

## **The Evolutionary Psychology of Crime**

David M. Buss

University of Texas, Austin

Corresponding Author:

David M. Buss

Department of Psychology

University of Texas, Austin

Austin, Texas 78712

Email: [dbuss@psy.utexas.edu](mailto:dbuss@psy.utexas.edu)

## **The Evolutionary Psychology of Crime**

Evolutionary psychology provides a powerful set of tools for understanding human behavior, including criminal behavior and responses to criminal behavior. One set of tools entails furnishing hypotheses about the underlying psychological mechanisms that could plausibly be part of the causal chain leading to criminal behavior and responses to it. Because all psychological mechanisms require environmental input for their activation, these hypotheses include a specification of circumstances in which criminal behavior is likely to be enacted or inhibited. A somewhat different set of the tools, also potentially quite valuable, is that evolutionary psychology provides heuristic value, guiding criminologists to examine domains previously unexplored or to uncover elements in the causal chain that otherwise might be missed by existing criminology theories. By introducing evolutionary explanations, Durrant and Ward (this volume) provide a valuable service in opening the door for both sets of tools provided by evolutionary psychology in the understanding criminal behavior.

According to evolutionary psychology, all human behavior, criminal or otherwise, is a product of psychological mechanisms (instantiated in the brain) combined with environmental input that activates them or inhibits their activation. Consider calluses. Explanatory understanding the thickness and distribution of calluses on the human skin within individuals over time and across individuals and cultures at any point in time requires (1) knowledge that humans have evolved callus-producing adaptations whose proper function is to protect the underlying physiological and anatomical structures beneath the skin, and (2) knowledge that the environmental input of repeated friction to skin is required for activating the callus-

producing mechanisms. Evolutionary psychology, in short, is fundamentally an interactionist framework.

Although evolutionary psychologists focus on *psychological* adaptations, the interactionist logic is essentially the same. The argument for a key role of evolutionary psychology in understanding criminal behavior can be stated syllogistically. All human behavior, at some fundamental level of description, requires psychological mechanisms and environmental input into those mechanisms for their activation. Without psychological mechanisms, no behavior could be produced. All functional psychological mechanisms, whatever they turn out to be, owe their existence to evolution by selection. If another causal process exists that can create complex functional psychological adaptations, it has not been made known to the scientific community.

Criminal behaviors such as robbery, assault, rape, and murder comprise a subset of human behavior. They occur at non-trivial rates in all known cultures in predictable patterns. For example, in every culture, criminal behavior such as sexual assault, non-lethal violence, and homicide shows cross-culturally predictable age and sex distribution (Daly & Wilson, 1988). These forms of criminal behavior are perpetrated many times more by males than by females. They increase dramatically when males enter reproductive competition. And they decline with age such that male rates approach female rates in older age. These forms of criminal conduct also occur at predictably higher rates among unmarried men compared to married men, and among men lacking resources more than among women lacking resources.

It is noteworthy, for example, that although women are more likely than men to suffer from being financially impoverished, poor men are far more likely than poor women to commit crimes such as robbery and mugging to procure resources. These are all key findings about which evolutionary psychology can shed causal light. Consider these findings generated by evolutionary psychology: (1) Women worldwide

place a greater premium on resources in potential mates than do men (Buss, 1989); (2) Men consequently are known to engage in greater competition for access to the resources that women want (Buss, 2003); (3) Men lacking resources have greater difficulty than men with resources in attracting mates; (4) Engaging in crimes such as theft and robbery to acquire resources is likely to be a male-dominated activity in all cultures. Without knowledge of sex differences in mate preferences, which in turn produce sex differences in the battlefields of same-sex competition for mates, the finding that poor women are far less likely than poor men to commit crimes of purloining the resources of others would remain inexplicable.

Since criminal behavior forms a predictable subset of human behavior; and all human behavior requires psychological mechanisms for its production; and all psychological mechanisms, at some level of description, owe their existence to evolution by selection; then evolved psychological mechanisms necessarily play a key causal role in the production of criminal behavior.

### **Exploitative Resource Acquisition Strategies**

At a highly general level of description, humans and other organisms have three fundamental strategies for acquiring resources that are critical to survival and reproduction (Buss & Duntley, 2008). The first is *individual* or solo resource acquisition. A woman gathering fruits or nuts, a man engaged in solo hunting, or either sex sowing seeds for a summer harvest are examples of individual resource acquisition strategies. A second is *cooperative* resource acquisition strategies. Two or more individuals form cooperative alliances or coalitions that often result in acquiring more collective resources than any individual could have acquired alone. A coalitional hunting party, for example, has a far better chance of taking down a large game animal than any individual alone, and doing so with far less risk.

A third class of resource acquisition strategies, one that cross-cuts the first two, is best described as *exploitative* resource acquisition (Buss & Duntley, 2008).

Exploitative resource acquisition entails procuring resources by taking them from other people through tactics of threat, coercion, force, terrorism, deception, manipulation, violence, or murder. Exploitative resource acquisition tactics can be performed either by individuals, cooperative dyads, or coalitions (e.g., gangs; war parties), and hence crosscut individual and cooperative resource acquisition strategies.

Most criminal behavior falls within the domain of exploitative resource acquisition strategies. If adaptations for exploitation have evolved in humans, as Buss and Duntley (2008) propose, then evolutionary psychology has the potential to make important contributions to the causal understanding of criminal behavior, as well as for individual and societal strategies for dealing with it.

### **The Heuristic Value of Evolutionary Psychology for Criminology**

Durrant and Ward (this volume) furnish the insightful proposal that criminal behavior is one means, albeit one that most in society find abhorrent, for achieving reproductively-relevant goals or obtaining reproductively-relevant resources. They highlight *status attainment* is a key example. All human groups contain status hierarchies. Position within status hierarchies heavily determines access to reproductively-relevant resources, such as material possessions, food, territory, and desirable mates. Humans have evolved status-striving motives that loom larger in men's drives than in women's drives (Buss, 2012). Evolutionary psychology provides heuristic value in guiding criminologists to domains in which criminals will deploy exploitative strategies.

This heuristic function of evolutionary psychology may or may not add much to what criminologists already know. No grand theoretical framework is needed to reveal that many crimes are directed toward stealing or forcibly taking resources from others, committing violence in the defense of one's social status, sexually assaulting fertile women, or killing one's key intrasexual rivals. Nonetheless,

evolutionary analyses offer the promise of providing deeper insights into these phenomena, or adding a layer of understanding to known patterns. The evolutionary insight that the presence of a stepfather in the home is the single largest risk factor for violence and killing of preschool children was not discovered without the heuristic value provided by evolutionary psychology (Daly & Wilson, 2007).

Evolutionary psychology provides similar heuristic value into crimes such as theft, male-male violent assault, sexual harassment, sexual assault, prostitution, and homicide (Duntley & Shackelford, 2008). It also provides novel insights into crimes that have more recently acquired legal sanctions such as stalking (Buss & Duntley, in press).

Because there is good evidence that these forms of criminal behavior have a recurrent historical time-depth and are known to inflict heavy costs on victims, it would defy evolutionary logic if selection had not fashioned adaptations to prevent becoming a victim of crime, as well as adaptations to minimize the collateral damage of crime in its aftermath (Buss & Duntley, 2008; Duntley, 2005; Duntley & Shackelford, 2012). And equally important, evolutionary psychology provides a co-evolutionary framework for understanding powerful anti-crime defenses in would-be victims of crime, such as anti-stalking adaptations (Buss & Duntley, in press), anti-rape adaptations (Buss, 2003), and anti-homicide adaptations (Buss, 2005; Duntley, 2005).

In sum, evolutionary psychology provides a valuable heuristic, guiding criminologists and forensic psychologists to explore causal facets of crime that might remain otherwise undiscovered as well as offering insight into the co-evolution of victim defenses against crime.

### **Ancestral Adaptations Operating in the Modern World of Crime**

The cross-cultural evidence of both modern and pre-state traditional cultures is replete with evidence suggesting that behaviors such as theft, male-on-male

assault, intimate partner violence, sexual assault, stalking, and murder are and were quite common (e.g., Chagnon, 1983; Hart & Pilling, 1960). Exploiting the resources of others is often a rapid means of resource acquisition. Successful theft secures resources more quickly than relying on one's own hard-earned labors. Sexual assault secures sexual access more rapidly than the longer process of honest courtship. Killing a rival often secures rapid access to that rival's resources, as well as quickly eliminating a key source of competition for as-yet unclaimed resources.

Traditional cultures typically lacked laws, a professional police force, juries, or jails. Consequently, victims of these exploitative strategies often had to fend for themselves and rely on close kin, friend, and coalitional allies for protection and retribution.

These ancestral conditions were highly conducive to co-evolutionary arms races between those pursuing exploitative resource acquisition strategies and those who were potential victims of those strategies. A reasonable working hypothesis is that humans have evolved adaptations to steal, assault, and kill (Buss, 2005; Duntley & Shackelford, 2008). Similarly, once these exploitative strategies evolved within the human repertoire, selection would immediately favor adaptations to prevent becoming a victim of exploitative strategies (Buss & Duntley, 2008).

If these guiding hypotheses are even partially correct, then it is interesting to consider how these adaptations operate in the novel modern world containing written laws, a professional police force to enforce those laws, and judges, juries, and jails designed to deter crimes or to quarantine criminals from future potential victims. Assuming that the law is designed to function as a "lever" on human behavior (Jones, 1997), greater knowledge of co-evolved adaptations to commit crime and to avoid victimization, as well as the environmental circumstances in which these adaptations are activated and enacted, can only be beneficial in combating crime in the modern environment.

## References

- Buss, D. M. (1989). Sex differences in human mate preferences: Evolutionary hypotheses testing in 37 cultures. *Behavioral and Brain Sciences, 12*, 1-49.
- Buss, D. M. (2003). *The evolution of desire: Strategies of human mating (Rev. Ed.)*. New York: Free Press.
- Buss, D.M. (2012). *Evolutionary psychology: The new science of the mind* (4<sup>th</sup> ed.). Boston: Allyn & Bacon.
- Buss, D.M., & Duntley, J.D. (2008). Adaptations for exploitation. *Group Dynamics: Theory, Research, and Practice, 12*, 53-62.
- Buss, D.M. & Duntley, J.D. (2011). The evolution of intimate partner violence. *Aggression and Violent Behavior, 16*, 411-419.
- Buss, D. M., & Shackelford, T. K. (1997). From vigilance to violence: Mate retention tactics in married couples. *Journal of Personality and Social Psychology, 72*, 346-361.
- Chagnon, N. (1983). *Yanomamo: The fierce people* (3rd ed.). New York: Holt, Rinehart, & Winston.
- Daly, M., & Wilson, M. (1988). *Homicide*. Hawthorne, NY: Aldine de Gruyter.
- Daly M, Wilson M (2007) Is the "Cinderella effect" controversial? A case study of evolution-minded research and critiques thereof. In C Crawford & D Krebs, eds., *Foundations of evolutionary psychology*. Mahwah NJ: Erlbaum.
- Duntley, J. D. (2005). Adaptations to dangers from humans. In D. Buss (Ed.), *The Handbook of Evolutionary Psychology* (pp. 224-249). New York: Wiley.
- Duntley, J. D., & Buss, D. M. (in press). The evolution of stalking. *Sex Roles*.
- Duntley, J. D., & Shackelford, T. K. (2012). Adaptations to avoid victimization. *Aggression and Violent Behavior, 17*, 59-71.



Durrant, R., & Ward, T. (2012). The role of evolutionary explanations in criminology.

*Journal of Theoretical and Philosophical Criminology.*

Hart, C.W., & Pilling, A.R. (1960). *The Tiwi of North Australia*. New York: Hart,  
Rinehart, & Winston.

Jones, O. D. (1997). Evolutionary analysis in law: An introduction and application to  
child abuse. *North Carolina Law Review, 75*, 1117-1242.