Evolutionary Perspectives on Sexual Offending

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Evolutionary psychology has been successful in explaining diverse phenomena, such as the relative rarity with which people commit crimes against their biological relatives and the observed differences between males and females in romantic and sexual interest. According to an evolutionary view, the current sexual motivations of males and females were created in ancestral environments through their relationship with reproductive success. Sexual offending may arise in the context of a male sexual psychology that has been designed to maximize reproductive success by varying the proportion of mating effort and parental investment expended according to circumstances. Various kinds of sexual offending appear to be particular manifestations of this male sexual psychology either as modified by the offender's ontogenetic history or as pathology caused by some aspect of the normal sexual preference mechanism gone awry.

KEY WORDS: evolution; gender differences; incest; sexual aggression; sexual offending.

INTRODUCTION

One of the most puzzling aspects of the literature on sexual offending is that, although it deals with reproductive behavior, it is almost completely divorced from the literature on reproduction (for exceptions, see Freund, 1990; Thornhill & Thornhill, 1992; Feierman, 1990). By reproductive behavior in this context, we do not mean that the sexual behavior of sexual offenders, or males more generally, is directly motivated by a desire to reproduce; rather, we mean that sexual interests and motivations have been shaped by their relationship to reproductive success in ancestral environ-

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ments. From this viewpoint, interests, motivations, and behaviors associated with rape and child molestation pose interesting theoretical challenges. Our purpose in this theoretical note, therefore, is to discuss what light might be shed on rape and child molestation by a perspective informed by evolutionary theory. [For recent applications of this theoretical perspective to antisocial behavior more generally see Mealey (1995) and Quinsey (1995).

**EVOLUTIONARY PSYCHOLOGY**

Evolutionary psychology seeks explanations for mental mechanisms and behaviors with a gene-centered selectionist viewpoint. In this view, people have been designed to desire the things and experience the emotions that increased the representation of their ancestors' genes in ancestral environments (for an introduction to evolutionary psychology see Buss, 1994, 1995; Daly & Wilson, 1988b; Wright, 1994). The brain, as the organ of behavior, is conceived as being organized in a modular fashion, each module designed by natural selection to solve a particular problem related to survival or reproduction in the environments of evolutionary adaptation (Tooby & Cosmides, 1992). Two aspects of evolutionary theory provide the background for evolutionary accounts of sexual coercion and child molestation: nepotistic behavior and sex differences in mating strategies.

**Crimes Against Relatives.** Evolutionary theory leads to the prediction that people will be highly motivated to help and to avoid harming their genetic relatives under a wide range of circumstances. This expectation is based upon the theory of inclusive fitness, according to which actors can increase the proportion of their genes in the next generation by providing aid to their relatives with whom they share genes (Hamilton, 1964). In support of this view, Daly and Wilson (1988a, b) found that homicide rates are what would be expected from a gene-centered perspective in cross-cultural and cross-national homicide data. People are less likely to kill genetic than nongenetic relatives and, therefore, consanguineous kin, rather than affines, like spouses. Infanticide is related to paternity uncertainty or denial, step-child status, and poor prospects of the infant's survival (Daly & Wilson, 1988a).

From the theory of inclusive fitness, it would also be expected that crimes in general should be viewed as more serious to the degree that the victim is genetically related to the perpetrator. We tested this idea by having university students rate the severity of brief descriptions of crimes such as physical assault, in which the degree of genetic relatedness of victim and perpetrator was varied (Quinsey, Lalumière, Quéré, & McNaughton,
1995). We obtained the predicted linear relationships between genetic relatedness and perceived crime severity.

**Sex Differences in Mating Strategies.** Many of the differences between human male and female sexual interests and motivations can be understood using an evolutionary selectionist perspective. In this perspective, the reproductive interests of human males and females did not always coincide in ancestral environments because the minimum amount of required parental investment was smaller in males than females. Females were limited in the number of offspring they could produce by gestational period, lactation, and menopause, whereas males were not. In addition, males could not be certain of their paternity because fertilization occurred within females. These two sex differences created different reproductive problems for males and females (for an extensive and seminal description of these issues, see Symons, 1979). Critical for our discussion is the fact that males' reproductive success was limited by access to sexually available females, whereas females' reproductive success was limited by males' willingness to provide parental assistance (Trivers, 1972). The relationship between the sex difference in minimal parental investment and sex-specific limitation on reproductive success is a ubiquitous feature of the animal world regardless of which sex makes the greatest amount of minimal investment (Daly & Wilson, 1983; Clutton-Brock & Vincent, 1991).

Because of female internal fertilization, males can misdirect their parental investment toward other males' children. Evolutionary theory suggests that male sexual jealousy has been designed to address this problem. Thus, much marital violence and homicide appear to arise out of males' desire to control the reproductive capacities of females. Male sexual proprietariness is a common source of marital conflict and sexual jealousy is the most common motive for males killing their wives (Daly & Wilson, 1988a, 1988b).

We conducted a number of studies motivated by evolutionary theory that compared young adult males' and females' mating motivations and interests. In comparison to females, males were much more interested in partner variety, less interested in committed long-term relationships, and more willing to engage in impersonal sex (Landolt, Lalumière, & Quinsey, 1995; see also Clark, 1990; Clark & Hatfield, 1989; Symons & Ellis, 1989). The nature of this psychological difference between males and females is strikingly illustrated by the sex difference in the relationship between number of sexual partners and self-esteem: in a sample of 30 young males, the number of previous sexual partners and self-esteem were positively correlated ($r = .35$), whereas the reverse was true in a sample of 29 young females ($r = -.72$). Similarly, the correlation between the number of one-night stands and self-esteem was .29 among males and -.83 among
females (Lalumièreme, Seto, & Quinsey, 1995). These correlations suggest that self-esteem is tied to success in implementing the mating tactics typically preferred by members of one’s own sex. One of the implications of this interpretation is that the emotional sequelae of sexual assault should be greater in females than in males. Female victims would be expected to share with male victims the effects of sexual assault attributable to physical trauma, fear, and betrayal of trust but only female victims of sexual assault would suffer the psychological effects of having been coerced into a suboptimal or sex atypical approach to intimate relationships. (In addition, only female victims with male partners would be adversely affected by male sexual jealousy and paternity uncertainty concerns.)

Of significance for what follows, males who reported perceiving themselves as more successful in attracting opposite-sex partners were less likely than other males to pursue the female preferred strategy of long-term relationships (Lalumièreme, Chalmers, Quinsey, & Seto, 1995; Lalumièreme, Seto, & Quinsey, 1995; Landolt, Lalumièreme, & Quinsey, 1995).

SEXUAL COERCION

Sexual aggression occurs on a continuum ranging from various coercive practices among intimates to predatory attacks upon total strangers. An evolutionary perspective on sexual coercion attempts to determine whether it is a result of an evolved specific psychological mechanism that favors the use of sexually coercive behaviors under certain conditions or is a side effect or a by-product of one or more mechanisms designed for something else, such as the control of females’ reproductive capacity (Daly & Wilson, 1988a, 1988b) or the male propensity to maximize the number of short-term sexual encounters (Lalumièreme, Seto, & Quinsey, 1995).

One evolutionary hypothesis involving a putative special-purpose mechanism asserts that males who have more limited access to mates are more likely to resort to sexual coercion (Thornhill & Thornhill, 1983, 1991, 1992; Thornhill, Thornhill, & Dizinno, 1986). The tendency to use sexual coercion would therefore be part of an evolved conditional mating strategy. This mate deprivation hypothesis is derived from fairly well-validated non-human animal models of rape (Crawford & Galdikas, 1986). Interestingly, this hypothesis is consistent with current theories of human rape in which rapists are seen as inadequate in a number of interpersonal domains, such as having deficiencies in heterosocial skills and difficulties in forming intimate attachments, that interfere with their forming successful relationships with females (Marshall, Hudson, & Hodkinson, 1993; Stermac, Segal, & Gillis, 1990).
Lalumière, Chalmers, Quinsey, and Seto (1995) tested the mate deprivation hypothesis using a sample of 156 young, heterosexual, mostly single, undergraduate males. Contrary to what would be expected from the mate deprivation hypothesis, sexually coercive males reported significantly more sexual experience (e.g., more sexual partners) and tended to have higher self-perceived mating success than nonsexually coercive males. Of less direct relevance to the mate deprivation hypothesis but of importance in understanding acquaintance rape was the finding that date rapists had a significantly greater preference for partner variety and casual sex and tended to have more antisocial characteristics.

These findings suggest that sexually coercive males have adopted a short-term, uncommitted approach to mating and have been relatively successful in this endeavor. If there is an adaptive psychological predisposition designed for the use of sexually coercive tactics, it is not one triggered by relative mate deprivation, unless it is argued that sexually coercive males have limited access to particularly desirable female partners.

The use of coercion by males who have adopted a short-term approach to intimate relationships requires explanations consistent with what is known about male mating strategies. Buss and Schmitt (1993) proposed that there could be different evolved mechanisms associated with different mating strategies. Males in ancestral environments who pursued predominantly short-term, uncommitted sexual relationships faced, among other problems, the problem of securing a large number of partners to compensate for the relatively low probability of fertilization with any one of them and for the limited amount of parental help they provided if fertilization occurred. These psychological mechanisms should be sensitive to context and individuals may possess an evolved capacity to adjust their mating tactics as a function of their success. Thus, males who have adopted a short-term mating approach and who have periodic difficulties obtaining many partners, including highly desirable ones, may adopt alternative mating tactics such as sexual coercion.

Although the validity of this "micro mate deprivation" hypothesis is yet moot, the notion that sexually coercive males are more likely to have adopted a short-term mating approach is consistent with findings from other studies on the psychology of sexually coercive males.3 First, Kanin

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3A psychology supporting a short-term approach is likely, for most males, a result of a facultative developmental algorithm (a facultative algorithm in this context is an open mental program that directs development through its interaction with specific features of the environment, in contrast to an obligate developmental algorithm, which is minimally affected by variations in environmental conditions). If this is correct, behavior genetic analyses should find that the development of a psychology supporting a short-term approach to mating has near-zero heritability.
(1983) reported that undetected rapists, compared to nonrapists, aspired
to having a greater amount of sexual experience. Second, incarcerated rapists
have been found to have difficulties perceiving and understanding females’
affective cues in analog “first-date” interactions (Lipton, McDonel, & McFall, 1987),
potentially leading them to misconstrue their dates’ intentions. Individuals rated high in rape proclivity have been found to have difficulties reading females’ negative but not positive cues (McDonel & McFall, 1991). Coercive males have been found more likely to interpret
hostile rejection as containing elements of seduction (Malamuth & Brown, 1994).
Laboratory interactions between opposite-sex strangers showed that
males in general, and males with a history of sexually coercive behaviors
in particular, rate females as more sexually expressive and more sexually
interested than females rate themselves (Craig Shea, 1993). Third, there
are data suggesting that incarcerated and nonincarcerated rapists are less
empathic (Rice, Chaplin, Harris, & Coutts, 1994; Seto & Barbaree, 1993)
and less well socialized (Sarwer, Kalichman, Johnson, Earley, & Akram Ail, 1993)
than nonrapists. Finally, sexually coercive males’ attitudes, values,
and beliefs encourage a tendency to disregard females’ choices and desires
(Malamuth, Heavy, & Linz, 1993; Walker, Rowe, & Quinsey, 1993). This
psychological configuration may facilitate an insensitive striving for sexual
encounters.

A different line of research has shown that a substantial proportion
of incarcerated rapists shows deviant sexual preferences in the laboratory
(Harris, Rice, Quinsey, Chaplin, & Earls, 1992; Lalumière & Quinsey, 1993,
1994). The sexual preferences of nonincarcerated sexually coercive males
have not been extensively studied but the results suggest that they show
more erotic interest than noncoercive males in sexual aggression (Malamuth et al., 1993). Sexually coercive males may be psychologically predisposed
to be aroused by cues pertaining to aggressive sex through a number
of mechanisms. One possibility is that they are simply more arousable to
a wide variety of contexts and situations involving reproductively mature
females (alluded to by Hall, 1989). Another, not necessarily independent,
possibility is that their lesser concern for the impact of their behavior on
others leads to less inhibition caused by victim distress or displeasure (as
discussed by Barbaree, 1990). Both mechanisms would facilitate the motivation
to maximize sexual encounters with a variety of females under a
variety of conditions, including those where the woman does not consent.
These mechanisms are, however, not sufficient to explain a sexual preference
for sexually aggressive activities observed in some detected rapists.
Such sexual preferences for rape appear to involve exaggerated links be-
tween sexual desire and cues involving dominance and submission in sexual
encounters; such exaggerated links have been described as a courtship disorder (Freund, 1988, 1990).

Sexual coercion and rape therefore appear best explained with two major dimensions: (a) a disinterest in compromising with the preferred female approach to relationships, whether due to specific attitudes concerning interactions with females and a short-term approach to sexual relationships and/or to psychopathic personality traits, and (b) an erotic interest in coercive sexual activities. These two dimensions led to a further prediction that sexually deviant males who are psychopathic should be at the highest risk to commit a new sexual offense because they are not highly motivated to control their sexually deviant interests. This predicted interaction of psychopathy and sexual deviance has been confirmed by our collaborators (Rice & Harris, 1994). A similar interaction can be predicted for indicators of a short-term mating approach and sexual deviance.

MALE SEXUAL PREFERENCE FOR PREPUBESCENTS

Although males are well-known to be much less choosy than females in short-term mating contexts (Clark, 1990; Clark & Hatfield, 1989; Kenrick, Groth, Trost, & Sadalla, 1993), their sexual preferences are nevertheless exquisitely tuned to the reproductively relevant characteristics of potential partners.

Heterosexual males prefer average-weight female figures with prototypical female waist-to-hip ratios (Quinsey, Rice, Harris, & Reid, 1993; Singh, 1993; Singh & Luis, 1995). Strong age preferences are evident: Males, regardless of their own age, prefer females in their late teens to late twenties (Harris, Rice, Quinsey, & Chaplin, 1995; Quinsey & Chaplin, 1988; Quinsey et al., 1993; Kenrick & Keefe, 1992; Quinsey, Steinman, Berghersen, & Holmes, 1975). This finding has been obtained using self-report, attractiveness ratings, covertly measured viewing time, and penile plethysmography. This age preference is thought (Symons, 1979) to represent a compromise between maximal female reproductive potential (relevant to a long-term mating approach) and maximum fertility (relevant to a short-term mating approach).

There is also strong interrater agreement on female attractiveness, even within the preferred sex and age category (Lalumière & Quinsey, 1995; Landolt et al., 1995; see review in Quinsey et al., 1993). Average faces

4A similar conclusion was reached by Quinsey (1984) except that this early review underestimated the influence of psychopathic characteristics in sexual aggression.
are preferred, perhaps because they have signaled the absence of genetic 

Of significance for what follows, heterosexual males are not totally un-
responsive to female cues among non-reproductively viable females, how-
ever: Their penile responses to prepubertal females, although much lower 
than to postpubertal females, are higher than their responses to prepubertal 
boys and to neutral stimuli (Freund & Costell, 1970; Freund, McKnight, 

This exquisite tuning of male sexual interest to signs of reproductive 
capability, such as gender, youthfulness, body shape, and absence of genetic 
anomalies, strongly indicates that it is the result of an adaptation (Williams, 
1966, 1992). It is, therefore, puzzling that some males sexually prefer pre-
pubertal children (Quinsey & Chaplin, 1988; Quinsey et al., 1975). Such 
preferences meet both of Wakefield's (1992, p. 384) criteria for the iden-
tification of psychopathology and are clearly not the result of an adaptation. 
In Wakefield's view (see also Richters & Cicchetti, 1993), a condition is a 
mental disorder if, and only if,

(a) the condition causes some harm or deprivation of benefit to the person as judged 
by the standards of the person's culture (the value criterion)\(^5\) and (b) the condition 
results from the inability of some mental mechanism to perform its natural function, 
wherein a natural function is an effect that is part of the evolutionary explanation 
of the existence and structure of the mental mechanism (the explanatory criterion).

Of course, not all males who have sex with children sexually prefer 
them (Freund, Watson, & Dickey, 1991; Quinsey, Chaplin, & Carrigan, 
1979). It is important to distinguish between behavior and preference in 
this context; sexual behavior is often an inaccurate reflection of sexual pref-
ference because of environmental constraints affecting access to partners. 
Sexual behavior directed toward children is not difficult to explain, there-
fore, but sexual preference for children is. This preference seems more dif-
ficult to explain than homosexuals' preference for adult male partners; 
homosexuals may develop the sexual preferences of females due to a failure 
of the hormonal mechanism that ordinarily masculinizes the brain \textit{in utero} 
(Ellis & Ames, 1987). If this is true, homosexual preference meets the sec-
ond but not the first of Wakefield's criteria for psychopathology.

Because it is difficult to believe that a specific sexual preference for prepubescents would have been adaptive in either sex in any circumstances, 
how could such a preference arise, even as pathology? The explanation 
may turn on the manner in which the male sexual preference system is 
organized. Imagine that it is comprised of modules tuned to discrete fea-

\(^5\)To apply to the personality disorders and paraphilics, Wakefield's value criterion must be 
broadened to include harm or deprivation of benefit to the community at large.
tures of the environment, each feature relevant to a particular ancestral reproductive problem in sexual partner selection. Imagine further that these modules are dissociable or in part independent of each other, as in the primate visual system, where the form, color, movement, and depth of objects are processed separately but concurrently (Livingston & Hubel, 1988).

There would be modules designed for detecting and appreciating, among other things, gender (probably through secondary sexual characteristics), youthfulness, body shape (in particular, waist-to-hip ratio)\textsuperscript{6}, and absence of genetic anomalies. If these modules can malfunction independently from one another, one can derive the observed individual differences in male sexual preferences. The gender detector is likely a switch and the simplest of the mechanisms. It is set in a binary fashion to male or female \textit{in utero} via a testosterone surge: the default is a preference for the physical characteristics of adult males (Hamer, Hu, Magnuson, Hu, & Pattatucci, 1993; LeVay, 1991). When the switch malfunctions, the \textit{reverse} preference is observed, and bisexual preferences (as opposed to bisexual behaviors) are rarely observed among adults (Freund, Sher, Chan, & Ben-Aron, 1982; Hamer \textit{et al.}, 1993).

A malfunctioning set of body shape detectors (specifically waist-to-hip ratio detector) may lead to pedophilia. When these detectors malfunction, the youth detectors (tuned to cues involving such things as skin smoothness and tone, lustrous hair, and sprightly gait) are left unconstrained. Prepubertal individuals thus become the most attractive. Because the body shape detectors are based on postpubertal body shape, their malfunction leads to the well-documented increase in homosexual and bisexual interests among pedophiles (Freund & Kuban, 1993; Freund & Langevin, 1976; Freund, Watson, Dickey, & Rienzo, 1991) and the lower ratio of heterosexual-to-homosexual pedophiles compared to the ratio of heterosexual to homosexual nonpedophiles (Freund, Heasman, Racansky, & Glancy, 1984; Freund & Watson, 1992).

The recent finding that male homosexuals have more older brothers (Blanchard & Bogaert, 1995) suggests that their mother's immune system may have become too competent in producing antibodies to fetus-produced androgens. This immune response would be responsible for the failure to masculinize the male brain (MacCulloch & Waddington, 1981). This explanation should, however, be consistent with the recent finding that some cases

\textsuperscript{6}Body shape and gender detection are not completely independent. A specific range of waist-to-hip ratios is associated with fertility in females (see Singh, 1993). Although we are not aware of any studies addressing this issue, we expect that males who have waist-to-hip ratios resembling that of reproductively viable females (e.g., hypogonadal males) are not more likely to generate erotic interest among heterosexual males than males with typical waist-to-hip ratios.
of male homosexuality can be traced to the Xq28 location on the X chromosome (Hamer et al., 1993). An evolutionary perspective suggests that the gene(s) causing male homosexuality could have been maintained in the population because of some beneficial effect, the most obvious of which is a more competent immune system for the mother and her reproducing offspring. It is, therefore, possible that pedophilia could be occasioned by the same genes that lead to male homosexuality and more competent immune systems. The difference between pedophilia and homosexuality directed toward adult partners (androphilia) might be in the timing of the androgen exposure, or lack thereof, during brain development. Consequently, pedophiles would also be expected to have more older brothers.

It is of theoretical interest that homosexual pedophiles appear to have many more victims than heterosexual pedophiles. This finding mirrors the observation that homosexual males who prefer adults (androphiles) have many more partners than heterosexual males (gynephiles); Symons (1979) has argued that this difference in partner number reflects the compromise that heterosexual males make with the female preference for long-term commitment that androphiles do not have to make. Male children may be more accessible sexual “partners” through their greater interest in sexual activities, in line with the lessened compromise hypothesis or, alternatively, the lesser impact of adult supervision on their whereabouts.

INCEST

Many biological and nonbiological incest offenders do not sexually prefer children (Barbaree & Marshall, 1989; Quinsey et al., 1979). Their sexual activities directed toward their children, most often their daughters, requires an explanation that should be consistent with what is known about incest avoidance and with the modularity view of the human brain. Incest avoidance theory (Biemler, 1982a, b; Thornhill, 1991; Westermack, 1921) suggests that sexual activities among close relatives is avoided because of its deleterious effect on the reproductive viability of offspring (Charlesworth & Charlesworth, 1987; Lewin, 1989; Pusey, 1990; van den Berghe, 1983). The mechanism of avoidance would be an evolved disposition to acquire an aversion or indifference to the idea of sexual activities with individuals one has been in intensive contact with during his/her early childhood years. This mechanism worked because in ancestral environments these individuals were usually close genetic relatives.

One obvious prediction for the case of human father–daughter incest is that fathers who have had very little contact with their female children are less likely to have acquired this aversion or indifference. This lack of
sexual inhibition, together with the general male tendency to take advantage of mating opportunities (children are vulnerable and easily manipulated), and the male sexual response to nude depictions of female children, may lead to an increased probability of sexual activities with daughters. In support of this prediction, a step-father is a risk factor for sexual abuse of children (Finkelhor & Baron, 1986) and incestuous fathers have been found to be less involved in the early care, rearing, and socialization of their daughters than nonincestuous fathers (Parker & Parker, 1986; Williams & Finkelhor, 1995).

In addition to the indifference mechanism that results from interactions between specific children and parental figures, we might expect that the deleterious effects of inbreeding would lead to specific attitudes toward incestuous relationships in general. We tested a prediction based on this idea by examining how the genetic relatedness of a male and female influenced how seriously intercourse between them was viewed by university undergraduates (Quinsey et al., 1995). Specifically, sexual activity should be perceived as more serious the closer the genetic relationship of the "partners," particularly when the female is of a fertile age. We obtained the predicted linear relationship when the female involved was a young adult.

CONCLUSION

We have outlined some of the implications and applications an evolutionary perspective on human sexuality has for understanding sexual aggression and child molestation. A consideration of sexual offending in its reproductive context, particularly the male sexual psychology that has developed out of its relationship to reproductive success in ancestral environments, yields fresh questions about the etiology of sexual aggression and child molestation. The implications of this approach for the prevention of sexual offending and for sexual offender treatment await explication.

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Evolutionary Perspectives


