disputes arising from retaliation for previous verbal or physical abuse" (95 cases; 52.8%).

The escalated showing-off dispute involves two or more individuals trying to best one another in front of witnesses. There were no such cases in which the disputants were relatives. We offer two illustrative synopses based on Wilt's summaries of the police documentation:

Case 121: Victim (male, age 19), offender (male, age 23) and others had been drinking together. Victim was a boxer and was talking about his fights. Offender showed off with his night stick by placing it between the victim's legs and lifting him in the air. Victim was embarrassed and asked offender to let him down. Victim accused offender of tearing his pants and told offender to pay for them. Offender and others were laughing at victim. Victim hit offender and both were told to leave. Victim left first, then stood on the porch. Offender says victim hit him again when he came out, so he shot him.

Case 185: Victim (male, age 22) and offender (male, age 41) were in a bar when a mutual acquaintance walked in. Offender bragged to victim of "this guy's" fighting ability and that they had fought together. Victim replied "you are pretty tough" and an argument ensued over whether victim or offender was the better man. Victim then told offender "I got

Figure 3. Unemployment rates among male homicide offenders, male victims, and the male population-at-large in the city of Detroit in 1972. Population-at-large data from U.S. Department of Labor (n.d., Table II).

mine" (gun) and the offender replied "I got mine too", both indicating their pockets. The victim then said "I don't want to die and I know you don't want to die. Let's forget about it". But the offender produced a small automatic, shot the victim dead, and left the bar.

Such escalated showing-off disputes as these are overwhelmingly a male affair. The two cases in which a woman killed a man both involved the woman's intervening in a dispute between two men, killing one in defense of the other. Only one of 29 cases involved an escalated showing-off dispute between women.

The category of "disputes arising from retaliation for previous verbal or physical abuse," accounting for the largest number of cases, is a little more heterogeneous. It includes retaliation for insults, for accusations of cheating or theft, and for physical attacks at some time past. The unifying characteristic of these cases is the affront and loss of face that seem to demand redress. Here are two brief illustrative synopses of disputes arising from verbal or physical abuse:

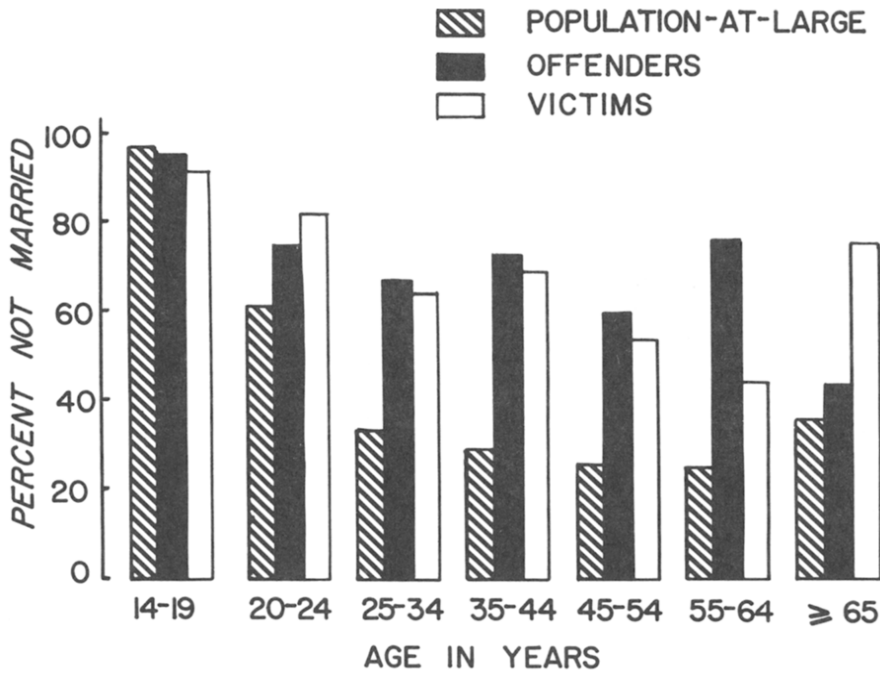


Table 3. Two hundred twelve Detroit "Social Conflict" Homicides Where Victim and Offender Were Unrelated, by Conflict Typology and Sex of the Principals

Conflict typology	Offender-Victim ^a			
	M-M	M-F	F-M	F-F
Jealousy conflicts	20	5	6	3
Business conflicts	10	1	2	0
Escalated showing-off disputes	26	0	2	1
Retaliation for previous verbal or physical abuse	75	9	6	5
Intervention in family quarrels	5	0	0	0
Miscellaneous unique disputes	2	0	1	1
Insufficient information to categorize	26	4	1	1
Total social conflicts among nonrelatives	164	19	18	11

^a M, male; F, female.

Case 79: Victim (male, age 23) accused an acquaintance, the offender (male, age 17), of having broken into his home, and proceeded to beat up offender. The latter left, got a gun from a friend, returned and killed his assailant before several witnesses.

Case 324: Victim (male, age 25), walking down street with his brother, directed an insulting

Figure 4. Proportions unmarried among male homicide offenders, male victims, and the male population-at-large in the city of Detroit in 1972. Population-at-large data courtesy of the Planning Department of the City of Detroit.

remark at two brothers (ages 20, 22), who responded aggressively, whereupon victim and victim's brother walked home. When they reemerged, the brothers whom they had insulted were waiting with guns and killed victim and wounded his brother.

CRIME-SPECIFIC HOMICIDES

Alexander (1979) has argued, from the same perspective adopted here, that young men are expected to be the principal participants in law breaking and in dangerous attempts to accrue material resources as well as status:

Sexual competition is demonstrably more intense among males than among females; and one can easily show from the accumulated differences between modern males and females powerful evidence that this has consistently been the case during human history, and that as a general consequence the entire life history strategy of males is a higher-risk, higher-stakes adventure than that of females . . .

This finding leads to the prediction that lawbreaking will occur more frequently among males, which of course is already well known . . . It also seems to predict that laws are chiefly made by men (as opposed to women) to control men (as opposed to women) (Alexander 1979, p. 241).

In this regard, it is interesting to note that Bacon, Child, and Barry (1963) found that crime rates tend to be higher in more polygynous societies, males being everywhere the criminals.

Our "crime-specific" homicide sample may also be viewed as supporting Alexander's analysis. The offenders in such homicides are even more often male (95% of 134 cases) than are "social conflict" offenders (75% of 337 cases). The seven crime-specific homicides committed by women include four in self-defense against male burglars or attempted rapists, leaving only three cases where the woman was the party engaged in criminal activity. A predominance of male offenders is of course characteristic not just of homicide, but of all types of crime except prostitution. Ninety-three percent of robberies, 94% of burglaries, and 91% of motor vehicle thefts in America in 1980, for example, were committed by males (U.S. Department of Justice, 1981, Table 34). Men are not poorer than women, but they help themselves to other people's property more often, and they are evidently readier to use violence to do so. It may be suggested that the chronic competitive situation among males is ultimately responsible for a greater felt need for surplus—as opposed to subsistence—resources.

Not only are crime-specific offenders in Detroit more often male than social conflict offenders, but they also match our predicted demographic profile better. The crime-specific male offenders are younger (27.8 ± 12 years) than their social conflict counterparts (34.2 ± 13 years), are more often unemployed (43.6% vs. 38.9%) and are more often unmarried (73.8% vs. 57.8%). The age and marital status differences are significant ($p < 0.01$).

It is also noteworthy how few of the *victims* of crime-specific homicide are female (Table 2). If these cases were simply to be understood as violent appropriation of other's resources, then we might expect male offenders to pick on females fairly often. Women are not infrequently robbed (50% of victims of theft in Detroit according to U.S. Department of Justice, 1976), but they are relatively infrequently killed (14%

of 49 murdered robbery victims in the present study). There are several possible reasons for this, but at least part of the explanation seems to lie in the fact that crime-specific homicides contain some of the same elements of face and male competitiveness that characterize so many social conflict homicides. This point has been especially well developed by Toch (1969), who has analyzed violent escalation in police-suspect interactions in terms of the stubborn aggressiveness of both parties when concerned to maintain face in front of witnesses.

RISK TAKING MORE GENERALLY

We expect a taste for competitive risk taking to be an evolved aspect of masculine psychology as a result of sexual selection. If male fitness derives from success in risky competition, then males are expected to join such competition willingly, given reasonable prospects of success. Thus, for example, the addition of an element of competition, especially face to face, makes males but not females more willing to persevere in a rather dull, laboratory, skill-testing task (Weinberg and Ragan 1980). A taste for risk, with or without competition, may also be manifested in many other spheres than the violent conflicts that we have thus far considered (see also Rubin and Paul 1979).

In a sociable species such as our own, in which there are long-term consequences of success and failure in competition, mediated by rank and reputation, we furthermore expect an evolved inclination toward the social display of one's competitive risk-taking skills, and again this should be especially a masculine trait. Just why the maintenance of reputation should require incurring risk can be answered in terms of pressures favoring "honest advertising." A signal or display that is supposed to be indicative of high resources or estimable personal qualities is only convincing when it cannot be counterfeited by individuals with fewer resources or lesser qualities (Zahavi 1977; see also Popp and DeVore 1979). A boast is only impressive if it implies a challenge and if those who might take up the challenge hear it (Borgia 1979).

Successful risk taking certainly evokes admiration. An entertaining case study is Wolfe's (1979) *The Right Stuff*, an account of machismo and prestige in test pilots and astronauts. Wolfe's title refers to a coveted, intangible sub-

stance that successful daredevils possess. Some men have it and are revered for it; others don't have it and never will. The fact that people accord prestige to successful risk takers in this way only makes sense on the assumption that there is something predictive about past success—that competence, judgment, physical prowess, and good “luck” are enduring qualities of individuals. Acceptance of defeat or subordinate status also requires the same assumption—that there is some enduring quality that makes past victors likely to win again if challenged again. For this reason, the acceptance of risk seems to have acquired a generalized prestige value that may transfer, irrationally, to pure chance situations where past success is *not* predictive of future success. People are not always good intuitive statisticians and they use many imperfect rules of thumb in making behavioral decisions (see, e.g., Nisbett and Ross 1980). One such rule of thumb is to follow the successful, so that being followed and admired can augment the rewards of the initial success.

One laboratory operationalization of risk taking is to confront subjects with hypothetical dilemmas (whether to recommend major surgery, for example, or how to invest a pension fund). With the hazards and expectations of benefit specified probabilistically, the subjects are called upon to choose from the various options. A riskier decision is then one that incurs relatively large or probable hazards in exchange for relatively large or probable benefits. In this sort of situation, groups generally tend to arrive at riskier decisions than do individuals (e.g., Kogan and Wallach 1964; Zaleska 1976). As we would expect, this effect appears to be stronger in men than in women (e.g., Johnson, Stemler, and Hunter 1977) and most studies have used male subjects only. A leading candidate as an explanation for the group effect is that social desirability or prestige accompanies the advocacy of risky choices in group situations (Brown 1965), perhaps because advocates of risk are perceived as especially capable (Jellison and Riskind 1970). These interpretations are of course quite compatible with the arguments we have presented.

A similar operationalization of risk taking in the real world is gambling. If the odds are equal, then the larger bet is the riskier bet. Gambling is predominantly a male activity (e.g., Downes et al. 1976; Kallick et al. 1979) and the larger the

stakes, the more male dominated it becomes (e.g., Newman 1972; Cornish 1978). There is some evidence that the presence of other players leads blackjack players to elevate their bets against the house (Blascovich, Ginsburg, and Howe, 1976; Ginsburg, Blascovich, and Howe 1976), a result similar to the group shift-to-risk effect described above. Furthermore, “high rollers” sometimes enjoy considerable prestige.

A rather different sort of risk is incurred by drug users. In American surveys, adolescents and young adults are the major users of illegal drugs, and males use all such substances more than do females. Married persons show the lowest rates of use. In predicting drug usage, parental influence is minor and peer influence preeminent (Kandel 1980). We predict that high-risk behaviors, such as experiments with high dosages of drugs and novel or unknown substances, can be shown to be socially facilitated and admired by peers, especially among males.

ON THE SEX DIFFERENCE IN MORTALITY

We have already remarked that it is characteristic of a polygynous species that the males tend to suffer higher mortality than the females. This sex difference is ultimately attributable to the greater degree of reproductive competition among males. Its more proximate causes are various, including a variety of consequences of the males' risk-taking behavior. Demographers draw a distinction between “external” and “internal” sources of mortality. The former category consists primarily of deaths by accident (approximately 80% of “external” deaths in America), as well as deaths by suicide, homicide, poisoning, and medical misadventure. Internal sources of mortality include disease and senescence. Males exceed females, in the Western world, in both sorts of mortality, but the pattern of sex differences is distinct (Fig. 5). The sex differential is considerably larger in external than in internal mortality and it is maximal in young adulthood, whereas the sex difference in internal mortality is maximal in later years. The substantial sex difference in external mortality risk in young adulthood may be interpreted as another manifestation of the dangerous-young-male syndrome.

Some efforts have been made to construct life tables for ancient men and women from archaeological materials, and it is generally concluded

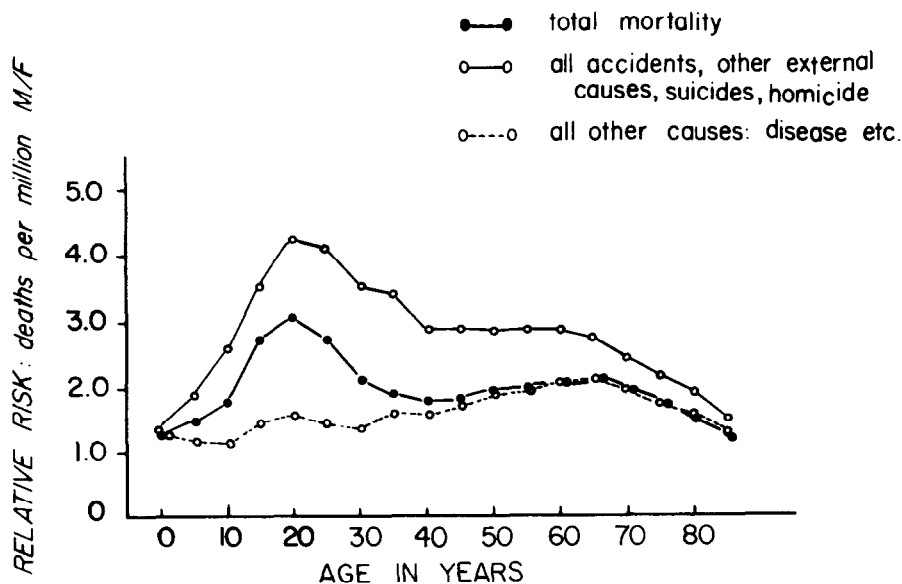


Figure 5. The ratio of male mortality over female mortality for the United States in 1975, according to type of mortality. Data from U.S. Department of Health, Education, and Welfare (1979) and U.S. Bureau of the Census (1977).

that female mortality exceeded male mortality at most ages in most prehistoric skeletal series (Ac-sádi and Nemeskéri 1970). This result appears to contradict modern evidence and our expectation that excess male mortality is characteristic of our species. In this regard, it should be noted that virtually all the archaeological materials are postagricultural and are therefore no more representative of our hunting-and-gathering prehistory than are modern samples; that sexing of prepubertal skeletons is acknowledged to be guesswork; and that data are based on burial groups and may therefore exclude adventurous, emigrant young men. The fact that males surpass females in "internal" mortality (Fig. 5), and in particular that males senesce more rapidly than females, supports our hypothesis that the female life-span has exceeded male life-span for a significant period of our evolutionary history.

MORTALITY IN MOTOR VEHICLE ACCIDENTS

Men, particularly young men, incur many more accidents and fatalities in motor vehicles than do women (Peck, Coppin, and Marsh 1965; Shaw and Sichel 1971). It would appear likely that this is not a matter of lesser skill, but rather of more risky behavior, such as speeding (Or-

ganisation for Economic Cooperation and Development 1975), tailgating (Ebbesen and Haney 1973), refusing to yield right of way (Jamieson 1977), and running amber lights (Konečni, Ebbesen, and Konečni 1976). Men also react more aggressively than women to inconsiderate behavior by other drivers (Turner, Layton, and Simons 1975).

It has been suggested, however, that the sex difference in motor vehicle fatalities may be an artifact of sex differences in exposure to risk: males drive more than females (Organisation for Economic Cooperation and Development 1975). We have therefore combined three sorts of data—motor vehicle fatalities (U.S. Department of Health, Education, Welfare 1974, Table 4-1); estimates of the numbers of miles driven by licensed drivers in different age-sex classes according to a U.S. National Probability Sample (U.S. Bureau of the Census 1979); and numbers of licensed drivers by age and sex (U.S. Department of Transportation, n.d., Table DL-

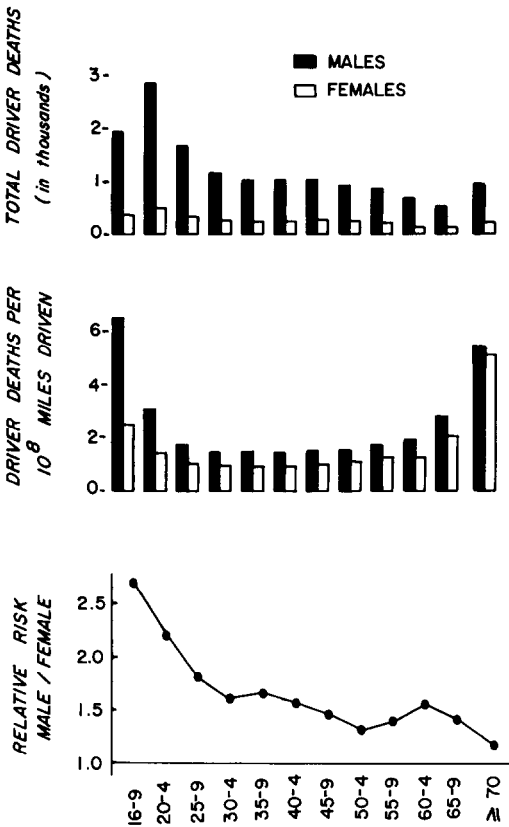


Figure 6. Driver deaths (excluding motorcycles) in the United States in 1970, by age and sex; death rates on a per driving distance basis; and the ratio of male mortality over female mortality. See text for data sources.

P1)—to arrive at estimates of driver mortality per mile driven (Fig. 6). Although men indeed drive more than women, a dramatic sex difference in driver mortality remains when the data are corrected for miles driven, and the sex difference is strongly age dependent. Dangerous driving by young men moreover appears to be a social display. For example, male drivers are much quicker to hazard a turn into traffic when they have male passengers than when they have female passengers or are alone, whereas female drivers are not evidently influenced by passengers (Jackson and Gray 1976).

THE FIELD OF HONOR

The risky competitive inclinations of young men are variously manifested, then, but we should like to return, in conclusion, to the sort of con-

frontational disputes with which we began. The typical "trivial altercation" homicide in America is an affair of honor with strong resemblances to the affairs of honor that have been described in other cultures (e.g., Eckert and Newmark 1980; Caro Barajo 1966; Safilios-Rothschild 1969). The precipitating insult may appear petty, but it is usually a deliberate provocation (or is perceived to be), and hence constitutes a public challenge that cannot be shrugged off. It often takes the form of disparagement of the challenged party's "manhood": his nerve, strength or savvy, or the virtue of his wife, girlfriend, or female relatives. Where there is a disparity in social rank, the individual of higher status may be able to refuse a challenge without loss of face, but not when the two parties are approximate equals. The challenge is itself often issued in response to a perception of status-inappropriate behavior—offense is taken because the other party appears to be elevating himself either by putting on superior "airs" or by failing to show adequate deference to those of slightly higher rank. There seems to be almost an "agreement" that the conflict will be resolved violently (Luckenbill 1977) and it is often the eventual victim who presses the conflict to its violent end (Wolfgang 1958). The eventual killer may announce and justify his deadly intentions both to his victim and to their audience. In all of these features, the homicidal altercation seems more like a formal duel (Thimm 1896; Baldick 1965; Williams 1980) than a senseless eruption of violence.

One interesting question is why these cases must be carried to their deadly conclusion. They may be contrasted, for example, with the ritualized "hold-me-back-or-I'll-kill-him" Irish barroom disputes described by Fox (1977), in which satisfaction is routinely achieved without bloodshed. The difference is of course largely attributable to reporting bias—our starting point is a sample of homicide cases and we have no knowledge of the incidence of defused conflicts. But homicide is more frequent in America than in Europe (see, e.g., United Nations 1975, Table 27). One possible explanation is that low-status men in American ghettos may often be immigrants from out of state, perhaps cut off from extended family ties, and are therefore playing a higher-stakes, higher-risk game (cf. Alexander's formulation quoted above) than the young contestants Fox observed "at home" in more enduring social networks. Of the male-

male, nonrelative homicides in our Detroit sample, 53% of victims and 47% of offenders were born outside Michigan; however, 41% of all Detroiters were born out of state (U.S. Bureau of the Census 1973), and so it is not clear that immigrant men are at higher risk of involvement in homicide than men in Detroit generally. We would still expect that the participants in homicidal conflicts are relatively isolated from family and the opportunities for enhancement of inclusive fitness that family affords, and hence have relatively little to lose. We would expect further that the demographic characteristics of participants in homicidal conflicts are associated with high risks of nonmarriageability and total reproductive failure. These are issues for future research.

It is evident that the principal protagonists in homicide are young adults (Figs. 1, 2), but we are not satisfied that the sociobiological theories reviewed earlier in this article explain why. Several authors have suggested that a young adult peak in risk-prone competitiveness is a prediction from sexual selection theory. We know of no formal derivation of this "prediction," which seems to be more of a generalization from comparative knowledge. One might instead predict that where two men find themselves similarly disenfranchised—their circumstances similarly predictive of failure—that it is the *older*, not the younger, who has less to lose and should therefore be readier to employ dangerous competitive tactics. Development of theory about competitive strategies in relation to life histories seems called for.

A final area in which research should prove illuminating is the question of the social significance and sequelae of competition and confrontation. Who are the actors most concerned to impress—women, their opponents, or other men? Is success in dangerous confrontation in fact predictive of later status, resource accrual, social accomplishments, perhaps even fitness? What are the social consequences of refusing to accept risks—is cowardice an enduring and consequential stigma? The motives in fatal altercations between young men are often portrayed as "trivial," implying that homicide is an irrational overreaction. But this conclusion is too hasty. For all we know, the principals may be acting as shrewd calculators of the probable

costs and benefits of alternative courses of action. Once a conflict becomes dangerous, the *most* negative outcome befalls the man who is shot. Men in such situations may have quite realistic knowledge of the lesser costs (not to mention possible benefits) of shooting first. In our Detroit sample, we know the eventual dispositions in 121 solved, male-male, social conflict, nonrelative homicide cases. Fifty-seven offenders (47.1%) were not convicted of any crime in connection with the homicide (56 cases dismissed, primarily as "justifiable," "excusable," or "self-defense," and a single acquittal after trial). Of 64 convicted offenders, only 2 were first-degree murders, 12 second-degree murders, 34 manslaughters, and 16 lesser charges. Thus fewer than 12% of apprehended offenders in this sample were convicted of an offense more serious than manslaughter (although the rate of murder convictions may well be higher in the 43 cases for which we lacked final dispositions). A typical sentence for manslaughter was 3 to 5 years in state prison, with parole available after 18 months.

We cannot then conclude that the offenders in "trivial altercation" homicides, swept up by irrational passions, act without concern for the consequences to themselves. We should need a great deal more information to decide whether pulling the trigger is ultimately beneficial or detrimental to the perpetrator's welfare. But, of course, most people are able to avoid situations in which they will be obliged or provoked to kill. What is clear is that it is young adult males, with few resources and poor prospects, who most often become involved in such dangerous, competitive situations.

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