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Unbidden confession as an evolved pre-emptive strategy against punishment: A preliminary investigation with prisoners

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ABSTRACT

Unbidden confession—confession made by a transgressor in the absence of interrogation—presents an evolutionary puzzle because it guarantees social exposure and places the person at risk of punishment. We hypothesize that unbidden confession may be an ancestrally adaptive behavior and is difficult to inhibit under certain social conditions, particularly when one perceives imminent and inevitable social exposure. This serves as a pre-emptive strategy that, in the ancestral past, may have attenuated punishment from retributive in-group members. Using self-report data from a sample of 78 federal inmates, we report analyses supporting this hypothesis. Inmates who made unbidden confessions were more confident that they would be caught by police, and this confession was usually made to someone who had a stake in the transgressors' genetic interests, most often a family member or friend. These results suggest: (1) a possible role for natural selection in shaping cognitive mechanisms that motivate confession; (2) a potential mismatch in the efficacy of unbidden confession today compared with our ancestral past, given that the law is now administered by strangers rather than in-group members; and (3) new avenues for research on the origins of sophisticated cognitive strategies.

1. Introduction

Confessions sometimes occur even when the confidant has no suspicion that the confessor has anything to hide. From an evolutionary perspective, this type of *unbidden confession* is puzzling. Because confession guarantees social exposure and thus renders the individual vulnerable to punishment (via ostracism, reputation damage, fines, or direct costs), this behavior may have threatened ancestral reproductive success (Williams, 2007; Williams & Nida, 2011). One might therefore reason that people will retain sensitive personal information under all but the most extraordinary conditions, such as harsh interrogation. Nevertheless, the "urge" to confess is well-documented (Kassin & Gudjonsson, 2004; Weiner, Graham, Peter, & Zmuidinas, 1991).

We hypothesize that, under certain social conditions, unbidden confession may be an ancestrally adaptive behavior and, therefore, difficult to inhibit. The cornerstone logic to this hypothesis is as follows: Belief in imminent and inevitable social exposure evokes unbidden confession. This serves as a pre-emptive strategy that, in the ancestral past, may have attenuated punishment from retributive in-group members, including ostracism and social exclusion (Williams, 2007; Williams & Nida, 2011).

When people believe that their identities have been compromised in committing transgressions, such as through indisputable evidence or witnesses, they are more likely to make unbidden confessions because social exposure is probable. Consider that authorities often elicit confessions by leading the suspect to believe that they possess more information than they in fact have (Candel, Merckelbach, Loyen, & Reyskens, 2005; Kassin & Gudjonsson, 2004). Transgressors who in response confess—and who appear sincere in doing so—are given lighter sentences, judged as less likely to re-offend, and are more often forgiven by their victims than are those who deny their guilt (Gold & Weiner, 2000). Our evolutionary hypothesis of unbidden confession was used to generate the following predictions.

1.1. Prediction 1: The perceived number of knowledgeable others increases one's anticipatory anxiety about getting caught

The greater the number of people who could identify the person as a transgressor, the more the person should worry about getting caught. Strategic social information is transmitted to the rest of the in-group via gossip and, therefore, the more "carriers" of this information, the greater the threat of public exposure of one's offence (Vrij, Nunkoosing, Paterson, Ooserwegel, & Soukara, 2002).

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1.2. Prediction 2: Anticipatory anxiety about getting caught correlates with the urge to confess, and unbidden confession relieves this anxiety

We do not envisage unbidden confession to be under conscious control (although this is possible); indeed, consciousness might have interfered with the quality of remorse signals and negated the ancestral reproductive payoffs of unbidden confession (Trivers, 2000, 2011; Von Hippell & Trivers, 2011). Rather, we argue that the proximate mechanism behind unbidden confession is the expectation of reduced anxiety that stems from ruminating about impending social exposure. Therefore, we predict that the urge to confess increases as one's anticipatory anxiety about getting caught increases, and transgressors who make unbidden confessions have experienced greater anticipatory anxiety than those who do not make unbidden confessions.

1.3. Prediction 3: People should first confess to those with shared genes or genetic interests

Inclusive fitness theory (Hamilton, 1964) can be used to generate the prediction that those with the greatest genetic relatedness to the transgressor (e.g., parents, siblings) are also the most likely to become a confidant and come to the transgressor's defence, because their shared genes are at stake if the transgressor is caught and punished. In addition to shared genes, individuals with shared *genetic interests* can also be predicted to provide support to transgressors. Such individuals may include a mate with whom the transgressor shares offspring, or a close friend who has shared personal (i.e., compromising) information of their own with the transgressor. In short, if one's survival or reproductive interests are threatened by the capture and punishment of a transgressor, this may serve as motivation (consciously or unconsciously) to provide support (e.g., aiding in the evasion of authorities, negotiating the transgressor's punishment). Given these potential benefits to the transgressor, we predict that if a person makes an unbidden confession, that person is most likely to confess to someone with shared genes or genetic interests. Additionally, unbidden confession can serve as a signal of commitment by the offender because, given the risks of sharing such compromising information, it reduces the likelihood of defection from future interactions (e.g., Kelly, 1999; Schelling, 1960).

We tested these predictions in a sample of federal inmates using self-report surveys of unbidden confession and criminality.

2. Methods

2.1. Participants

Participants were 78 self-selected inmates (36 men) at an Arkansas Department of Correction facility. To avoid the provision of identifying information, participants indicated their current age with one of several ranges (7.7% were aged 18–21 years, 43.6% aged 22–35 years, 42.3% aged 36–45 years, 5.1% aged 46–60 years, and 1.3% over the age of 60 years). Participants indicated the number of consecutive years served at the current imprisonment with one of several ranges (26.9% reported less than one year, 53.8% 1–5 years, 14.1% 6–12 years, 2.6% 13–20 years, and 2.6% over 20 years). Finally, participants indicated the crime(s) for which they were convicted and, as a result, for which they were currently imprisoned (33.3% reporting drug crime, 32.1% robbery/theft/property crime, 17.9% sex crime, 11.5% fraud/racketeering/forgery/counterfeiting, 10.3% murder/manslaughter, 9.0% weapon offence, 5.1% assault, and 3.8% kidnapping).

2.2. Materials and procedures

This research was approved by the Institutional Review Board of the University of Arkansas. Inmates were alerted to the survey by prison staff. Those interested in participating were administered the survey in same-sex groups in classrooms within the prison. Two research assistants, one male and one female, administered all surveys under the supervision of guards. Participation was voluntary and inmates who signed the consent form were paid $3 regardless of their completion of the survey (note that $3 can be much more valuable in prison compared to typical experimental settings with students). Each group was allotted 30 min to complete the survey; however, most finished within 20 min.

The survey included the following questions, responses to which are the focus of the current analyses: "*Before* you were arrested, did you tell anyone (for example, a friend, family member, relative, priest, or therapist) about what you had done?" ("Yes" responses were coded "1" and "No" responses were coded "0"; italics in original); "*Before* you were arrested, how confident were you that the police would somehow find out and arrest you?" (responses were recorded on a scale of 1–5, with 1 = "I was positive the police *would never find out*" and 5 = "I was positive that the police *would eventually find out*"). "How often did you *worry* about getting caught, before you decided to tell somebody (anybody)?" (responses were recorded on a scale of 1–5, with 1 = "never" and 5 = "all the time"); "*Before* you were arrested, did you ever feel a strong urge to tell somebody (anybody) about what you had done?" ("Yes" responses were coded "1" and "No" responses were coded "0"); "If you had to estimate, how many people knew that you had committed this crime, *before you actually confessed*?" (responses were recorded as 0 = "0," 1 = "1", 2–4 = "2," and 5 or more = "3"); "Who was the *very first* person you told about what you had done?" [participants selected one among: "Family member," "Friend," "Therapist or religious authority (for example, psychologist, priest, or rabbi)," and "Legal authority (for example, a lawyer or police officer)."] The following two questions followed-up on the previous question: "Was one of the main reasons you told this person that you believed that you could trust him or her with this information?" ("Yes" responses were coded "1" and "No" responses were coded "0"); "Generally speaking, has this person helped to support you (in any way) through this entire ordeal?" ("Yes" responses were coded "1" and "No" responses were coded "0").

3. Results

We first present descriptive data for responses to each of the questions that appeared in the second section of the survey and which are the focus of the current analyses. In response to the question, "*Before* you were arrested, did you tell anyone (for example, a friend, family member, relative, priest, or therapist) about what you had done?," 55.1% of participants indicated "Yes." In response to the question, "*Before* you were arrested, how confident were you that the police would somehow find out and arrest you?," participants provided a mean rating of 3.35 (SD = 1.50). In response to the question, "How often did you *worry* about getting caught, before you decided to tell somebody (anybody)?," participants provided a mean rating of 3.36 (SD = 1.42). In response to the question, "*Before* you were arrested, did you ever feel a strong urge to tell somebody (anybody) about what you had done?," 50.6% of participants indicated "Yes." In response to the question, "If you had to estimate, how many people knew that you had committed this crime, *before you actually confessed*?," participants provided a mean rating of 2.79 (SD = 1.04). In response to the question, "Who was the *very first* person you told about what you had

done?," 32.4% indicated that this person was a "Family member," 47.9% a "Friend," 4.2% a "Therapist or religious authority (for example, psychologist, priest, or rabbi)," and 15.5% a "Legal authority (for example, a lawyer or police officer)." In response to the question, "Was one of the main reasons you told this person that you believed that you could trust him or her with this information?," 82.9% of participants indicated "Yes." Finally, in response to the question, "Generally speaking, has this person helped to support you (in any way) through this entire ordeal?," 49.3% indicated, "Yes." Next, we present directional tests of the predictions.

3.1. Number of knowledgeable others and anticipatory anxiety

In support of Prediction 1, anticipatory anxiety about getting caught was related to the number of others presumed by the transgressor to have knowledge about the crime, Goodman–Kruskal's $G(67) = .25$, $p = .04$ (note that sample sizes vary slightly for different analyses due to missing data). The more people who were presumed to know that the transgressor committed the crime, the greater the transgressor's worry about getting caught.

3.2. Anticipatory anxiety, the urge to confess, and unbidden confession

In support of Prediction 2, participants who indicated an urge to confess prior to being arrested also reported greater anticipatory anxiety about getting caught ($M = 3.82$, SD = 1.41) compared to those who did not have an urge to confess ($M = 2.81$, SD = 1.25), $t(67) = -3.11$, $p = .003$. The urge to confess was not related to the presumed number of knowledgeable others, Mann–Whitney $U(74) = 711.50$, $Z = -.11$, $p = .91$. Taken together, these results suggest that the presumed number of knowledgeable others influences one's degree of anticipatory anxiety, and one's anxiety, in turn, affects the urge to confess. This is consistent with the argument that anticipatory anxiety serves as a proximate mechanism for making unbidden confessions by influencing one's urge to confess.

Unlike the *urge* to confess, actually making unbidden confessions was not related to anticipatory anxiety [$t(67) = -1.65$, $p = .10$], although the relationship was in the predicted direction, with participants who made unbidden confessions reporting marginally higher anticipatory anxiety ($M = 3.60$, SD = 1.48) than those who did not make unbidden confessions ($M = 3.03$, SD = 1.30). However, making unbidden confessions *was* related to the presumed number of knowledgeable others, with those who made unbidden confessions presuming a greater number of knowledgeable others (Median = 3.00) than those who did not make unbidden confessions (Median = 2.00), $U(74) = 476.50$, $Z = -2.55$, $p = .01$. Furthermore, and consistent with Prediction 2, making unbidden confessions was related to confidence that the police would find out and arrest the individual, with those who made unbidden confessions reporting greater confidence in getting arrested ($M = 3.67$, SD = 1.34) than those who did not make unbidden confessions ($M = 2.94$, SD = 1.62), $t(73) = -2.13$, $p = .037$.

3.3. To whom is confession offered first?

Consistent with Prediction 3, participants were more likely to offer an initial confession to a family member or friend than to a therapist, religious figure, or legal authority, $\chi^2(3, n = 72) = 31.25$, $p < .001$ (see above for data). Participants also indicated that one of the main reasons that they offered an initial confession to the particular recipient was that they trusted that person with this sensitive information, $\chi^2(1, n = 70) = 30.23$, $p < .001$ (see above for data). Also consistent with Prediction 3, participants were more likely to report trust as a main source of motivation when the confidant was a family member (91.3%) or friend (93.9%) rather than a therapist or religious authority (33.3%) or legal authority (44.4%), $\chi^2(3, n = 68) = 19.37$, $p < .001$. The percentage of participants indicating that the person to whom they initially confessed helped to support them during their "ordeal" (49.3%) did not differ from the percentage of participants indicating no help from their confidant (50.7%), $\chi^2(1, n = 71) = 0.01$, *ns*.

4. Discussion

Our hypothesis that unbidden confession occurs when people believe that their offences will soon be exposed was tentatively supported, and in several ways. For example, inmates who reported that they had confessed to a confidant prior to being arrested were more likely to believe (at the time) that the police would find out and arrest them. These people also expressed marginally more anticipatory anxiety about getting caught and reported that a greater number of people knew that they had committed the crime.

Furthermore, the results suggest that the proximate mechanism that motivates the urge to confess is the desire to reduce anticipatory anxiety about getting caught. Although the urge to confess was not directly related to the number of people presumed to know that the transgressor had committed a crime, the urge to confess was positively related to one's anticipatory anxiety, and anticipatory anxiety was positively related to the presumed number of knowledgeable others. In other words, one's belief in the number of knowledgeable others appears to influence the degree of anxiety, which in turn influences the urge to confess. Nevertheless, the lack of a direct relationship between the number of knowledgeable others and the urge to confess suggests that an alternative explanation may be necessary. For example, rather than the number of people who know about one's offence, the urge to confess may hinge on which specific people know, given that some individuals may be more likely than others to turn in a particular transgressor.

The prediction that confidants will be those who share a stake in the person's genetic interests was supported by the finding that unbidden confessions were made most often to family members or friends (see also Vrij et al., 2002). Although over a third of participants indicated confessing to a family member, the most frequent confidants reported were friends (47.9%). Assuming that these findings are reliable, future research should investigate the nature of these friendships to determine whether confessing to friends follows the evolutionary rationale outlined in the current article. However, it is also possible that this finding regarding the frequency of friend confidants is inaccurate, as participants may have indicated "friend" as their confidant in lieu of other options that were unavailable, such as "coworker," "acquaintance," or "stranger."

About half the inmates reported that their confidant had done nothing to help them. This finding might appear to contradict our reasoning that invested others would come to the person's defence. First, it is important to note that the data indicate the participants' *perception* of support, or lack thereof. Given the current situation the participants find themselves in (i.e., incarcerated), it is possible that they are biased and believe that they have received less support than is actually the case. However, assuming that the participants' responses accurately reflect the support they have or have not received, there are at least two possible explanations for the finding that half the inmates reported that their confidant had done nothing to help them. First, in modern settings there may be little that a confidant *can* do once matters are handed over to the police. In hunter-gatherer and foraging societies likely to be closer to societies in our ancestral past, in contrast, transgressors' kin can be instrumental in negotiating and agreeing on what punishments

should be administered (e.g., Chagnon, 2012; Hill & Hurtado, 1996). Although individuals in modern societies recommend lesser fines and jail time when the transgressor in a hypothetical scenario is kin rather than a friend or stranger (Lieberman & Linke, 2007), kin are not in a position to negotiate deals or obtain concessions (except where the police are sufficiently corrupt). In short, the proximate mechanisms underlying unbidden confessions may still be activated in modern settings, even though unbidden confessions may no longer serve their evolved function.

Second, a lack of help to transgressors could itself be broadly consistent with inclusive fitness theory. When the genetic costs imposed on the family member by the public impact of the stigma outweigh the relative contribution of the stigmatized person's reproductive success, support may be withdrawn in proportion to these costs. For serious offences, public distancing may have been adaptive ancestrally even for those who have an obvious genetic stake in the person's welfare (Williams, 2007; Williams & Nida, 2011). This broadcasts an important dissimilarity from the transgressor, one in league with standard values and norms. Goffman (1963) observed that people wanted on criminal warrants were once referred to as "having smallpox"—merely being seen with them could lead to arrest on suspicion. Indeed, another potential benefit to distancing oneself from the transgressor is the reduced possibility of being implicated as a co-conspirator or punished for withholding information.

The problem with these ideas is that they call into question why unbidden confession evolved at all, if it leads confidants to distance themselves rather than help. However, like most biological traits, unbidden confession is likely to be context-dependent. When transgressions are minor or moderate, confidants may accrue fitness gains from helping transgressors to avoid punishment or to receive reduced punishment. But when transgressions are severe, confidants may gain little from this approach, and instead distance themselves from those who have gravely violated social norms—whether kin or not.

The withdrawal of social support under the strain of reputation-related damage remains to be addressed empirically. It may be that, all else equal, natural selection valued conditional over unconditional love in cases in which our ancestors' kin and allies were vilified publicly by the rest of the in-group. One example of such withdrawal is the father of Norweigan mass murderer Anders Behring Breivik, who declared immediately afterwards that his son should have taken his own life.

Is unbidden confession adaptive today? Confessing to crimes, turning oneself in voluntarily, and pleading guilty in court can contribute to clemency or more lenient sentencing. In many cases, unbidden confession may help to achieve these ends. This would mean it remains adaptive in the sense of reducing material costs to the individual, but possibly also in the traditional biological sense of maximizing reproductive success (since this can be effectively abolished by incarceration). However, the question remains as to why those who provide unbidden confessions are often given lesser sentences, judged as less likely to re-offend, and are more often forgiven by their victims than are those who deny their guilt. What is it about unbidden confession that makes transgressors more likely to be forgiven and less likely to be punished, and what factors influence these outcomes? Future research should attempt to determine the factors that influence these outcomes. For example, while the motivation to provide unbidden confession is arguably linked to the likelihood of getting caught, the benefits of unbidden confession may also be influenced by this likelihood. It may be that unbidden confession is most effective when the transgressor has knowledge of the likelihood of getting caught while those on the receiving end of the confession do not. In other words, if it appears obvious to everyone involved that the transgressor was likely to get caught, they may be less impressed with the transgressors "choice" to confess. Another variable worth investigating in future research is the type of transgression. In addition to criminal transgressions, it would be interesting to investigate whether factors such as the number of knowledgeable others and the likelihood of getting caught similarly influence unbidden confession in the realm of relational transgressions (e.g., cheating on a romantic partner, betraying a close friend), and whether the victims of such transgressions are similarly influenced by such confessions (i.e., more likely to forgive and less likely to "punish"; e.g., Shackelford & Buss, 1996; Shackelford, Buss, & Bennett, 2002).

Another remaining question is why humans would have evolved cognitive adaptations to manage confession in the first place. If the likelihood of capture and the severity of punishment were high enough, why did selection not just reduce the rate of transgression? One possibility is that transgression always remained tempting because, as long as individuals got away with it often enough over time, it brought net benefits (at least to those in the population without other opportunities for resource acquisition). Where it failed, however, those equipped with methods of minimizing damage would have outperformed those without.

An alternative account is that people overestimate the probability of getting away with transgressions, giving rise to selection pressures for managing the consequences. Robinson and Darley (2004), for example, found that criminals often did not know the law, or when they did it did not affect their decision to transgress, and they overestimated the benefits of transgression relative to the costs. Other researchers have argued that the temptation to transgress is so strong in humans that beliefs in supernatural agents may have been selected as mind-guards that reduced this temptation and thus the fitness consequences of retributive punishment (Johnson & Bering, 2006; Schloss & Murray, 2011).

We have hypothesized that unbidden confession may constitute an ancestrally adaptive trait that is sensitive to cues regarding one's likelihood of being caught and may have served to mitigate punishment. The current research represents a first step toward testing this hypothesis, with results that are largely consistent with the evolutionary rationale outlined above. These findings may have potentially important policy implications. For example, if people are more likely to confess to kin and friends when there is the possibility of social exposure, then the police may find detection, arrest and prosecution more effective and less costly if they can get family members or friends to bring criminals in instead of relying on pursuit or dawn raids carried out by threatening strangers. The better we understand the factors related to unbidden confession and the functions that unbidden confession may have evolved to serve, the better equipped we will be to detect transgressors and increase the likelihood of unbidden confessions.

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References

Candel, I., Merckelbach, H., Loyen, S., & Reyskens, H. (2005). I hit the Shift-key and then the computer crashed: Children and false admissions. *Personality and Individual Differences, 38*, 1381–1387.

Chagnon, N. A. (2012). *Yanomamo* (6th ed.). New York: Cengage.

Goffman, E. (1963). *Stigma*. Englewood Cliffs, NJ: Prentice Hall.

Gold, G. J., & Weiner, B. (2000). Remorse, confession, group identity, and expectancies about repeating a transgression. *Basic and Applied Social Psychology, 22*, 291–300.
Hamilton, W. D. (1964). The genetical evolution of social behavior. *Journal of Theoretical Biology, 7*, 1–52.
Hill, K., & Hurtado, A. M. (1996). *Aché life history: The ecology and demography of a foraging people*. Hawthorne, NY: Aldine de Gruyter.
Johnson, D. D. P., & Bering, J. M. (2006). Hand of god, mind of man: Punishment and cognition in the evolution of cooperation. *Evolutionary Psychology, 4*, 219–233.
Kassin, S. M., & Gudjonsson, G. H. (2004). The psychology of confession evidence: A review of the literature and issues. *Psychological Science in the Public Interest, 5*, 35–67.
Kelly, A. E. (1999). Revealing personal secrets. *Current Directions in Psychological Science, 8*, 105–109.
Lieberman, D., & Linke, L. (2007). The effect of social category on third party punishment. *Evolutionary Psychology, 5*, 289–305.
Robinson, P. H., & Darley, J. M. (2004). Does criminal law deter? A behavioural science investigation. *Oxford Journal of Legal Studies, 24*, 173–205.
Schelling, T. C. (1960). *The strategy of conflict*. Harvard: Harvard University Press.
Schloss, J. P., & Murray, M. (2011). Evolutionary accounts of belief in supernatural punishment: A critical review. *Religion, Brain & Behavior, 1*, 46–99.
Shackelford, T. K., & Buss, D. M. (1996). Betrayal in mateships, friendships, and coalitions. *Personality and Social Psychology Bulletin, 22*, 1151–1164.
Shackelford, T. K., Buss, D. M., & Bennett, K. (2002). Forgiveness or breakup: Sex differences in responses to a partner's infidelity. *Cognition and Emotion, 16*, 299–307.
Trivers, R. L. (2000). The elements of a scientific theory of self-deception. *Annals of the New York Academy of Sciences, 907*, 114–131.
Trivers, R. (2011). *The folly of fools: Deceit and self-deception in human life*. New York: Basic Books.
Von Hippell, B., & Trivers, R. (2011). The evolution and psychology of self-deception. *Behavioral and Brain Sciences, 34*, 1–56.
Vrij, A., Nunkoosing, K., Paterson, B., Ooserwegel, S., & Soukara, S. (2002). Characteristics of secrets and the frequency, reasons and effects of secret keeping and disclosure. *Journal of Community & Applied Social Psychology, 12*, 56–70.
Weiner, B., Graham, S., Peter, O., & Zmuidinas, M. (1991). Public confession and forgiveness. *Journal of Personality, 59*, 281–312.
Williams, K. D. (2007). Ostracism. *Annual Review of Psychology, 58*, 425–452.
Williams, K. D., & Nida, S. A. (2011). Ostracism: Consequences and coping. *Current Directions in Psychological Science, 20*, 71–75.