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Suicide and the Moralistic Fallacy: Comment on Joiner, Hom, Hagan, and Silva (2016)

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Abstract

Joiner, Hom, Hagan, and Silva (2016) argue that human suicidal behavior is an evolutionarily maladaptive byproduct of eusociality. We believe that Joiner et al. are committing the moralistic fallacy in their analysis of human suicidal behavior, which may have led to a number of unexamined assumptions and possible errors in their discussion. Specifically, it is because of the moralistic fallacy—i.e., the conflation between that which is socially desirable and that which is in keeping with inclusive fitness concerns—that Joiner et al. dismiss the possibility that suicide may sometimes bring reproductive benefits to individuals via its effect on suicidal individuals' family members.

Keywords: suicide, moralistic fallacy, inclusive fitness, adaptation, evolution

Suicide and the Moralistic Fallacy: Comment on Joiner, Hom, Hagan, and Silva (2016)

Joiner, Hom, Hagan, and Silva (2016) argue that human suicidal behavior is an evolutionarily maladaptive byproduct of eusociality. Eusociality refers to a suite of behaviors that includes multigenerational care of offspring and the division of labor between reproductive and non-reproductive individuals. Although we applaud the authors' attempt to address suicidal behavior from a naturalistic, evolutionary perspective, their argument contains several problems. Chief among these, we believe, is the moralistic fallacy.

Like the naturalistic fallacy, the moralistic fallacy is a logical fallacy marked by a conflation between that which *is* and that which *ought to be* (Davis, 2000). Whereas the naturalistic fallacy refers to the error of deriving one's morals from nature, the moralistic fallacy refers to the error of perceiving nature through the biasing lens of one's morals. Applying these concepts to the issue at hand, an example of the naturalistic fallacy would be believing suicide to be morally justifiable if it were shown to be natural or evolutionarily adaptive. Conversely, an example of the moralistic fallacy would be believing suicide to be unnatural or evolutionarily maladaptive due to one's belief that it is immoral. We believe that Joiner et al. (2016) are committing the moralistic fallacy in their analysis of human suicidal behavior, which may have led to a number of unexamined assumptions and possible errors in their discussion.

Joiner et al.'s (2016) attempt to connect the study of human suicidal behavior to an evolutionary framework—and, in particular, to Hamilton's (1964) inclusive fitness framework—is commendable, but the authors do not discuss the implications of such a connection. One such implication is the lack of equivalence between that which is evolutionarily adaptive, and that which is merely preferable in an everyday sense. Evolution by natural selection does not ensure that organisms maximize their happiness or well-being—only their genetic proliferation.

Although the authors mention the inclusive fitness framework, they dismiss the possibility that it could bring about adaptive suicidal behavior. Inclusive fitness refers to the reproductive success of individuals' genes, both via their own offspring and via the offspring of their family members—i.e., individuals with whom genes are shared; it says nothing about what is individually, socially, or morally desirable. It is premature to claim that the cost-benefit ratio is such that the reproductive benefits of suicide *never* outweigh the costs (see Brown et al., 2009). As such, we believe that it is because of the moralistic fallacy—specifically, the conflation between that which is socially desirable and that which is in keeping with inclusive fitness concerns—that Joiner et al. dismiss the possibility that suicide may sometimes bring reproductive benefits to individuals via its effect on suicidal individuals' family members.

That the moralistic fallacy may be responsible for Joiner et al.'s (2016) dismissal of suicide as an adaptive behavior is most clearly suggested by Joiner et al.'s casting of the characteristics of suicide—characteristics that, on their own, do not threaten an individual's reproductive fitness—as evidence for it being a derangement. These characteristics include (a) the brutal killing of an innocent, (b) the state of mind that one's death has inviting properties, (c) suicide contagion, (d) the risk of bystander death, (e) the deprivation of one's future self or (f) one's loved ones of choice, and (g) others experiencing a shocked state of bereavement. Even if all of these attendant outcomes are true, however, it is nonetheless possible for suicide to be, or to have been ancestrally, associated with reproductive benefits via its effect on suicidal individuals' kin. Claiming that suicide involves the "killing of an innocent" is a valuative statement and, thus, has no bearing on the adaptiveness of suicide. As for Joiner et al.'s contention that suicide is a derangement because it is brought about by a mindset that views death as having inviting properties, if suicide is produced by adaptation, then natural selection

would ensure that suicidal individuals associate it with inviting properties. That suicide might lead to "suicide contagion" (i.e., the copying of suicidal behavior by third parties) or to the death of bystanders has no bearing on whether suicide brings reproductive benefits to the family members of the victim. Furthermore, even if suicide were to deprive suicidal individuals or their family members of choice at some future period, this says nothing about whether it is a reproductively favorable choice in the present moment. Such an argument is akin to claiming that one's decision to enter into a romantic relationship now would deprive one of future mating opportunities. This may indeed be the case, but it does not negate the possibility that one's decision to enter into the relationship in the present moment is reproductively favorable. It is also doubtful that a family's experience of bereavement excludes any possibility of them securing evolutionarily-relevant benefits from their relative's suicide. After all, there is no biological law stipulating that grief cannot exist alongside reproductive success (see Winegard et al., 2014, for an evolutionary account of grief). In short, it appears that all the characteristics of suicide that the authors cite as evidence for it being a derangement are interpreted as such because the authors believe that suicide is a derangement *a priori*, not because of the characteristics themselves.

A misunderstanding of Hamilton's rule also leads the authors to propose a questionable suicide prevention intervention. Joiner et al. (2016) note that, contrary to the finding that colony size is positively associated with self-sacrifice among nonhumans, human suicide rates are lower in large, urban populations than in small, rural populations. The authors attempt to reconcile these findings by noting that it is *cohort size* relative to the rest of the population that positively predicts suicide rates, citing research by Stockard and O'Brien (2002). The authors suggest that "putting a face to things" (p. 244) may help to decrease the rate of suicide in contexts in which individuals feel "faceless, anonymous, and insignificant" (p. 244)—a presumed feature of

individuals born into large cohorts. However, this begs the question of why "putting a face to things"—presumably an attempt to increase a would-be suicidal individual's social connectedness—would be helpful in preventing suicide. It may be helpful, but it could also risk creating more fictive kin and thereby potentially increasing a suicidal individual's feeling of burdensomeness. Feeling "faceless, anonymous, and insignificant" can be interpreted as being either the cause of suicide if such a state motivates individuals to sacrifice themselves for more "significant" others, or it can be interpreted as being a remedy for suicide if it prevents individuals from forming relationships with others who make them feel burdensome. The authors likewise present a questionable version of inclusive fitness that applies to both relatives and non-relatives. This is suggested by their statement that "… [suicidal] individuals act in response to a misperception of Hamilton's (1964) rule, believing that their own lives must be sacrificed in order to benefit surviving family members and loved ones, as well as society as a whole…" (p. 244). Evolved inclusive fitness calculations do not take the consequences for "society as a whole" into account.

Even if Joiner et al. (2016) support a "group selectionist" view of evolution, according to which organisms act for the good of both relatives and nonrelatives within their group (still a controversial position within the evolutionary sciences; Bourrat, 2015; Dawkins, 1976), they fail to support their assumption that suicidal individuals *always* misperceive their burdensomeness to others. This is an oversight and one which casts doubt on the authors' central argument—i.e., that human suicide is *always* a derangement of otherwise adaptive eusocial behavior. The authors' view that a perception of burdensomeness is, in fact, a misperception, is belied by findings showing that depressed individuals are sometimes more aware of the true state of the world and of themselves than non-depressed individuals (Alloy & Abramson, 1979).

Notwithstanding the limitations of this study (whose findings have recently been challenged—see Moore & Fresco, 2012), the declaration that suicidal individuals *always* misperceive their burdensomeness cannot be claimed as fact without empirical support.

Neither is it in keeping with scientific rigor for the authors to suggest that suicide is an outcome of psychological disorder *100%* of the time. First, the clinical definition of "disorder" is not synonymous with an evolutionary definition, in that what clinicians label a disorder may be an evolved response on the part of the individual. This argument has been made with respect to socially noxious dispositions and traits such as depression, psychopathy, and aggressiveness (Gorelik, Shackelford, & Weekes-Shackelford, 2012; Jonason, Valentine, Li, & Harbeson, 2011; Keller & Nesse, 2006). Second, among suicidal individuals who have a psychological disorder, suicidal behavior need not be an outcome of that disorder. Third, even if suicide is caused by psychological disorder, it may be an instance of an individual having to make the best of being dealt a bad hand. That is, the burden imposed on family members by an individual's psychological disorder may cause the individual to attempt to reduce this burden by taking his or her own life. In this way, even though mental disorder may be indirectly responsible for an individual's suicide, suicide may be an evolved corrective for the costs of the individual's disorder on his or her kin.

We do not suggest that every—or, indeed, any—instance of suicide is indicative of it being produced by adaptation. What we do suggest is that Joiner et al. (2016) do not present a convincing case that *all* instances of human suicide are derangements of eusocial behavior. It is necessary to reiterate that even if suicide is, or was ancestrally, adaptive, this does not mean that it should be tolerated or is thereby justified. After all, human aggression may have been produced by natural selection, but this does not mean that we should condone homicide and

warfare. In fact, more headway could be made in alleviating the individual and social costs of suicide and aggression if scientists are willing to conduct honest, unfiltered examinations of these phenomena. Suggesting that suicide is a derangement or that it is always a result of psychological disorder risks prematurely abandoning potentially fruitful lines of investigation into its causes and possible remedies. Joiner et al. have proposed an intriguing and unique perspective on suicide as an expression of human eusociality. That it shares various features with nonhuman self-sacrificial behavior (e.g., withdrawal, agitation, loss of sleep, loss of appetite, etc.) suggests that this perspective should be given serious theoretical and empirical consideration. Closing off the possibility that suicide may sometimes be produced by adaptation would, at this point, be a mistake.

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