SYMPOSIUM: VIOLENCE IN THE FAMILY: Blame, Retribution and Deterrence Among Both Survivors and Perpetrators of Male Violence Against Women

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SUMMARY: ... Several empirical studies are reviewed that establish: (1) that self-blame is the driving force behind distress among survivors of male violence; and (2) that the threat of retribution figures prominently in the mind of potential perpetrators in their decision to resort to violence. ... First, we bridge the gap between the socially constructed categories of rape and spousal abuse. Traditionally, rape has been viewed as a "sex" crime and spousal abuse as a "violent" crime. ... With the possible exception of organized warfare, social victimization appears to yield no such countervailing compensations. ... These results also lend support for the cross-cultural generalizability of COH theory. ... One of the critical predictions that can be derived from evolutionary theory, connecting the biological and social forces that impinge on the phenomenon of violence towards women, is that a family structure favoring the continuation of close lifelong ties of a woman to her natal, or consanguineal, family as opposed to her marital, or conjugal, family, would serve as a major protective factor against spousal abuse by her mate. ... Questions pertained to family structure, support and conflict. ... However, these results also caution that the COH ideology is not sufficient by itself to produce suppression of male violence towards women. ... CRIMINAL JUSTICE SYSTEM RESPONSES TO VIOLENCE AGAINST WOMEN ... Attorney arguments. Lines of questioning can be harmful in terms of content or process. ... Third, women who are victimized by male violence are re-victimized by the criminal justice system. ...
The capacity to negotiate social contracts and develop effective responses to those who violate them is a universal pattern of behavior that has survived thousands of years of human evolution. Here, an evolutionary perspective is applied to analysis of violence against women focusing on concepts of social equity, retribution, and deterrence. Several empirical studies are reviewed that establish: (1) that self-blame is the driving force behind distress among survivors of male violence; and (2) that the threat of retribution figures prominently in the mind of potential perpetrators in their decision to resort to violence. We consider the psychological implications of various alternative models of justice that bear on these problems. Although others have critiqued the criminal justice response to violence against women, we raise additional questions about human needs for justice with which to evaluate traditional approaches to the subject. We conclude that traditional approaches fail to address the survivor's needs for equity. Currently, criminal justice responses to violence against women illserve victims and are not very effective in reducing the prevalence of violence by perpetrators. Our analysis suggests that we should work to find alternatives that are more sensitive to human beings' psychological needs for retribution and for the restoration of social equity, and to the key role that the social costs to men play in the deterrence of violence against women.

Fanny Flagg expressed one woman's fantasy of getting even in her novel, *Fried Green Tomatoes at the Whistle Stop Cafe*:

Evelyn had even made up a secret code name for herself... a name feared around the world: TOWANDA THE AVENGER!  

And while Evelyn went about her business with a smile, Towanda was busy poking child molesters with electric cattle prods until their hair stood on end. She placed tiny bombs inside *Playboy* and *Penthouse* magazines that would explode when they were opened... She allowed rats to chew all slumlords to death... Graffiti offenders were to be dipped in a vat of indelible ink... Towanda would be so busy all day that Evelyn was exhausted by bedtime.  

Our research program has focused on the roles of blame and retribution in the recovery of survivors of male violence and the deterrence of its perpetrators. Our work is grounded both in evolutionary psychology, which attempts to understand human behavior in terms of the adaptive purposes it serves, and in models of human thought processes, which examine what happens cognitively in the transformation of traumatic experiences into deleterious outcomes for physical, psychological, and social health. This paper consists of five sections: (1) a brief background with definitions; (2) an examination of the role of blame in the recovery from victimization; (3) a discussion of varying theoretical models of justice, including concepts of reciprocity, revenge, and honor; (4) an analysis of the potential of retribution for deterrence of violence against women; and (5) a critique of the current criminal justice response to sexual and physical assault of women.

In attempting to integrate this seemingly diverse body of knowledge, we violate certain traditional categories that many people have become accustomed to taking for granted. First, we bridge the gap between the socially constructed categories of rape and spousal abuse. Traditionally, rape has been viewed as a "sex" crime and spousal abuse as a "violent" crime. Although both are violent crimes, the general public has viewed rape differently because it involves sex. For some time now, however, feminist theorists have been emphasizing the salient role of the violent component of rape in the experience of the victim, while evolutionary theorists have been emphasizing the critical importance of the sexual component of spousal abuse in the motivation of the perpetrator. Although these two categories do not represent identical phenomena, they constitute part of the same general discourse on male violence against women. Second, we identify the key commonalities in the evolved psychologies of both victims and perpetrators that influence their understanding of the social consequences of rape and spousal abuse. Third, we bridge the gap between a consideration of the natural history of this evolved individual psychology and the current practices that our criminal justice system uses to process those cases that come to its attention.
BACKGROUND AND DEFINITIONS

According to the public media, we do not really know how large the problem of male violence has become in this country. However, several nationally representative surveys carrying the imprimatur of the federal government have recently appeared with very consistent [*222] prevalence estimates. For example, the National Violence Against Women Survey, a telephone survey of 16,000 women and men funded by the National Institute of Justice and Centers for Disease Control and Prevention, reported rape prevalence of 17.6% among women when completed and attempted rape were added together, as is typically done in crime statistics. n2 This percentage translates into one in every six American women dragging the trauma of rape through their lives. n3 This report also revealed that 51.9% of women reported some type of physical assault during their lifetimes. n4 At 66.4%, the corresponding figure for men was even higher. n5 But whereas a partner committed 76% of assaults on women, only 17.9% of the assaults on men were intimate, n6 and the vast majority of perpetrators of rape and physical assault were men (93.4% of female victims and 85.9% of male victims). n7

This survey was based on a definition of rape that is consistent with most North American statutes and federal rape law. Rape was defined as the use or threat of force to attempt or actually penetrate the mouth, anus, or vagina by penis, tongue, fingers, or objects, or the victim's mouth by penis, without the victim's consent. n8 Physical assault included acts such as throwing objects, pushing, pulling hair, slapping, kicking, choking, beating up, threatening with a gun or knife, or using a gun or knife. n9 We reference these definitions when we use the terms rape, physical assault, or the broader term "violence against women," although the latter term covers a larger range of acts than the current focus.

THE ROLE OF BLAME IN RECOVERY

Our research program on recovery from rape examined the roles played by traumatic memory, cognitive coping, and social information processing in mediating social, physical and psychological [*223] outcomes of rape, including posttraumatic stress disorder ("PTSD"). When compared to other civilian traumas, rape victims have relatively high rates of PTSD. n10 The deleterious effects of rape on mental, physical and social functioning have been well described. n11

The key studies in our work on rape recovery n12 were (1) a brief community-based survey, n13 (2) cross-sectional interviews of rape survivors representing the continuum of lengths of time since assault, (3) a longitudinal follow-up of survivors across two years of recovery beginning in the immediate post-rape period, and (4) a generalization of findings to diverse samples (low-income Anglo-American, American Indian, and monolingual Spanish-speaking survivors). n14 The same basic battery of assessments was used in each study.

Our conceptual model for this research program incorporated many features of the cognitive or information-processing models of PTSD reviewed and extended by Brewin, Dalgleish, and Joseph. n15 Cognitive theories of PTSD share core assumptions that individuals possess preexisting beliefs and models of the world. When intentional harm by another human being is received, the experience provides information that is both salient and discordant [*224] with these models. This information undermines certain illusions about the world that are essential to positive mental health, such as a belief that your life is secure, faith in the justness of the world, or assumptions of the basic goodness of people. From the cognitive perspective, recovery involves cognitive readjustments that reconstitute core beliefs in a manner that again provides the individual with the sense that their experiences are predictable and understandable.

One of the first responses to victimization is the process of figuring out how the incident happened and running alternate scenarios of different potential choices that could have theoretically changed the outcome. There are multiple factors that contribute to the rape and physical assault of women that are more or less external to the woman, including: (1) patriarchal structures that disempower women, (2) institutional supports for violence including ideologies of male aggression as the basis of masculinity, (3) social roles and sexual scripts dictating an inherent tension in social exchanges between men and women, and (4) features interior to the perpetrator including biological and psychological
But instead of blaming external factors, many abused women turn to self-blame. Two forms of self-blame—behavioral and characterological—have been identified. When applied to rape, behavioral self-blame refers to acts committed by the woman that she perceives contributed to her victimization, such as being out late, drinking too much, or being around older men. Characterological self-blame consists of blaming unchangeable features of the self, which in the case of rape might include being a weak person, too trusting, overly friendly, or a poor judge of character. The latter is considered to be more harmful to the recovery process.

However, our studies showed great heterogeneity among women both in recovery from rape and in the mediating role of various forms of blame and associated maladaptive beliefs. Rape happened to real people who differed in their inherent personality characteristics, the adverse childhood experiences they had faced, and the violence they encountered. For example, negative early life experiences appeared to create tendencies to activate self-blame following a sexual assault. Attempts to attribute blame and responsibility were also clearly influenced by the physical characteristics of the rape and by the behavior of the survivor. Women who experienced the most violence or whose rapes involved strangers were most likely to blame factors external to themselves. This pattern of blaming was least detrimental to speedy and full recovery. Women who were drinking or using drugs prior to the rape or survivors who had prior experiences with violence were more likely to blame their own character. This form of blame was particularly pernicious in its ability to disrupt core assumptions about basic goodness and evil, personal ability to stay safe, and the capacity to make good decisions. Furthermore, blaming unchangeable features of oneself for rape both directly and indirectly determined the severity of rape's deleterious effects on social adjustment and the degree of psychological distress and physical symptoms.

Based on the foregoing results, it is clear that issues of assigning responsibility and reckoning social justice figure prominently in the minds of the survivors and have important practical consequences for recovery. Looking more generally at the documented long-term psychological effects of life-threatening events reveals a broad overall pattern distinguishing the effects of trauma produced intentionally by a social agent and accidentally by a mindless natural process. All sufficiently traumatic experiences threatening life integrity, whether natural or social in origin, are capable of producing the basic set of core symptoms that characterize the PTSD syndrome, although these may vary in both prevalence and severity. However, social victimizations are also capable of producing additional long-term changes in social cognitions, such as self-blame and self-depreciation, which have deleterious effects upon the health and adjustment of the survivor that outlast the purely traumatic reaction to the precipitating event. The distinction between human and natural disasters is not perfectly categorical. A certain ambiguity may exist in some cases where human action or negligence contributed to or exacerbated the effects of the natural disaster. For example, famines may be perceived, sometimes correctly, to be politically contrived, and defective highways or bridges might contribute to the death toll taken by an earthquake. Where this interpersonal element is lacking, however, attributions of blame and reckoning the social justice of the disaster are clearly irrelevant to the traumas of the disaster. This is not to minimize the harmful effects of naturally induced traumas, but to point out that certain additional and qualitatively distinctive consequences accrue to their socially-induced equivalents.

Victims of a natural disaster can be physically and economically devastated by their losses. However, these victims often demonstrate surprising resilience and community spirit. In fact, some find the experience of a shared struggle against common misfortune to evoke heroic and altruistic sentiments that can be emotionally satisfying. With the possible exception of organized warfare, social victimization appears to yield no such countervailing compensations. Although survivors after a recovery of many years may identify what they refer to as "growth" from the experience, these changes are often negatively toned ("I became more sensitive to the underdog," "I became more cautious"). The predominant lingering feelings are typically shame rather than pride.

The PTSD construct has been criticized for its inadequacy in accounting for all the responses that characterize victimization by male violence and for its lack of recognition of the unique recovery environment that the survivor of gendered abuse faces. However, there is a consensus that its symptoms are observed not only in survivors of rape, but among victims of other forms of male violence, and in those exposed to interpersonal life-threats in general. It only seems to matter that something very bad was done to the victim by a human perpetrator. How objectively and
subjectively severe the misdeed was remains an important issue, and [*227] unwanted sexual penetration of the body is highly predictive of serious aftermath. But precisely what misdeed was perpetrated otherwise appears to pale in relative significance.

THEORETICAL MODELS OF JUSTICE

Why are rape survivors, or humans in general, so obsessed with issues of blame and retribution? One popular explanation is that humans have an innate desire for justice. For example, much has been written about the so-called "just world" hypothesis. n21 However, these "just world" ideologies are not homogeneous, and may have radically different social implications. Historians of religion have categorized some of these differing conceptions. n22 For example, some religions offer a Deuteronomic conception of justice, in which God rewards and punishes individuals in this life according to their deeds. n23 Such a conception of justice may be participatory, where individuals may perceive themselves to be the instruments of divine justice in this world. Others offer a doctrine of postmortem justice, promising the blissful salvation of paradise to innocent martyrs and an eternal damnation of torment to evildoers. n24 Such conceptions are socially conservative in that they reserve moral retribution as the exclusive privilege of God and restrict the individual to seeking personal salvation or recovery rather than revenge or social change. Still others offer the hope of apocalyptic justice, prophesizing a terrible day of judgment in which the unjustly privileged and powerful will be collectively brought down and the downtrodden will be exalted and divinely compensated for their long ordeal of suffering. Such conceptions are socially revolutionary, encouraging individuals to strive towards and prepare for the final cataclysmic upheaval, which will overturn the existing world order. n25 Not all such ideologies are [*228] theistic, however. Marxism is a wonderful example of an atheistic apocalyptic faith. Participating in the Feminist movement may serve much the same psychological function by offering victims the opportunity to do something constructive to undermine the social power of their oppressors. The implications of such different "just world" ideologies on the individual response to trauma might be far-reaching. However, to derive any practical implications from a presumed "innate desire for justice," we have to be more specific about exactly what we mean by social justice. To posit a generalized need for justice in the world also leaves open the question of what would cause information on social victimization to be processed so much differently than that on comparably traumatic natural catastrophes.

Whereas the Standard Social Science Model ("SSSM") represents the human mind as a set of simple and domain-general learning mechanisms, evolutionary psychologists have argued that the mind is better conceived as being comprised of a set of dedicated and domain-specific information processing modules designed by natural selection to perform specific adaptive functions that are relevant to the survival and the reproduction of the organism. n26 One such hypothesized module whose existence and general operating characteristics has been well-supported and documented by a substantial body of empirical evidence deals with the problem of social exchange. n27 The existence of such a module is virtually required by all prevailing theories on the evolution of social behavior. n28 To merely assert that the postulated need for revenge is an artifact of certain cultural ideologies is little better than just appealing [*229] to human nature. Such accounts are ultimately reducible to mere descriptions rather than explanations. Evolutionary psychology demands a functional explanation of why something is either culturally transmitted or genetically encoded into human nature. An evolutionary approach would seek to explain why there may be an innate human need for social equity and what accounts for the intuitive emotional appeal of cultural ideologies that promise a just world.

Briefly, evolutionary theorists have proposed two different mechanisms to account for the evolution of social behavior. Both of these are highly mathematical theories, but informal verbal descriptions will suffice for present purposes. The first mechanism is that of kin-selected altruism, n29 wherein an organism might curtail or even entirely forego individual reproduction in order to enhance the reproductive output of another. According to this theory, this form of altruism can only be naturally selected in direct proportion to the degree that the beneficiary is genetically related to the altruist. Thus, an altruist can replicate its own genes indirectly by increasing the number of surviving offspring produced by its genetic relatives. The second mechanism is reciprocal altruism, n30 wherein one organism might confer reproductively relevant advantages upon another in exchange for proportional reciprocation by the beneficiary on some future occasion. For this mechanism to operate, it is not essential that the interacting individuals be genetically related to each other, although that possibility is not entirely precluded by the theory. What is required is
that the cost-to-benefit ratio favor "investing" altruism in another individual in return for having an equal or greater benefit returned when it is more urgently needed. As pre-agricultural (and thus pre-industrial and pre-refrigeration) hunter-gatherers put it, the best place to store food is in your neighbor's stomach. \[n^31\]

\[n^230\] Of course, this second mechanism is more speculative and thus much harder for an evolving population to maintain. For example, it requires that individuals be able to reliably recognize each other and accurately remember the value of benefits exchanged with every other individual. Furthermore, it requires that cooperating individuals be able to detect and systematically discriminate against non-reciprocating "cheaters" in repeated social interactions. Otherwise, such "cheaters" will socially parasitize and ultimately multiply sufficiently to undermine the system. Indeed, elaborate cognitive mechanisms are required to maintain an evolutionarily stable system of reciprocal altruism, such that it would be hard for some theorists to believe that it could naturally evolve at all if we humans were not such unrivalled masters of this game.

Given the cognitive requirements described above, it has been shown that some relatively simple behavioral algorithms can successfully regulate reciprocal social exchange. \[n^32\] One such social algorithm has been dubbed "tit-for-tat" ("TFT") because all that it requires is the equal payback of any benefits received. This automatically discriminates against cheaters because those who confer no benefits on others eventually receive none in return. However, the only penalty imposed by TFT on cheaters is the withholding of altruistic benefits, and not the infliction of any true punishment. This deceptively simple strategy has been shown to be surprisingly successful in competition with much more seemingly sophisticated ones in game-theoretical computer simulations, qualifying as an "evolutionarily stable strategy" ("ESS") by virtue of its resistance to displacement in the population by variants or alternative strategies. \[n^33\]

A tantalizing extension of this hypothesis is that the flip side of TFT is the "eye-for-eye" principle ("EFE") immortalized in 1750 BCE by the Babylonian King Hammurabi, which entails repaying harm with harm. Indeed, it is quite possible that such an \[n^231\] evolved cognitive mechanism might form the fundamental basis for the human need (or evidently strong desire) for social equity. Our cultural elaborations of the concept of social justice go far beyond such simple behavioral algorithms, but it is quite possible that our basic instincts and our untrained moral intuitions continue to follow more primitive principles, \[n^34\] which serve to guide human societies in developing social systems directed at resolving disputes. It is precisely this conflict between our constructed social institutions and our evolved emotional psychology that sets the stage for the additional adverse effects of social victimization.

It is obvious that the proximate implementation of the TFT or EFE strategies in humans is not embodied in the kind of mindless reflexive mechanism that might be expected in some simpler forms of life. It requires an elaborate cognitive infrastructure, but it is nevertheless mediated by emotional arousal. Casual observation of human affairs immediately suggests that violation of social equity is a strong elicitor of emotional reactions. Thus, any occasional malfunction of this evolved adaptive mechanism could be safely predicted to result in some emotional distress. Furthermore, in reviewing the distinctive sequelae of social victimization, it becomes difficult to view them as entirely coincidental to the hypothesized cognitive mechanism. Self-blame, for example, can clearly function to restore imputed equity. Self-devaluation (decreased self-esteem), although not completely abolishing the basic fact of the inequity, can nonetheless function to reduce it by trivializing the magnitude of the offense by the implication that it was perpetrated on a less worthy victim.

It is therefore possible that when an individual is rendered powerless by social constraints to restore equity following social victimization, however enlightened or civilized these constraints might be, this situation might produce severe affective and cognitive distortions. This theory would postulate an innate human need for revenge which, if unsatisfied, leads to certain predictable patterns of psychosocial maladjustment. Furthermore, this theory leads to several testable hypotheses. For example, victims who have somehow obtained social retribution, either through the formal \[n^232\] criminal justice system or through informal extralegal means, should develop a better prognosis than those who have not. By the same token, victims who acknowledge and accept their anger should do better than those who suppress or deny it. Socially acceptable mechanisms for expressing these feelings of anger and vindictiveness should prove to be therapeutic, as in the "testimonial method" that has been used for survivors of torture and attempted genocide. Encouraging victims to forgive the perpetrators, as is often done, might be counterproductive to this end.
If revenge reflects the "dark side" of reciprocal altruism, survivors of social victimization are burdened with more than the physical trauma of the original incident. They are burdened with the unacceptable social implications of an unresolved injustice. They must either consent to live in the reduced psychological circumstances of permanent social subordination and accept chronic oppression, or find a way to reassert their human dignity. No less might be required for recovery. It might be the profound social insult, and not the mere physical injury, that distinguishes survivors of social victimization.

However, a major potential objection to this corollary of reciprocal altruism theory can be found in the original theoretical work of Trivers and other evolutionary game theorists, in which what they referred to as "spite" (returning harm for harm) was found not to be an ESS. This was because the cost of punishing cheaters was borne exclusively by the "spiteful" individual (now classifiable as an altruist!), whereas the benefits thereof accrued equally to all the other potential cooperators in the system. More recently, however, several evolutionary theorists have explored the emergence of such possible countervailing factors as "indirect reciprocity,” "blood revenge,” and "family honor” as evolved adaptive strategies, and two social psychologists have recently produced an entire volume on the "culture of honor” hypothesized to be a virtually universal characteristic of herding (as opposed to farming) societies and their latter-day descendants. The works of Alexander, Daly and Wilson, and Nisbett and Cohen have shown that in explicitly social settings (called "multiplayer” in game theory), the evolution of both indirect reciprocity and indirect retribution can be facilitated by both observational learning and social communication (e.g., gossip).

Under Nisbett and Cohen's "culture of honor” ("COH”) theory, the herder versus farmer hypothesis has a functional explanation. Briefly summarized, the theory posits that while farmers can readily defend their resources after harvesting their crops in fortified storage facilities, even if it is only a central enclosure surrounded by dwellings—which has been a characteristic feature of early agricultural communities since at least as far back as 8,000 BCE—herders' most valuable property is their livestock, which is easily raided and provides its own four-legged means of transportation. Furthermore, because agriculture typically provides more productivity of food per unit area of land than pastoralism, it can typically support a higher population density. In contrast, herding peoples tend to live at lower population densities and may even be nomadic. This limits the availability of law enforcement for herders, even when living under formal state authority. Herders therefore have historically had to take justice into their own hands more often than farmers. Although Nisbett prefers a cultural rather than a genetic explanation for the evolution of a code of honor in herding societies, the ultimate cause proposed for the function of retribution is that of strategic deterrence. Of course, over ten thousand years of fidelity to one mode of subsistence over another might be more than sufficient to have permitted some degree of genetic divergence on the relevant traits between human subpopulations. In either case, either cultural or phylogenetic inertia appears to have preserved these behavioral traits into the present day, regardless of the current industrial or postindustrial modes of subsistence that may have been recently acquired by some human groups.

The famous computer simulation tournaments of the Prisoner’s Dilemma, in which TFT emerged triumphant as an ESS, were limited in that they modeled society as a system of purely dyadic interactions. No individual had access to any information regarding the outcomes of interactions other than its own. As Cheney and Seyfarth observed of vervet monkeys, cognitive abilities such as transitive inference (if a>b and b>c, then a>c) permit many primates to use their observations of encounters between others as a way to reduce the amount of aggression that they have to risk to determine their social status within a large group. For example, if monkey A was observed to beat monkey B, and monkey B was observed to beat monkey C, there is no need for monkey C to have to fight monkey A. Thus, there are simple ways to reduce the need for what would otherwise require a dominance contest between every possible pairing of individuals, especially if these agonistic interactions are potentially damaging to the participants. In such a context, public revenge would be an adaptive behavior, especially for members of kin-structured groups.

To adequately test this theory, one has to operationalize and psychometrically validate the COH construct as an individual difference variable. Fortunately, Nisbett and Cohen have identified an entire battery of critical issues on which the ideology of honor can be reliably discriminated and multi-operationaized. The author was recently involved in directing a series of psychometric studies designed to evaluate the convergent and discriminant validities of the hypothetical constructs of reciprocity, revenge, and honor, as proposed by both evolutionary and social
psychologists. In the first of these studies, a sample of 544 undergraduates at the University of Arizona completed an eighty-item questionnaire to test the theory that a basic and genetically determined instinct for reciprocity may be cognitively elaborated at various increasing levels of sophistication under appropriate social conditions to yield more complex ideologies of equity and social exchange. Eight common factors were initially constructed: (1) positive individual reciprocity, (2) negative individual reciprocity, (3) positive group reciprocity, (4) negative group reciprocity, (5) positive individual honor, (6) negative individual honor, (7) positive group honor, and (8) negative group honor. These common factors relate to theoretical constructs proposed in the previous literature. For example, positive individual reciprocity is comparable to Axelrod & Hamilton's TFT strategy, whereas negative individual reciprocity is comparable to Trivers' concept of spite, and is perhaps related to Hammurabi's historic EFE principle. Also, positive individual honor is comparable to Alexander's indirect reciprocity, while negative individual honor is comparable to Nisbett and Cohen's COH ideology. Preliminary analyses of these data suggested that there were two latent higher-order constructs representing the positive and negative categories of the corresponding lower-order factors and that these higher-order constructs were statistically independent of each other.

In a recent follow-up study, 263 undergraduates from the University of Arizona, Tucson, 143 undergraduates from the Universidad Complutense de Madrid ("UCM"), Madrid, Spain, 120 undergraduates from the Universidad Nacional Autonoma de Mexico ("UNAM"), Mexico City, Distrito Federal, 153 undergraduates from the Universidad de Sonora ("UNISON"), Hermosillo, Sonora, 144 undergraduates from the Universidad de Costa Rica ("UCR-SJ"), San Jose, Costa Rica, and 119 undergraduates from the Universidad de Costa Rica ("UCR-LG"), Liberia, Guanacaste, completed parallel English and Spanish translations of an abbreviated thirty-two-item questionnaire constructed to provide a more stringent test of the discriminant validities of the eight lower-order constructs previously identified. A multi-sample confirmatory factor analysis was performed on these data, comparing the samples obtained from the different study sites. Items were generated systematically in an orthogonal factorial design to measure any additive contributions to the overall judgment of three theoretical dichotomies: (a) reciprocity versus revenge, (b) justice versus honor, and (c) individual versus group. The reciprocity and revenge factors were confirmed to be psychometrically discriminable, suggesting the independent operation of at least two distinct psychological mechanisms for positive and negative social exchange. However, the hypothesized distinctions contrasting justice with honor and individual with group effects were not supported.

These results imply that the proposed TFT and EFE strategies might be produced by different evolved cognitive mechanisms. It is possible that the EFE mechanism was evolved in a multilateral interactive social context and is not a simple extension of the TFT strategy. This is consistent with the predictions of evolutionary game theory that inter-individual revenge or "spite" cannot easily evolve in the context of purely dyadic interactions. This suggests that retributive honor and revenge are best considered the result of more complex processes of social evolution, as emergent properties arising from social communication within multiplayer games. Regardless of its ultimate origin, an independent psychological mechanism for revenge appears to have evolved in humans, which is not an automatic consequence of some generalized "just world" ideology. This separate cognitive mechanism appears to be dedicated to processing domain-specific information regarding negative social exchange and may serve as the foundation for the universal human concern with issues of blame and retribution. We ignore such a fact of human nature at our peril.

These results also lend support for the cross-cultural generalizability of COH theory. The same model specifications held up cross-culturally, although statistically significant differences were found in the magnitudes of the factor loadings. By computing unitweighted factor scores to achieve greater generalizability across independent samples, significant differences in the factor means, representing the absolute levels of these constructs, were found. The mean unit-weighted score on the revenge factor was found to be significantly higher in the combined Mexico and Costa Rica (Meso-American) samples than in the combined Arizona and Madrid samples. Although there were no significant differences in mean scores on the revenge factor between the Arizona and Madrid samples, there were systematic differences within the Meso-American samples that supported the hypothesized Nisbett and Cohen herder versus farmer distinction. The mean score on the revenge factor in the combined Sonora and Guanacaste (herder) samples was significantly higher than that of the combined Mexico City and San Jose (farmer)
samples. Furthermore, there were no significant differences in mean scores on the revenge factor between either: (1) the Sonora and Guanacaste (herder) samples, or (2) the Mexico City and San Jose (farmer) samples, respectively. This indicated that the herder versus farmer distinction completely transcended and overwhelmed that of the national boundary between Mexico and Costa Rica.

Both the Mexico City and the San Jose samples represented data from the capital cities of central highland valley regions that have been dominated by farming economies for several thousand years and have drawn most of their current population from the surrounding agricultural regions. Conversely, the Sonora and Guanacaste samples represented data from regions that have been dominated by herding economies for the past few centuries, and should indeed reflect the influence of a strong COH ideology. The current populations of both Hermosillo, Sonora, and Liberia, Guanacaste, are also drawn principally from their surrounding regions. This is unlike the case of Tucson, Arizona where large-scale recent immigration from other regions of the United States, principally from California and the Midwest, has reduced the descendants of the original settlers, many of whom were also herders, to a small minority. The same pattern of large-scale recent immigration from other regions of Spain has also changed the demographics of Madrid to a more cosmopolitan mix. Thus, we were able to contrast the effects of differing social ecologies with those of similar ethnic phylogenies and provide some cross-cultural support for the Nisbett and Cohen herder hypothesis.

DETERRENCE BY THREAT OF RETRIBUTION

The operative question then becomes whether this ideology of punishment and retribution is behaviorally effective in deterring aggression. Radical behaviorism tells us that it should not be, because punishment does not work very well in permanently reducing a tendency to respond in a certain way. Furthermore, criminals have been characterized by operant behaviorists as being the individuals least susceptible to aversive conditioning. Much of criminology also tells us that the threat of retribution should not deter aggression because criminals are represented in more cognitive theories of criminality, such as the "general theory of crime" ("GTC") as having insufficient foresight and impulse control to consider the long-term consequences of their actions.

Nevertheless, the preponderance of empirical findings concerning male violence towards women do not support these broad assertions within the context of male sexual coercion. To the contrary, male sexual coercion appears to be extremely sensitive to the risk of social retribution. In a variety of studies, men's self-reported likelihood of committing rape has been shown to vary significantly as a function of various social contingencies, including but not limited to: (1) whether the act was labeled "rape" or just "forced sex," indicating different social perceptions of the act; (2) whether the subject was verbally assured that he either would or would not be caught, indicating the likelihood of social retribution for the act; (3) whether the subject was given "inhibitory" or "dis-inhibitory" communications that were differentially permissive of male aggression against women, indicating either social approval or disapproval of the act; (4) whether the subject had recently viewed or heard depictions of coercive sex with either positive or negative outcomes, indicating differently valued social consequences of the act; and (5) whether the subject believed that women either secretly desired and enjoyed forced copulation or were instead distressed and disgusted by it, indicating the probable social response or non-response of the victim to the act. Such experimental manipulations, which are transparently related to the nature of the probable societal response, produced substantial variation in male estimates of how likely they were to engage in sexual aggression. Furthermore, the self-reported "likelihood to rape" ("LR") scale used in these studies has been validated as predictive of real outcomes (at least in samples of college students) by a variety of cognitive and behavioral measures, which included measures for those that have engaged in dating violence. Therefore, for the suppression of male sexually coercive behavior, the threat of punishment or social retribution seems to work quite well. The question then becomes to what extent the COH revenge ideology supporting social retribution is behaviorally effective in creating and communicating a credible threat of punishment to the potential perpetrator and how much it actually suppresses the aggressive behavior.

Evolutionary theory predicts that women will develop counterstrategies to domination instead of passively accepting male sexual coercion. Among these counterstrategies is the use of any familial social support and resources that she has at her disposal to offset the effects of the greater physical and economic power typically wielded...
by the male. Such assistance is predicted to be more forthcoming from her consanguineal family, or genetic relatives, based on the theory of kin-selected altruism. However, this prediction requires a social structure within which her kin group is readily accessible. One of the critical predictions that can be derived from evolutionary theory, connecting the biological and social forces that impinge on the phenomenon of violence towards women, is that a family structure favoring the continuation of close lifelong ties of a woman to her natal, or consanguineal, family as opposed to her marital, or conjugal, family, would serve as a major protective factor against spousal abuse by her mate. Such close and continuing extended family structures are quite prevalent in many Mediterranean countries, such as Spain, as well as many countries of the New World, primarily because of the large contributions, both cultural and genetic, made by the former Spanish empire to the many different societies of the Americas.

Working against the female support mechanism, the prevailing pattern of sex-biased dispersal can influence the relative geographical distances of females from their kin with respect to males from their kin. For example, a pattern of strong patrilocality would militate against adult females living near her genetic relatives, but would provide the males with the advantages of local consanguineal family ties. This is one possible basis for the evolution of an androcentric sexist bias in certain traditionally patrilocal human societies, where the local males are all related by blood and thus more likely to cooperate, but their mates tend to be unrelated to each other and thus socially disunited. Since the female offspring of such a community would eventually disperse, an androcentric social bias would favor the males and their male offspring who are likely to remain in the group, while minimizing the impact on the female offspring slated to depart. The losers in this system would be the immigrant females who are individually overwhelmed by the solidarity of the local male kin-group. It would be more difficult for any genetically-based and reproductively relevant sexism to evolve in a community without sex-biased dispersal. This is because sexual discrimination favors the offspring of one sex at the expense of the other. Balanced sex rations would produce no net genetic discriminatory benefit.

The threat of attack on women can vary depending on the relative strengths of sex bias and family support systems. Based on comparative evidence from studies of nonhuman primates and human ethnographic literature, Barbara Smuts generated five major hypotheses regarding the possible factors responsible for variation in women's vulnerability to both physical and sexual violence from men:

[*241] 1. "Male aggression toward women is more common when female alliances are weak;" n58

2. "Wife beating is more common when females lack support from natal kin;" n59

3. "Male aggression toward women is more common when male alliances are particularly important and well-developed;" n60

4. "Female vulnerability to wife beating will generally increase as male relationships become less egalitarian;" n61

and

5. "Women will be more vulnerable to male aggression as male control of resources increases." n62

Although humans are predominantly patrilocal, there is much regional variation in the patterns of dispersal and outbreeding. Thus, we would expect any power imbalances between the sexes to be strongly moderated by these demographic patterns. For example, the existence of a strong extended family structure might serve as a countervailing force and function to set real limits to the oppression of women even in a primarily patrilocal and, thus, patriarchal system. Furthermore, the absolute economic dependency of the woman on her husband might be mitigated by the proximity of her male kin, such as fathers, uncles, and brothers. Therefore, the prediction is that the prevalence of domestic violence in different human societies is directly related to the family structure. The extended family, as a social resource to exogamous women, functions as a protective societal factor limiting the more extreme manifestations of patriarchy. Variations in family structure within societies could therefore be used to test the efficacy of this hypothesized causal force.

These combined perspectives lead to several fascinating testable hypotheses. First, the observed family deterrence
should be primarily the product of an interaction (the multiplicative or joint effect) between extended kin densities and the ideology of honor. Neither factor in isolation should be as effective as both combined [*242] in deterring aggression. Second, because of both an evolved male psychology and a musculoskeletal anatomy more dedicated to the strategic use of physical force, the protective effect of extended families should be stronger for the local densities of male kin than of female kin. Third, because social coercive power in primates is not dependent on musculature alone, but also partially on social dominance and affiliative rank, the protective effect of extended families should be stronger for higher rather than for lower socioeconomic status kin. Fourth, because the social cohesion or internal solidarity of the extended family is highly variable among human societies, the protective effect of extended families should be stronger for emotionally and instrumentally supportive kin than for socially nonsupportive kin. Therefore, we should expect not just a two-way, but a four-way interaction between: (1) the local density of male kin, (2) the social support provided by local kin, (3) the socioeconomic status of close kin, and (4) the personal COH revenge ideology of the respondents.

To test these theoretical predictions, independent samples of 128 women and 106 men were interviewed in a study in Hermosillo, Sonora, Mexico between 1996 and 1998. n63 Respondents were screened for their involvement in a committed sexual relationship during the past year, but not with each other. Questions pertained to family structure, support and conflict. Females reported on victimization by spousal aggression and males on perpetration. Previously documented effects of the partner's mate quality, the partner's socioeconomic status, and the partner's number of children with the respondent were cross-culturally replicated in this study. n64 The multivariate construct used to operationalize spousal abuse included subscales measuring verbal abuse, physical abuse, escalated (life-threatening) abuse, and sexual abuse. These four subscales were found to be highly intercorrelated. Although spousal violence and spousal sexual coercion represent two distinct legal categories, their rate of co-occurrence [*243] is sufficient to place them within a unitary psychometric construct. This means that regardless of the fine points of our definitions, spousal physical abusers are generally also spousal rapists and vice-versa.

In these studies, cumulative interactions between family structure parameters of local male and female kin were computed for male and female respondents. Multi-sample structural equation models showed that the same cumulative interactions of local density of male kin protected women from spousal abuse but empowered men to perpetrate it. Thus, the risk of spousal abuse was mitigated by the sexual balance of power between the family structures of potential victims and potential perpetrators. This means that not only does a credible threat of deterrence and the willingness to use it actually decrease the risk of spousal abuse in potential female victims, but a sufficiently potent counter-threat from the corresponding kin group of the potential perpetrator, backed up by both ability and motivation, can offset the effect of that deterrent. Although evolutionary psychology differs from some feminist theories of violence against women in that it does not characterize the motivation of male aggressors as the exercise of power for its own sake, these results strongly support the traditional feminist stance that relative power is intimately involved in the socially contingent expression of male violence towards women. n65

 [*244] These results indicate that a cultural ideology (or genetic predisposition) legitimizing the strategic use of socially approved forms of violence to enforce accepted norms of social justice appears to provide adverse enough social contingencies to effectively suppress male sexual coercion. However, these results also caution that the COH ideology is not sufficient by itself to produce suppression of male violence towards women. The significant four-way interactions also included family social support for the potential victim and family socioeconomic status, which represent resources that are neither generally nor equitably available to all members of society. Furthermore, although evolutionary theory predicts that the reproductive interests of a women and her genetic relatives will partially overlap, it does not predict that they will be identical. Individuals are expected to maximize their inclusive fitness and only contribute to that of others in exact proportion to how much the reproductive interests of those others are partially confluent with their own. Some societies might occasionally be willing to sacrifice the personal interests of a female member to the real or perceived interests of the family as a whole if the situation is deemed to require it. Finally, our results showed that a society-wide COH ideology was a double-edged sword, in that it simultaneously protected certain women from abuse but empowered certain men to perpetrate it.
Therefore, in spite of a shared cultural ideology legitimizing their protection, some women were in reality much better protected than others. This implies that, unless one subscribes to a particularly harsh version of social Darwinism, one cannot rely on such natural mechanisms to function as a check on male aggression in the population as a whole. A substantial proportion of women could be expected to fall through the cracks of such a laissez-faire system of justice. It is arguably the role of state authority to fill this gap as the legitimate guardian of the weak and the oppressed.

[*245] CRIMINAL JUSTICE SYSTEM RESPONSES TO VIOLENCE AGAINST WOMEN

After a prolonged absence from his office [Cornelius Vanderbilt] returned to find that Charles Morgan and C.K. Garrison, his associates in the Accessory Transit Company, had taken advantage of the power of attorney he had vested in them and had done considerable damage to his interests. Recovering from his initial rage, Vanderbilt dictated the following letter to them: "Gentlemen: You have undertaken to cheat me. I won't sue you, for the law is too slow. I'll ruin you." n66

Unfortunately, survivors of male violence rarely have the social power to take revenge on those who have wronged them. The presumption has been that such individuals can rely on the criminal justice system to protect their interests. The get-tough crime control rhetoric often appeals directly to women, playing on their fears and promising safety. n67 However, in light of our empirical findings, we can offer several explanations of why it is that the current criminal justice system has generally failed to deter violence against women. First, certain adversarial procedures commonly used in both the investigation and litigation of rape cases serve to aggravate the survivor's psychologically unhealthy focus on self-blame. Second, the well-known consequences of pressing charges serve to discourage the majority of survivors from being processed by the criminal justice system. Third, even when they do participate in the criminal justice system, the final outcomes are generally unsatisfactory in terms of restoring any sense of equity in the survivors after what happened to them. We review the evidence for each of these assertions in turn.

Several features inherent in the United States criminal justice system shape survivors' experiences and create an understandable [*246] fear of the process. For example, women are generally aware that the credibility and culpability of sexual assault survivors are scrutinized like that of no other group of victims. Surveys of rape crisis centers in the United States revealed thirteen states where adult rape complainants had been required to take a polygraph exam before their charges would be accepted and eleven states where child victims were polygraphed. n68 Furthermore, the observation of rape trials has produced the following judicial factors that could exacerbate the trauma of the original assault: n69

Delays in the court process. Trials can last over a year. Repeated delays can result in victims feeling that time was suspended and that the court process came to dominate their thoughts.

The public trial. Many women do not realize that they will be required to testify in open court because the defendant has the right to a public trial. They become upset when they are told that something they perceived as a very private matter will be disclosed. Some judges, however, have discretion to clear the courtroom during the victim's testimony. n70

The courtroom environment. The formality and ritual of legal proceedings may contribute to a victim's emotional reaction and well-being. She may feel a sense of isolation when giving her testimony if her friends who are witnesses are sequestered, if she faces only men in court, and if she is the only complainant. She may feel betrayed when her friends, family, or mental health professionals give information to defense attorneys. The rape survivor's own tendency to blame herself may create oversensitivity to the opinions of others. She may respond to silent suspicion, the prevailing societal response to rape victims, with a drive to convince others of her story.

Reliving the rape incident. Many victims re-experience the attack while giving testimony and this may disrupt whatever emotional [*247] recovery they have undergone since the incident.

Attorney arguments. Lines of questioning can be harmful in terms of content or process. In some cases, the way
questions are worded can make a victim feel helpless. In other cases, arguments are hard for victims to rebut because they are based on myths about women. Stereotypes in rape cases often portray women as degraded, oppressed, dependent, and victimized. It is even more emotionally destructive when the victim is treated like the offender, such as when the defense raises the issue of consent, fabrication or enticement, or capitalizes on her feelings of guilt and self-doubt or ambivalence.

Isolation from the proceedings. Victims often misunderstand the legal process and the verdict. They may not be kept apprised of developments in their case, although federal law requires that they be notified. Inaccurate perceptions, if not corrected, can lead to negative effects.

Although rape victims who participate in the criminal justice process report callous or indifferent attitudes toward victims at every stage of the proceedings, complete qualitative and quantitative documentation of victims' experiences is lacking. n71 Most of the psycho-legal research on sexual violence has focused narrowly on the trial process rather than on the experience of the victims themselves. Frazier and Haney studied ninety female rape victims assaulted between 1990-1994. n72 They found that survivors tended to believe that rapists had more rights than victims, that the system was unfair, that victims' rights were not protected, and that they were not given enough information or control over how the case was handled. n73 Other studies have found that although most survivors consider the rape trial a negative experience, there was considerable variation in their responses to the courtroom experience. n74 Some research reported increased nightmares, decreased social activities, more dissatisfaction with heterosexual relationships, recurrence of phobias, and greater rape trauma symptoms [*248] among victims whose cases went to trial. n75 Giving testimony about the rape was one of four significant predictors of PTSD symptoms among adult survivors of child rape. n76 Similarly, Allen noted that insensitive attempts to gather testimony from Bosnian rape victims resulted in severe traumatization, feelings of shame, lack of trust, fear of awakening bad memories, fear of reprisals, and suicide attempts.

These grim prospects create an understandable hesitancy on the part of many women to report having been raped to the authorities. One recent nationally representative survey estimated that only sixteen percent of all rapes are ever reported to law enforcement. n78 Among the top reasons women do not notify the police are self-blame for what happened, desire to avoid the shame of public exposure, and fear of the court process. n79 Underreporting has been found across multiple jurisdictions to be generally unaffected by rape law reform. n80 Thus, there is substantial evidence that the identified characteristics of the criminal justice process do indeed serve to inhibit reporting and prosecution of crimes against women.

Deterrence comes not just from arrest but also from conviction and punishment. Once reported, very few rapes reach the point of trial. n81 Moreover, not all alleged rapists end up convicted. For example, [*249] in Philadelphia, of 1,198 reported rapes, only 158 (13.2%) resulted in guilty verdicts, n82 a finding that is explained by both the high pre-trial attrition rates of rape cases and the outcomes of the trials. Further, the retribution inherent in a guilty verdict and prison sentence very rarely accrues to the woman raped or assaulted by someone she knows. In Washington, D.C., only nine percent of defendants who were ex-spouses, boyfriends or cohabiting partners of the victim were convicted. n83 In Milwaukee, ninety-five percent of those arrested for domestic assault were prosecuted, but less than one percent were convicted. n84 In a 1989 study, it was shown that abusive men felt there was a thirty-six percent chance that they would do time in jail for assaulting their wives, while they believed the chances of losing their jobs after such an assault was only twenty-seven percent. n85 Instead, these men were most likely to believe the cost of arrest would be loss of self-respect, family stigma and broad social disapproval. n86

The forgoing evidence supports the following three failures of justice system intervention in violence against women identified by Braithwaite and Daly. n87 First, most men are not made accountable for crimes against women. n88 Second, the men who are arrested and prosecuted are most often those who have gotten away with numerous previous acts of violence. n89 Third, women who are victimized by male violence are re-victimized by the criminal justice system. n90 A discussion of options that have been introduced to address domestic violence such as protection orders, mandatory arrest, mediation, and pretrial treatment diversion programs are not [*250] possible within the
present space limitations. However, what is important for present purposes is to observe that their effectiveness in reducing domestic violence has been questioned and their fairness to women criticized. Specifically, mandatory arrest policies have been applied in such a way that the number of women arrested inappropriately because they were defending themselves has grown dramatically. Mediation makes the assumption of equal power on the side of both parties, which is clearly negated by the context of a gender-stratified society. Most importantly, none of these responses is available to survivors of rape, perhaps because it does not pose the same day-to-day risk to responding officers as intervening in domestic violence and the low reporting rates maintain the illusion that rape is a rare crime.

CONCLUSIONS

We have suggested that human behavioral patterns result in part from strategies that have survived thousands of years of human evolution and have focused on human needs for justice, including social equity, retribution and deterrence. From this perspective, we have concluded that criminal justice responses to violence against women ill serve victims and are not very effective in reducing the prevalence of violence by perpetrators.

The central ideas addressed in the paper and supported by our own research and others include:

. Recovery from rape can best be understood in terms of the survivor's allocation of blame and its downstream effects on her core beliefs.

. Humans have internal models of justice and an inborn capacity to seek equity in social exchange. Victimization from this perspective is conceptualized as being cheated or unfairly treated.

. Models of justice vary cross-culturally and in predictable ways according to a group's social ecology.

[*251] . Women who lack a strong presence of powerful kin are more vulnerable to victimization. In a modern society the criminal justice system is charged with protecting the less powerful from predation.

. The criminal justice system is currently structured to discourage women from reporting rape, to exacerbate the self-blame they experience, and to lengthen and aggravate their distress.

. Lack of credible responses to violent victimization of women not only stymies the survivor's need to reestablish social equity, but reduces women's faith in the system and renders them more vulnerable to attacks by men.

. Potential rapists and batterers control their behavior by what they perceive as likely consequences. The current criminal justice response to violence against women fails to present a credible deterrent to men, who continue raping and beating women because they know the social costs are low.

Legal Topics:

For related research and practice materials, see the following legal topics: Criminal Law & ProcedureCriminal OffensesCrimes Against PersonsDomestic OffensesGeneral OverviewCriminal Law & ProcedureCriminal OffensesSex CrimesSexual AssaultRapeElementsFamily LawFamily Protection & WelfareGeneral Overview

FOOTNOTES:

n2 Patricia Tjaden & Nancy Thoennes, Nat'l Inst. of Justice & Ctrs. for Disease Control & Prevention, Prevalence, Incidence, and Consequences of Violence Against Women: Findings from the National Violence Against Women Survey 1-3 (1998). The rate for completed rape alone was 14.8%. See id. at 3.

n3 Id. at 3.

n4 Id.

n5 Id.

n6 Id. at 8.

n7 Id.

n8 Id. at 13.

n9 Id. at 3.


n11 See Mary P. Koss et al., No Safe Haven: Male Violence Against Women at Home, at Work, and in the Community 177-99 (1994) (reviewing the effects of rape).

n13 See generally Mary P. Koss et al., Traumatic Memory Characteristics: A Cross-Validated Mediational Model of Response to Rape Among Employed Women, 105 J. Abnormal Psychol. 421 (1996) (describing the brief survey and analyzing differences between memories of rape as compared to those of other important life events).


n16 See Nat'l Research Council, Panel on Research on Violence Against Women, Understanding Violence Against Women 49-73 (Nancy A. Crowell & Ann W. Burgess eds., 1996) (reviewing the various societal forces that contribute to the physical and sexual victimization of women).


n18 For a discussion of the relative long-term effects of these two different forms of self-blame, see id.

n19 For a comparison of the prevalence and severity of post-traumatic effects, see generally Norris, supra note 10.


n21 For a fuller exposition of the "just world" hypothesis, see generally Melvin J. Lerner, The Belief in a Just World: A Fundamental Delusion (1980).
n22 For an excellent review of the development of early religious ideas regarding the nature of justice and retribution within the Western cultural tradition, see generally Alan E. Bernstein, The Formation of Hell: Death and Retribution in the Ancient and Early Christian Worlds (1993).

n23 See id. at 146-51.

n24 See id. at 52, 72-76, 314-33.

n25 For a fuller treatment of the history of the idea of apocalyptic justice and the social uses to which it has been put, see generally Norman Cohn, Cosmos, Chaos and the World to Come: The Ancient Roots of Apocalyptic Faith (1993).


n29 For a detailed mathematical model specifying the cost-benefit ratio necessary for kin-selected altruism to evolve, see generally Hamilton, supra note 28, at 2-8.

n30 For a detailed mathematical model specifying the cost-benefit ratio necessary for reciprocal altruism to evolve, see Trivers, supra note 28, at 36-37.

n31 For a description of the complex exchange behaviors in modern foraging societies, see generally Elizabeth Cashdan, Hunters and Gatherers: Economic Behavior in Bands, in Economic Anthropology 21 (Stuart Plattner ed., 1989). For an explanation of the relationship of forager reciprocity to risk management, see generally Polly Wiessner, Risk, Reciprocity and Social Influences on !Kung San Economics, in


n33 For the seminal description of what constitutes an Evolutionarily Stable Strategy, see generally John Maynard Smith, Evolution and the Theory of Games (1982).

n34 See Lewis Petrinovich, Human Evolution, Reproduction, and Morality 143-76 (1995) (describing an entire program of research devoted to identifying and understanding basic human moral intuitions).


n37 See generally Richard E. Nisbett, & Dov Cohen, Culture of Honor: The Psychology of Violence in the South (1996) (proposing that the U.S. South has a type of culture of honor whereby an individual must respond with violence or threat of violence to any affront).

n38 See Alexander, supra note 36, at 94; See generally Daly & Wilson, supra note 36; Nisbett & Cohen, supra note 37, at 32-35.

n39 See Nisbett & Cohen, supra note 37, at 5-7.


n41 For a description of these computer simulation tournaments, see Axelrod, supra note 32, at 27-54.
n42 See generally Dorothy L. Cheney & Robert M. Seyfarth, How Monkeys See the World (1990) (containing an extended discussion of the suspected cognitive abilities of vervet monkeys and the scientific evidence supporting the existence of such abilities).

n43 See Nisbett & Cohen, supra note 37, at 2-11.


n45 See Trivers, supra note 35.

n46 See Alexander, supra note 36.

n47 See Nisbett & Cohen, supra note 37.

n48 See generally Richard L. Gorsuch, Factor Analysis (2d ed. 1983) (discussing the relative merits of unit-weighted versus various types of differentially-weighted factor scores).

n49 See Nisbett & Cohen, supra note 37, at 5.

n50 See id.

n52. See Michael R. Gottfredson & Travis Hirschi, A General Theory of Crime 85-120 (1990) (discussing a theory that criminality is a
general personality factor or individual difference variable consisting primarily of poor impulse control, perhaps due to inadequate
socialization). Under this theory, the actual criminal act is also facilitated by the chance opportunities that present themselves to the
impulsive individual and thus completely lack premeditation. See id. at 92.

n53. For an excellent review of these studies, see generally Neil M. Malamuth, Aggression Against Women: Cultural and Individual Causes,
 in Pornography and Sexual Aggression 17 (Neil M. Malamuth & Edward Donnerstein eds., 1984).

n54. See id. at 27-28.

counterstrategies to male sexual coercion in nonhuman primates); Sarah Blaffer Hrdy, Empathy, Polyandry, and the Myth of the Coy

of human patriarchy as the predominant norm).

n57. For a more detailed analysis of the specific evolutionary scenarios that favor the development of patriarchy in human societies, see


n59. Id. at 14.

n60. Id. at 15.

n61. Id. at 19.

n62. Id. at 22.
n63 For a more detailed description of this study, see Aurelia Jose Figueredo et al., Blood, Solidarity, Status, and Honor: The Sexual Balance of Power and Spousal Abuse in Sonora, Mexico (2001).


n69 See Lynda Lytle Holmstrom & Ann Wolbert Burgess, Rape: The Victim and the Criminal Justice System, 3 Int'l J. Criminology & Penology 101, 106-09 (1975) (discussing the effects of the process of court testimony on rape victims).
n70 See Thomas W. McCahill et al., The Aftermath of Rape 212 (1979).

n71 For a review of what incomplete documentation there is, see Patricia A. Frazier & Beth Haney, Sexual Assault Cases in the Legal System: Police, Prosecutor, and Victim Perspectives, 20 Law & Hum. Behav. 607, 611-13 (1996).

n72 See id. at 614.

n73 See id. at 625.

n74 See McCahill et al., supra note 70, at 211-22.

n75 See id. at 222-26.

n76 See Jeffery N. Epstein et al., Predicting PTSD in Women with a History of Childhood Rape, 10 J. Traumatic Stress 573, 583-86 (1997) (discussing rape testimony in the context of other predictors of PTSD).

n77 See Beverly Allen, Rape Warfare: The Hidden Genocide in Bosnia-Herzegovina and Croatia 94-95 (1996).


n80 For an evaluation of the relatively minor impact of rape law reform on reporting, see id. at 100-02. For another assessment of the lack of impact of rape law reform upon reporting by the same co-authors, see Julie Horney & Cassia Spohn, Rape Law Reform and Instrumental Change in Six Urban Jurisdictions, 25 L. & Soc'y Rev. 117, 129-51 (1991).

n82 See McCahill et al., supra note 70, at 228 tbl. 19-1.

n83 See Kristen M. Williams, Few Convictions in Rape Cases: Empirical Evidence Concerning Some Alternative Explanations, 9 J. Crim. Just. 29, 36-37 (1981) (including a proposed explanation of why this was the case).


n86 See id.


n88 See id. at 163.

n89 See id. at 164.

n90 See id. at 166.

n91 For a discussion of some of the various alternatives in addressing the problem of domestic violence, see generally Renzetti, supra note 67.