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## Martin Daly and Margo Wilson



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### Synonyms

[Aggression](#); [Crime](#); [Homicide](#); [Intimate Partner Violence](#)

### Definitions

Martin Daly is an evolutionary psychologist who received his Ph.D. from the University of Toronto. Margo Wilson was an evolutionary psychologist who received her Ph. D from University College London. Together, Daly and Wilson applied an evolutionary perspective to crime statistics to provide an explanation for patterns of violence and homicide in modern human societies.

Martin Daly and Margo Wilson were a husband-wife research team who, together, investigated the evolved functions of human aggression until Wilson's death in 2009. A great deal of Daly and Wilson's work focused on human aggression and, in particular, homicide. Their 1988 book *Homicide* applied an evolutionary perspective to violent crime statistics from urban cities and offered explanations for these patterns of violence in the context of evolved psychology. Daly and Wilson dispelled a number of supposed

inconsistencies between evolutionary logic and observed crime statistics in industrialized, Western cities like Chicago and Detroit. They argued that available data on violent crime are vulnerable to misinterpretations and erroneous conclusions, such as the belief that the majority of homicides are committed against kin. However, the factual basis of this claim relies largely on one's definition of kin. The kin altruism hypothesis predicts that, because individuals share roughly 50% of their genes with full siblings, biological children, or parents, an individual may aid copies of his or her own genes by behaving altruistically toward these individuals (Hamilton, 1964). Therefore, if humans regularly engaged in the killing of genetically related kin, this would pose a considerable contradiction between patterns of human aggression and the theory of evolution by natural selection (Darwin, 1859). Daly and Wilson explain that crime statistics like those from Chicago and Detroit do not present a conflict with evolutionary theory because many of the homicide victims reported as "kin" in police records are not genetically related to the perpetrator. In fact, many of these homicides are perpetrated by husbands, against their wives. Daly and Wilson take caution to avoid the implication that wife-killing may be adaptive. Rather, they explain that the supposedly high frequency of kin-killing suggested by violent crime statistics may be explained, at least in part, by men killing their spouses. Although killing one's intimate partner may certainly incur adaptive costs, Daly and Wilson argue that wife killing

is likely an unintended byproduct of spousal abuse which, itself, is intended to prevent or punish partner infidelity.

Another contentious aspect of human behavior addressed by Daly and Wilson in *Homicide* was infanticide, specifically the killing of infants by their mothers. At first glance, infanticide might appear to be in conflict with evolutionary logic, as not only are women killing an offspring who shares half her genes, but also they have seemingly wasted the time and investment involved in gestating and birthing the child. However, as Daly and Wilson explain, for women who find themselves giving birth under especially unfavorable conditions, the costs of keeping the child might be much greater than committing infanticide and may be outweighed by the potential benefits of waiting to raise a child under more favorable conditions. Daly and Wilson also point out that women are much more likely to kill their infant children when they are young and/or unmarried, suggesting that women who are poorly provisioned might be better off in the long term by committing infanticide and having another child when they have secured investment from a male partner.

Daly and Wilson's body of work represents a landmark contribution to the literature on evolved human psychology; however, their research is also notable for inspiring numerous subsequent studies investigating violence and aggression using an evolutionary perspective. For example, many studies have investigated intimate partner violence from an evolutionary perspective and have consistently found that men are more likely to use violence against their partner when they suspect her of committing infidelity (e.g., Buss & Shackelford, 1997). Further, researchers have observed that younger women appear to be at increased risk of being killed by their partners (e.g., Shackelford et al., 2000). The researchers suggested that, for men, the reproductive costs associated with a female partner's infidelity are much greater when the female partners are relatively younger. As a result, a young woman's infidelity might elicit greater sexual jealousy, and subsequently more severe violence by her male partner. As a whole, these findings support several

of Daly and Wilson's main arguments in *Homicide*, such as that selective pressures in the ancestral environment likely favored violent, aggressive responses from males when they suspected their partners of infidelity, and that such responses reduced the likelihood that men would unwittingly invest resources in genetically unrelated offspring.

Daly and Wilson have also published several papers on nonhuman animals (e.g., Daly et al., 1990). Martin Daly, in particular, has conducted research on foraging habits in kangaroo rats (*Dipodomys*, Heteromyidae). One such study observed that kangaroo rats are more selective in their foraging habits when predation risk in their environment is relatively high (Leaver & Daly, 2003), and a separate study reported that kangaroo rats expend greater effort to store more desirable food items (Leaver & Daly, 1998). Additionally, Daly et al. (1984) conducted a descriptive study, in which they detailed the living conditions and breeding procedures of their captive, kangaroo rats, and in another study, Wilson et al. (1985) described the estrous cycle of captive kangaroo rats.

Recent published works by evolutionary scientists have emphasized the downward trend in violence (Pinker, 2011) as well as the relative lack of aggression in humans compared to other species, and especially compared to our closest living primate relatives (Wrangham, 2019). Nevertheless, aggression is undoubtedly part of human evolutionary history, and Daly and Wilson's research on violent human behavior and cognition has yielded substantial contributions to evolutionary psychology.

## Cross-References

- ▶ [Aggression](#)
- ▶ [Infanticide](#)
- ▶ [Kin Selection](#)

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