Evolutionary Psychological Science of Suicide Terrorism

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Suicide terrorist acts, and the fatalities associated with such acts, have increased dramatically throughout the world over the last decade (Hronick, 2006). It is vital for researchers to redouble their efforts to understand why this behavior occurs, because with greater understanding comes the potential means to curtail its occurrence. Already several attempts have been made to identify systematic psychological features of suicide terrorists or to identify the psychological factors that give rise to acts of suicide terrorism (see Borum, 2004; Hoffman, 1999; Ross, 1996), but it is ultimately the architecture of our minds that makes such behavior a possibility. Our minds must be vulnerable to being convinced to put one’s ideals – often the most powerful being religious ideals – above one’s own life (Dennett, 2006).

Psychologists often attempt to explain mental phenomena through proximate causes; that is, through the immediate, salient reasons for a given phenomenon (see Workman & Reader, 2008). For instance, most of us find painful experiences highly unpleasant and go out of our way to avoid them. On the other hand, we tend to pursue enjoyable experiences, such as sex, with great zeal. We can account for such behaviors through physiological means, by describing how the nervous system responds to the respective phenomena of painful stimuli and sex. Or we can ask people why they avoid pain and pursue sex, reaching an obvious conclusion: Sex feels good, and pain does not. Although such proximate explanations are of interest and contribute to our understanding of human nature, they do not provide a full explanation. In other words, they do not account for why such behaviors exist in the first place. Why do we feel pain at all? Why are we so motivated to pursue sex?

The answer lies in that blind, unconscious, omnipresent driving force behind biological diversity on earth: natural selection. Only by looking at the mind as a product of natural
selection can we arrive at a full explanation, and once we do, we can gain a greater understanding of human behavior. The pleasure derived from sexual behavior, as well as the pain derived from various harmful stimuli, is a result of specific pieces of cognitive architecture that we have inherited from our ancestors. Our ancestors are those individuals who responded to stimuli in a way that made them more likely to survive and reproduce than their conspecifics, on average. The cognitive architecture that made those responses possible, whether it be responding to sex with pleasure or to harmful stimuli with pain and avoidance, were selected for and eventually became “universal” characteristics of the species. An evolutionary approach to psychology can thus do much more than merely catalogue psychological phenomena and describe which conditions give rise to particular mental states; it can account for why such mental states and behavioral proclivities exist in the first place.

There is no reason in principle why this approach cannot be extended to the topic of suicide terrorism, and even terrorism in general. Whatever the proximate causes of such behavior, there must be underlying evolved mechanisms that open these behaviors up to the realm of human possibility. The purpose of this chapter is to explore just this possibility by introducing evolutionary psychology to a general readership and explaining how such an approach is valuable to understanding suicide terrorism.

We argue that one of the primary, if not the most important, motivating factors underlying the occurrence of suicide terrorism is religious belief. Although we are not suggesting that all suicide terrorism is necessarily religiously motivated, there is significant overlap between suicide terrorism and religion, in that the vast majority of those who commit suicide terrorism espouse strong religious beliefs (see Pedahzur, Perliger, & Weinberg, 2003; Weinberg, Pedahzur, & Canetti-Nisim, 2003), often of a fundamentalist or extremist nature, most notably Islamic
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(Harris, 2004). This overlap suggests that understanding the evolutionary psychology of religion can provide a useful foundation for exploring the evolutionary psychology of suicide terrorism. Therefore, we begin by exploring how evolutionary psychology has begun to penetrate the root causes of religion, and then extend the current theories on religion to the phenomena of suicide terrorism.

The Evolution of Religion

Religion is by no means a new topic of study within psychology (see James, 1902), and applying evolutionary theory to religious belief and behavior can be traced to Darwin (1871) himself, who proposed that, “The same high mental faculties which first led man to believe in unseen spiritual agencies, then in fetishism, polytheism, and ultimately in monotheism, would infallibly lead him … to various strange superstitions and customs” (p. 816). But despite Darwin’s laudable prescience of applying evolution to the “mental faculties” of religious belief, an evolutionary psychological approach to religion is relatively novel and has only begun to gain momentum over the last decade.

Although there is much empirical work left to be done, the current consensus among many evolutionary psychologists and other researchers approaching religion from this perspective is that religion originated as a byproduct resulting from the interaction of several evolved psychological mechanisms, and with that initial foundation interacting with cultural evolution, religion has become what it is today (Atran, 2002; Bering, 2005 Boyer, 2001). One such psychological mechanism is the “hypersensitive agent detection device,” or HADD, which was proposed by Guthrie (1993), although the term was coined by Barrett (2000; 2004), who also expanded upon the idea.
Humans have a tendency to detect agency in the environment even when none exists, and Guthrie (1993) hypothesized that this behavioral predisposition could have an evolutionary basis. For the majority of human evolutionary history, predators were a real threat, and successfully detecting predators meant the difference between life and death. However, our ancestors likely had to interpret ambiguous environmental stimuli often (e.g., hearing a noise in the brush). Given ambiguous stimuli, those who made a false-positive error suffered a much smaller fitness cost compared to those who made a false-negative error. In other words, misinterpreting a harmless, natural noise in the brush for a predator would at most result in wasted energy escaping from an imaginary foe, whereas misinterpreting a real predator for a harmless noise could lead to severe injury or death. Therefore, a selection pressure likely existed for hypersensitive agency detection, because those who made false-positive errors were more likely to survive and reproduce than those who made false-negative errors.

Several researchers have demonstrated that adults have a strong tendency to detect agency, even when none exists (Berry, Misovich, Keen, & Baron, 1992; White and Milne, 1999; also see Boyer, 2001 and Scholl & Tremoulet, 2000 for a review), and there is an extensive developmental literature suggesting that this tendency emerges in infancy (Bering, 2005; Gergely & Csibra, 2003; Hamlin, Wynn, & Bloom, 2007; also see Atran, 2002, for a review). This psychological mechanism may have laid the foundation for religious belief, with people predisposed to posit supernatural agents (e.g., ghosts, spirits, gods) for certain classes of ambiguous stimuli. However, this mechanism by itself is not enough to explain the existence of complex religious beliefs.

Belief in supernatural agents may emerge as a byproduct of the HADD, but this does not explain the characteristics bestowed upon such agents by those who believe in them. In further
support of the byproduct hypothesis of religious belief, it has been proposed that the design of our memory system plays an important role. More specifically, Boyer (2001) suggests that people are particularly susceptible to remembering what Barrett (2004) has labeled “minimally counterintuitive” (MCI) concepts, and that supernatural agents are examples of such concepts. MCIs can be succinctly described as concepts in which a relatively small number of assumptions are violated, thus grabbing our attention (see Barrett, 2004, for a detailed description). However, not all MCIs are equally memorable. After conducting several experiments to determine the degree of recall among concepts of varying counterintuitiveness, Boyer (2001) explains:

Barrett and I also found that violations of ontological expectations—as found in the templates for supernatural concepts—are recalled better than what we called “mere oddities.” For instance, “a man who walked through a wall” (ontological violation) was generally better recalled than “a man with six fingers” (violation of expectations, but not of those expectations that define the ontological category PERSON) (p. 80, italics and capitalizations in original).

Additionally, these experiments found that concepts with too many assumptions violated were not recalled as well as MCIs, a finding that was replicated by Barrett and Nyhof (2001). Boyer and Ramble (2001) have provided cross-cultural support for these recall tendencies.

In summary, a condensed description of the byproduct account of religious belief focuses primarily on the HADD and MCIs. Supernatural agents arise as a byproduct of the HADD, and the specific characteristics of supernatural agents persist in a given society because they were the easiest to remember, because one byproduct of our memory systems is the susceptibility to MCIs. However, not all researchers studying religion from an evolutionary perspective agree
with this byproduct account, and so it is only fair to provide a brief review of adaptationist hypotheses for religious belief.

Wilson (2002) has proposed that religion may be an adaptation because throughout our evolutionary history, religious beliefs allowed groups to function more successfully and “out-compete” groups that did not hold religious beliefs. Wilson is an advocate of group-level selection, which suggests that in addition to operating at the level of individuals, natural selection can operate at the level of groups. Group-level selection was powerfully decisively refuted by Williams (1966), and the current consensus among evolutionary researchers is that group-level selection is highly unlikely except under very specific and rare circumstances. Also, Wilson provides little empirical support for his claims, and until such empirical support is provided by Wilson or others, group-level selection will likely remain a minority view.

Some researchers have proposed that religious belief, especially church attendance, may have a positive effect on one’s health (Koenig & Vaillant, 2009; Koenig et al., 1999; McCullough & Larson, 1999; McCullough et al., 2000), which would seem to support the view that religion has adaptive qualities. However, despite the positive relationships that have been found, these researchers have properly acknowledged the possibility of alternative explanations, such as one’s health benefiting from the feeling of belonging and acceptance in a tight-knit group, feelings which are not exclusive to religious organizations. For example, Park and colleagues (2006) have written about the importance of general social support in facilitating positive adjustment in chronic illness populations, and they have provided evidence that social support is a significant predictor of decreased feelings of depression for those suffering from congestive heart failure (CHF). Furthermore, Murberg and Bru (2001) have shown that the perceived social isolation of patients with CHF is a significant predictor of mortality. On the
other hand, positive relationships between church attendance and health have been found even after controlling for social connection variables (Koenig et al., 1999). Nevertheless, this does not address whether people belonging to certain non-religious groups might benefit in similar ways. Although manipulating religiosity or church attendance is not feasible, additional research must be conducted to determine whether these health benefits result from factors that are exclusive to religiosity, or if these factors exist in other contexts.

Arguably the most compelling adaptationist account of religion suggests that religious belief leads to a greater a degree of prosocial, or cooperative, behavior within groups (Alcorta & Sosis, 2004, Bering, McLeod, & Shackelford, 2004; Bulbulia, 2004; Purzycki & Sosis, 2009). Although this could be interpreted as group-level selection, it could also apply to selection at the level of individuals, because individual members of a prosocial group will, on average, benefit from these prosocial tendencies. A review of the literature on religious belief and prosociality by Norenzayan and Shariff (2008) led the authors to conclude that religious belief does indeed increase prosocial behavior, but that this increase is highly context-sensitive. Specifically, religious individuals are more likely to exhibit prosociality toward other members of their group than to “outsiders.” Also, the increase in prosocial behavior occurs primarily when the situation can affect one’s social reputation in the group. Finally, increased prosociality is not reliably observed unless one’s religious beliefs, particularly those regarding a morally concerned deity, are cognitively salient at the moment when prosocial behavior is possible. Taken together, these results suggest a possible adaptive role for religious belief, but they do not eliminate the possibility of religion as a byproduct. Perhaps religious belief can be best described as an exaptation (Gould, 1991; Buss et al., 1998), originally a byproduct of the HADD, our memory
system, and other psychological mechanisms, and eventually serving the adaptive function of facilitating cooperation among individuals in a group.

Finally, it is worth mentioning memetics, which is another evolutionary approach to understanding religious beliefs, but does not neatly fall into the category of byproduct or adaptation. Dawkins (1976) coined the term “meme” and suggested that ideas, or memes, may “evolve” in a way analogous to genes. Ideas can be thought of as competing with one another for residence in the minds of people, and those ideas that are most successful at being remembered will survive, get passed on, and possibly change (i.e., evolve) over time. Since its inception in 1976, memetics has been expanded upon by several authors (Blackmore, 1999; Brodie, 2009), and has been discussed explicitly in reference to religion by Dennett (2006). However, at this stage memetics is still a speculative, and controversial, approach to understanding cultural evolution and the spread of ideas (see Aunger, 2001). Nevertheless, Fincher and Thornhill (2008) have provided some indirect support for the memetic perspective in their examination of the degree of religious diversity throughout the world as it relates to pathogen prevalence. Fincher and Thornhill hypothesized, and found, that pathogen prevalence is positively correlated with religious diversity. Although they were not conducting this research from a memetic perspective, their results make sense within a memetic framework. If high pathogen stress limits contact between groups, there is less direct competition between different religious beliefs, which means that these different beliefs will continue to survive. Conversely, low pathogen stress translates into greater cultural transmission, which leads to competition between beliefs, and only the “fittest” beliefs survive.

An evolutionary psychological perspective has generated many interesting hypotheses regarding religious belief, and these hypotheses will undoubtedly be refined as additional
empirical work is done. We can now turn our attention to how such a perspective can be used to examine suicide terrorism.

**Applying Evolutionary Psychology to Suicide Terrorism**

Like religion, suicide terrorism has been studied extensively from a psychological perspective (see Bongar, Brown, Beutler, Breckenridge, & Zimbardo, 2007; Stern, 2003). However, the focus of this research has largely been to determine and understand the proximate causes of suicide terrorism. Although this research is important, we argue that the addition of an evolutionary psychological perspective has the potential to increase our understanding of terrorism, in general, and of suicide terrorism in particular, by explaining why the propensity for such behavior exists in the first place.

We argue that religious belief is a primary factor in the occurrence of suicide terrorism, yet it is necessary to clarify this argument before attempting to link evolutionary psychological theories of religion to suicide terrorism. We are not arguing that religiosity is a strong predictor of suicide terrorism, since the number of religious people in the world vastly outnumbers those willing to engage in suicide terrorism. However, there are certain religious beliefs that may facilitate such willingness (e.g., belief in the afterlife, endorsement of martyrdom, viewing one’s in-group as “the chosen people,” the vilification of heretics and nonbelievers). Therefore, although religiosity may not positively predict one’s willingness to engage in suicide terrorism, the lack of religiosity (i.e., the lack of certain specific religious beliefs) should predict one’s unwillingness to engage in suicide terrorism.

We are not the first to propose a link between religious beliefs and terrorism (Dawkins, 2006, Harris, 2004, Stern, 2003), but there is a lack of strong empirical data supporting this link. At the same time, data provided to disconfirm this link (Ginges, Hansen, & Norenzayan, 2009)
is, as of yet, unconvincing (Liddle, Machluf, & Shackelford, 2010). People may point to the Liberation Tigers of Tamil Eelam, or the Tamil Tigers, as a disconfirmation of the link between religion and suicide terrorism, because they are recognized as a secular organization. However, this label does not provide us with information about the specific beliefs of Tamil Tigers who are willing to commit acts of suicide terrorism. One can maintain supernatural beliefs without belonging to an organized religion (Zuckerman, 2008), and unless we can determine that the majority of Tamil Tigers willing to commit suicide terrorism lack the beliefs that are likely to facilitate such terrorism (e.g., belief in the afterlife), the secular identity of the organization as a whole is not a convincing argument.

As it stands, the direct link between specific religious beliefs and one’s willingness to engage in suicide terrorism is open for debate, since there is no evidence strong enough to effectively confirm or disconfirm this hypothesis. Nevertheless, the theories of religion outlined earlier provide a useful illustration of the application of evolutionary psychology, and the same principles of evolutionary psychology that have begun to demystify religious belief can be applied to the issue of suicide terrorism.

As with religious belief, an evolutionary psychological perspective requires us to consider whether suicide terrorism is produced by specialized psychological adaptations or is a byproduct of other psychological mechanisms. Although at first glance such behavior would appear maladaptive, primarily because of the forfeit of one’s life in the process, there are promising adaptationist hypotheses worth considering. Perhaps the most promising hypothesis is that such behavior can be maintained via kin selection.

The theory of kin selection, originally proposed by Hamilton (1964), explains how traits that are not necessarily beneficial to an organism can nevertheless be selected for. This apparent
contradiction is eliminated when one switches their focus from the *individual* to the *gene*. A trait that is harmful to an individual can be selected for if it is sufficiently beneficial to the individual’s relatives, because from the gene’s perspective, the harm is offset by the benefits to others who are likely to carry the same gene. The use of this theory by evolutionary psychologists has been particularly helpful in providing a partial explanation for altruistic behavior (see Buss, 2004). Although altruistic behavior often entails a cost to the altruist, the psychological mechanisms that allow such behavior to occur can be selected for if the behavior is directed toward genetic relatives. The genes for altruism are likely to survive even if the altruist suffers, because those same genes are likely to be carried by the altruist’s relatives who benefit from the behavior.

In terms of suicide terrorism, it is possible that such behavior persists because it provides benefits to the relatives of terrorists (Victoroff, 2009). Pedahzur and colleagues (2003), when examining the demographics of Palestinian suicide terrorists, concluded that these terrorists had few “family ties” because 84.2% of their sample consisted of bachelors. However, 81% of these terrorists came from families with at least eight members (Blackwell, 2005). Therefore, even though the majority of these terrorists were seemingly unsuccessful in passing on their genes directly, their large families of genetic kin provided an ample opportunity for kin selection to take place, if their kin benefitted from the act of suicide terrorism. In addition to the increased status and honor bestowed upon the families of these Palestinian suicide terrorists, these families have been paid between $10,000 and $25,000 by Hamas, spread out in monthly stipends of roughly $1,000 (Blackwell, 2005). Given the benefits bestowed upon the genetic kin of these suicide terrorists, and the large number of genetic kin in place to receive such benefits, the seemingly maladaptive act of suicide terrorism can prove to be adaptive through the action of kin
selection. Although these data do not refer to all acts of suicide terrorism, they provide support for kin selection as a driving force behind Palestinian suicide terrorism, suggesting that a similar driving force may exist in other regions.

Whereas kin selection theory provides an adaptationist explanation for suicide terrorism, the same theory can also provide a useful foundation for considering byproduct explanations. One possibility is that, in cases in which genetic kin do not benefit from such terrorist acts, the same psychological mechanisms geared toward helping kin are “hijacked.” In much the same way as altruism toward strangers may be produced by misfiring of mechanisms designed to benefit relatives, suicide terrorism may sometimes be triggered by feelings toward one’s group (i.e., terrorist organization or religious sect), despite the lack of genetic relatedness. In other words, one’s group may be considered “fictive kin,” leading to the unconscious activation of mechanisms that generate behavior normally geared toward benefitting genetically related kin.

Indeed, organizations that recruit individuals to carry out suicide terrorism promote feelings that are likely to lead to a misfiring of kin selection mechanisms. As Goetz and James (2004, p. 155) describe:

The small, terrorist cell serves as a meaningful substitute to family and it is not surprising that members end up forming strong emotional bonds with each other as well as the typical sacrificial inclinations of close family. Leaders of terrorist organizations cultivate and manipulate these emotional bonds and steer their expression toward political goals of the terrorist organization.

Furthermore, data on 39 recruits to an organization allied with Al-Qaida indicate that, “All believed that by sacrificing themselves they would help secure the future of their ‘family’ of fictive kin” (Atran, 2003; p. 1537). In addition to terrorist organizations, religious sects of
would-be suicide terrorists are also prime suspects for the misfiring of kin selection mechanisms. Many religious belief systems, such as Judaism, Islam, and Christianity, rely heavily on terminology often reserved for genetic kin (Atran, 2002). In short, the idea of suicide terrorism resulting from the misfiring of psychological mechanisms deserves further empirical attention, because discovering the factors that contribute to these misfirings can help guide actions to prevent or reverse such effects.

For kin selection mechanisms to motivate suicide terrorism, whether these mechanisms are activated by expected benefits to genetic kin or fictive kin, the benefit to the survival and reproduction of one’s kin must outweigh the costs to oneself. This provides another opportunity for religious beliefs to play a role in facilitating suicide terrorism. Without the belief that one’s life continues after death (and the belief that martyrdom will be rewarded in the afterlife), the largely unconscious cost-benefit calculation that motivates kin selection-related behaviors would likely motivate the would-be terrorist to not follow through with a suicide act. Life after death, particularly a life of rewards in paradise for eternity, might play a large role in offsetting the costs associated with suicide terrorism, thereby “tip[ping] the scale” in favor of the expected benefits to one’s kin. In short, even with expected kin benefits, specific religious beliefs may be a vital, but insufficient, motivating factor for suicide terrorism.

Speaking of beliefs, it is possible that, as with religion, memetics can shed light on the phenomenon of suicide terrorism. It may be the case that suicide terrorism persists because the ideas and beliefs that terrorist organizations and certain religious sects disseminate to their followers “parasitize” the brain. As Pedahzur and colleagues (2003) describe, “In a society where honor is among the highest virtues, there are indeed powerful social pressures lying behind the suicide bomber’s decision” (p. 420). The “virtues” of groups that foster terrorist
activity can be considered memes, with the terrorist acts serving to benefit and propagate those memes. More specifically, the belief of everlasting life in paradise can be an extremely powerful meme, which is possibly one of the main reasons that suicide terrorism is so often performed by individuals with strong religious beliefs. It is clear that a terrorist’s beliefs are a crucial component when attempting to explain their actions, and it is possible that these beliefs can be better understood within a memetic framework.

For example, often when confronted with stories of Islamic suicide terrorism, Muslims are quick to explain these terrorists as twisting Islamic beliefs and misinterpreting the Quran. These explanations can take on a whole new meaning from a memetic perspective. The differential survival and replication of religious beliefs (memes) should be related to which beliefs are the most “successful” in a given environment. Islamic beliefs that promote martyrdom, condemn heresy, apostasy, and nonbelief, and highlight rewards in the afterlife for killing the “enemies of Islam” will be emphasized by those who recruit, train, engage in, or support suicide terrorism. Likewise, these beliefs will be de-emphasized by moderate Muslims, who will instead emphasize Islamic beliefs that promote peace and tolerance of those with different religious beliefs, and condemn acts of martyrdom. Both sets of beliefs can be found in the Quran (Harris, 2004), but moderate Muslims are right to distinguish “their” Islam from the Islam promoted by terrorists. Asking whether Islam is a religion of peace or a religion of war is the wrong type of question to ask, and memetics can illustrate why: Islam, like other organized religions, is not a homogenous set of beliefs. It has evolved into several “sub-species” of Islam, each with their own sets of core beliefs that can be traced back to a “common ancestor” (i.e., the Quran). These sub-species are the result of different selection pressures, in that different groups select, emphasize, and transmit those beliefs that best suit their needs. By adopting a memetic
perspective, we may gain a better understanding of how and why the Islam of suicide terrorists differs so widely from the Islam of moderates, and how the emphasis of different sets of core beliefs can influence the occurrence of suicide terrorism.

**Directions for Future Research**

We have provided the theoretical groundwork for thinking about suicide terrorism from an evolutionary psychological perspective, but such an endeavor is only useful if it can open up new avenues of empirical study. We now provide some examples of how an evolutionary psychological approach to suicide terrorism can be applied to future research.

As mentioned earlier, kin selection may be a motivational force in suicide terrorism. Given the data on Palestinian suicide terrorists and the benefits received by their genetic kin (Blackwell, 2005), a next step would be to investigate whether genetic kin receive similar benefits in other populations in which suicide terrorism takes place. Are the majority of suicide terrorists in other populations bachelors? Do these individuals come from large families? Do their kin receive monetary rewards or improved status after the terrorist act? If so, do the monetary rewards or increases in status correlate with the degree of relatedness (i.e., parents and siblings of suicide terrorists receiving greater benefits than cousins)? The accumulation of data related to these questions would go a long way in determining whether kin selection plays a role in motivating individuals to engage in suicide terrorism.

In addition to (or in lieu of) benefitting genetic kin, suicide terrorists may be motivated by affiliations with “fictive kin,” which causes kin selection mechanisms to misfire. One way to investigate this would be to question suicide terrorists directly, using surveys or interviews to determine the extent to which they view others in their organization, religious sect, society, etc. as kin, and to compare their responses to those from the population at large. However, this brings
us to one of the greatest difficulties in attempts to study this population: Researchers would be hard pressed to find a less amenable group to analyze than suicide terrorists, with the only ones available for questioning being those who are in training or those who were unsuccessful; and of that sub-group, those willing to respond to surveys or engage in systematic interviews may well be in the minority. Nevertheless, such interviews are possible (see Stern, 2003), but there are other options available as well.

One option is to measure the support for suicide terrorism among individuals who are not suicide terrorists themselves. Although people who support terrorism are not synonymous with people who engage in terrorism, there is likely to be some overlap in the psychology of these two groups. For example, Ginges, Hansen, and Norenzayan (2009) found a positive relationship between religious service attendance and support for suicide attacks, which is consistent with the possibility of misfiring kin selection mechanisms, since attending religious services can strengthen one’s feeling of being connected to the community (Zuckerman, 2008). Additional research should be conducted in this fashion, comparing support for suicide terrorism and perceptions of fictive kin. This can be done through surveys, as well as other methods, such as investigating whether priming concepts of kin influences one’s level of support for suicide terrorism. Clearly, studying individuals who support suicide terrorism should not be viewed as a replacement for studying actual suicide terrorists, but the former group can inform our understanding of the factors associated with suicide terrorism.

Another important avenue for future research is testing the hypothesized relationship between religiosity and suicide terrorism. Granted, there are difficulties associated with trying to empirically assess this relationship. As we stated earlier, religiosity is unlikely to have any strong predictive power because there are far more religious people than would-be suicide terrorists in
the world. Nevertheless, investigating the relationship between religiosity and suicide terrorism is not a lost cause. One can generate hypotheses regarding which specific religious beliefs are likely to facilitate suicide terrorism. For example, belief in the afterlife is likely to have a strong impact on the (probably unconscious) cost-benefit analysis of engaging in suicide terrorism by minimizing the projected costs. Also, religious beliefs that strengthen the in-group bond and create a feeling of “fictive kin,” coupled with beliefs that strengthen out-group hostility, may activate psychological mechanisms related to kin selection and protecting one’s in-group (which consisted mostly of genetic kin throughout our evolutionary history), thus motivating behavior that is perceived to benefit the in-group and hurt the out-group, such as suicide terrorism.

A list of specific religious beliefs, like the ones mentioned above, allows us to generate more specific hypotheses. Within terrorist organizations, or among individuals who support suicide terrorism, there should be an emphasis on promoting these religious beliefs relative to other beliefs from the same religion. In other words, religious beliefs that likely facilitate suicide terrorism should be rated as more important than other beliefs within the same religion, but this pattern should not be found among those from the same population who are not supportive of, or willing to engage in, suicide terrorism. By considering specific religious beliefs, rather than religiosity in general, we may have a better chance of detecting the link between religiosity and suicide terrorism, if such a link exists.

Conclusion

Terrorism, in all its forms, is a phenomenon that we must try to understand as best we can, in the hopes that we can curtail its occurrence. This level of understanding can only be achieved by interdisciplinary efforts. We have reached a point at which proximate explanations of terrorism are becoming clearer, but ultimate, or evolutionary, explanations have yet to be
pursued with similar enthusiasm. We believe that an evolutionary psychological perspective has the potential to provide such ultimate explanations.

For the purposes of this chapter, we restricted our analysis to suicide terrorism. The surge of evolutionary psychological research on religion in the last decade provides a powerful stepping off point for examining acts of terrorism that are seemingly motivated by certain religious beliefs. By reviewing some of the ways in which an evolutionary perspective has influenced current research on religion, we sought to illustrate how evolution can be a useful framework for researching suicide terrorism. Applying the evolutionary principles of kin selection, and possibly memetics, to suicide terrorism has great potential, but researching terrorism from an evolutionary perspective is by no means limited to the ideas offered here. We encourage researchers to utilize the principles of evolutionary psychology when studying suicide terrorism, or terrorism in general, with the hope that such an approach will uncover valuable insights regarding such behavior.
References


