An Evolutionary Translation of Judicial Anger

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Judicial emotion is a touchy subject. When Judge Sprizzo lashed out at a bumbling prosecutor in a drug conspiracy case by calling them "not competent," he expressed the fiery hot anger that people love to watch unfold during a courtroom drama (Glaberson, 1989). When Judge Cowart complimented serial killer Ted Bundy by calling him a "bright young man," however, he expressed a surprising amount of empathy that was certainly not the courtroom sentiment at the time. Making sense of these two examples is a difficult task, especially considering that both represent starkly different emotions in their most visible state, with neither occurring regularly enough to be considered common. What these two do reveal, though, is that judges can experience a wide array of emotions, despite the widespread belief that the black robes act as a cloak over all emotions (Maroney, 2011a). While even the layperson can understand how completely suppressing emotions is a near-impossible task, this notion of a level-headed, dispassionate, and almost larger-than-life judge pervades both society and the legal system (Maroney, 2011a).

This reliance on the hypothetical emotionless judge is partially thanks to philosophers such as Aristotle, who argued "the law is reason, free from passion," and Thomas Hobbes, who dreamt of an ideal judge free from "fear, anger, hatred, love, and compassion" (Hobbes, 1904, p. 203). Although these accounts are flawed in both their naivete and understanding of emotion, they are by and large what the judicial system operates on, so much so that ascribing the word "emotional" to a judge is seen as more of a derogation than anything else (Maroney, 2011a).[1]

A recent example of this stigma comes from Justice Brett Kavanaugh's testimony before the Senate Judiciary Committee. The hearing was nothing short of a charcuterie board of

[1] Their understanding is flawed in that they believe emotion is an enemy to rationality. While anger can have negative impacts, research by Maroney (2012), suggests that righteous judicial anger can reflect sound judgement and carry behavioral benefits.

emotions, resulting in public and legal outcry for Kavanaugh to not be confirmed to the Supreme Court (Stolberg & Fandos, 2018; "The senate should not confirm Kavanaugh. Signed, 2,400+ law professors," 2018). In fact, well over 2,400 law professors signed a letter urging the senate to not confirm Kavanaugh, citing issues with his temperance and preference for partisanship over unbiased judicial inquiry (The senate should not confirm Kavanaugh. Signed, 2,400+ law professors," 2018). Though arguably an extreme case of judicial emotion, and while not from behind the bench, the Kavanaugh hearing reveals how deeply entrenched this Hobbesian standard of an emotionless judge truly is (Hobbes, 1904).

On top of being inherently flawed, the armchair belief that the bench is divorced from emotion has created a substantial gap in both psychological and legal research (Maroney, 2019). In fact, judicial decision making as a whole is surprisingly understudied in psychology (Scherer, 2007). This is especially disappointing considering jury decision making, an area both figuratively and spatially adjacent to judicial decision making, has such a robust literature surrounding it.[2] Of this already small field, the study of judicial emotion represents an even smaller subsection (Maroney, 2019). This is not to say it does not belong, as most of the judicial literature that should discuss judicial emotion often does not (e.g., Jacobs, 1984; Klein & Mitchell, 2010; Robinson & Spellman, 2005; Yung, 2013). Luckily, recent empirical projects have begun to fill this longstanding disparity.[3] Spearheaded by Terry Maroney of Vanderbilt University, these studies utilize surveys, interviews, and courtroom observations to better understand how judges feel and regulate their emotions in a courtroom setting (Maroney, 2019). While these researchers often target a variety of emotions in their studies (e.g., stress, loneliness, grief), they all consistently report the pervasive nature of anger as a judicial emotion (Maroney,

[2] For a comprehensive analysis of jury decision making, see (Peter et al., 2019).
[3] See (Maroney, 2019) for an overview of these projects.

2012, 2019). The concept of an "angry judge" is worrisome without a proper understanding of how anger works as an emotion, which is more reason why it warrants a sufficient explanation.

Dealing with incompetent lawyers, disobedient parties/witnesses, and difficult colleagues is no easy task, even for the most battle-hardened judges (Maroney, 2012). It is no surprise, then, that anger regularly manifests in judicial decision making, despite its individual expressions varying greatly. Judges can "benchslap" during a trial to put an unruly defendant in their place, invoke fear in the defendant while announcing their sentence, or utilize anger as a subtle persuasive technique in written opinions (Belleau et al., 2008; Kane, 2008).[4] While these examples are certainly non-exhaustive, it is important to understand that studying judicial anger is a complex, nuanced process that requires multiple levels of analysis from multiple approaches. It involves understanding both the perception and expression of anger alongside its functional purpose (Maroney, 2012). Therefore, it is worrying that the small amount of research that does examine judicial anger does so using solely social psychology/philosophical definitions of anger (Belleau et al., 2008; Maroney 2012). Though there is nothing blatantly wrong with these traditional views of anger, they are largely incomplete as they stand alone. It is necessary to amend them with insights from other theories of anger. Of these theories, the Recalibrational Theory of Anger has promise to do so: to better our understanding of judicial anger and anger itself.

Focusing on the functional and computational basis of anger, the Recalibrational Theory frames anger in terms of its underlying cognitive mechanisms and evolutionary relevance (Tooby et al., 2008). It is not a substitute or competitor for the extant theories of anger, but rather a supplement. So, while the traditional view of anger is largely successful in explaining the

[4] "Benchslap" is a term coined by the website Above the Law. It refers to an exuberant display of anger by a judge.

affective properties and proximate causes (i.e., what directly causes anger to be activated) of anger, the Recalibrational Theory provides an added layer of depth alongside additional hypotheses to test.

This paper places existing literature on judicial anger in terms of the Recalibrational Theory, and more broadly, proposes an evolutionary approach to judicial emotion. After beginning with an overview of the field of evolutionary psychology, the paper explains the concept of Welfare Tradeoff Ratios and their relationship with the Recalibrational Theory of Anger. Then, the paper examines instances in the judicial anger literature where an evolutionary perspective either elaborates or disagrees with the given definition of anger. Towards the end, future directions are given, including a research hypothesis in line with the formidability-based aggression idea of the Recalibrational Theory.

The Evolutionary Approach to Psychology

Natural selection, the process which guides evolution, only cares about one thing: the replication of genes (Dawkins, 2016). Many people who think they understand natural selection do not comprehend this key point, instead believing that natural selection operates on the level of the individual, conflating the "fitness" involving reproductive/genetic success with the "fitness" involving well-being. While well-being often does go in tandem with genetic success, it is not of any concern to natural selection. High levels of testosterone, for example, lead to reproductive success early in life, despite the risk of developing heart problems later in life. The same is true with high levels of stress, which can also lead to mental health problems and high blood pressure (McEwan & Lasley, 2004). Understanding this difference between genetic success and physical/emotional well-being is crucial to understanding how organisms evolve over time.

To deal with recurring environmental pressures, organisms evolve adaptations. These are characteristics (both behavioral and physical) designed by natural selection that, on average, increase the reproductive success of an organism by solving an adaptive problem (Buss et al., 1998). The ancestral polar bear, for instance, had at least two adaptive problems: 1) staying warm in year-round cold weather and 2) successfully hunting in a white-out environment. Intuitively, it is highly unlikely that natural selection would favor a thin-coated, black-colored polar bear. Such a polar bear would not be able to reproduce; they would be seen by prey from miles away and freeze in the climate of the tundra. It makes sense, then, that the modern polar bear has evolved a thick white fur coat, an answer to both adaptive problems.

Evolutionary psychology applies this same thought process to human cognitive systems. Rather than examining physical traits, evolutionary psychologists choose to look at the evolved function of the brain and its array of cognitive mechanisms (Cosmides & Tooby, 1997). This emphasis on cognitive adaptations separates evolutionary psychology from other evolution-based disciplines, such as sociobiology, that merely draw a direct line from genes to behavior. Moreover, studying the brain as a set of cognitive programs allows for functional analysis (i.e., analyzing why the specific program evolved) in the same token as analyzing why the polar bear evolved the white fur coat. Since most of human history was spent in hunter gatherer tribes, functional analysis is often done by examining how a specific adaptation/trait would have benefitted human ancestors (Cosmides & Tooby, 1997). This framework allows evolutionary psychologists to explain the ultimate function and underlying cognitive processes of phenomena such as the behavioral immune system, friendship, morality, and more (Krebs, 2008; Schaller & Park, 2011; Tooby & Cosmides, 1996).

The Recalibrational Theory of Anger

Non-evolutionary based theories of anger often fail to explain its adaptive purpose, meaning they fail to frame anger in terms of the adaptive problem it solved. While this is not necessary to understand anger's proximate causes, it would be remiss of an anger theory not to acknowledge its universality and cross-cultural recognizability. The Recalibrational Theory of anger, however, examines anger as a cognitive adaptation using an evolutionary lens. This is primarily done by breaking down dyadic interactions in terms of welfare tradeoff ratios (hereafter referred to as WTRs) and computationally analyzing instances where anger should be activated. (Cosmides et al., 2008; Petersen et al., 2010). So, before explaining exactly how anger develops within the Recalibrational Theory, it is first necessary to have a basic understanding of how WTRs are computed/regulated.

Welfare Tradeoff Ratios

Our ancestors were faced with the recurrent problem of choosing whether to accept costs to help others. In theory, natural selection should favor genes that steer the individual away from acting altruistically, since willingly accepting costs is usually detrimental to one's fitness. There are exceptions to this, however. In certain cases, individuals can reproduce more by accepting short-term costs, such as in reciprocal relationships (Nowak, 2006). This still leaves the issue of choosing whom to cooperate with and what costs to accept, however. To solve this, natural selection favored the evolution of a cognitive mechanism, the WTR, that guides altruism based on the combination of many different internal regulatory variables. (Cosmides et al., 2008; Tooby & Cosmides, 2008). Put simply, a WTR is how much you value another person's welfare relative to your own (Cosmides et al., 2008; Delton & Robertson, 2016). Although WTRs can quickly become much more complicated than this, it is easiest to begin with an everyday example.

Let's say a friend absent-mindedly forgets to bring their lunch to work, and so far, no one has offered to help. You, on the other hand, have remembered to bring your lunch and are in the process of deciding if you want to give your friend part of it. You could: a) give them part of your lunch, making your friend happy and thankful, or b) not give them part of your lunch, to which you receive a side-eye and hungry friend to deal with. After a long process of self-deliberation, you choose the former and give them your fruit and chips, which predictably lifts their mood. Although the cost to yourself is relatively small (being a little hungrier in the afternoon), you are still willing to forgo some of your own food to help your friend. This is indicative of a positive WTR, meaning you place weight on the welfare of your friend (Sell & Lopez, 2020). However, this weight you place on your friend's welfare will likely not be the same as the weight you place on your sister's welfare. Therefore, this same positive WTR towards your friend may not guide you to help you them in more dire circumstances. What about if they need a kidney, or if they need to be bailed out of jail for an unreasonable sum of money? In both these circumstances, your WTR towards this friend does not only need to be positive but also sufficiently high to motivate such a large self-imposition of costs. In other words, it matters how good of a friend they are. Determining this involves asking questions such as "have they reciprocated my help in the past," "how formidable/attractive are they," and the penultimate "how replaceable are they?" (Petersen et al., 2010; Sell et al., 2009; Tooby & Cosmides, 1996). It is important to mention that these questions are not consciously processed, but rather serve as hypothetical predictors for one's WTR in any given situation (Petersen et al., 2010).

As you can see, WTRs are incredibly complex. They involve the subconscious integration of many different person and situation variables, each one having its own specific criteria (Delton & Robertson, 2016).

The earliest form of WTRs can be traced back to evolutionary biology, where W.D. Hamilton developed his theory of inclusive fitness (Hamilton, 1964). Arguing that natural selection favors genetic success (meaning the success of those sharing genes with you) as well as reproductive success, he created an equation that measures when an individual would be altruistic towards another person (Hamilton, 1964). The equation, r x $b(other) > c(you)$ states that an individual will incur costs so long they are less than the product of the benefits and relatedness to the receiving person (Hamilton, 1964).[5] To most, this idea that relatedness plays a role in deciding whether to be self-sacrificial is intuitive; the heroic depiction of a mother saving a child from a burning building involves a mother and a child for a reason. Placing this intuition into testable and measurable terms, however, is what gave the theory of inclusive fitness its staying power. So, while the phrase "welfare tradeoff ratio" itself was not coined until many years later, the discovery that the degree of relatedness plays a role in the willingness to self-impose costs played a large role in developing the WTR as it is known today. Moreover, the degree of relatedness, commonly known as the kinship index, remains an important variable in calculating WTRs.

Alongside the kinship index, variables measuring reciprocity, formidability, and sexual value are all encoded as part of the WTR (Delton & Robertson, 2016; Tooby et al., 2008). Each of these internal regulatory variables are computed using specific, but not mutually exclusive, cues. In males, for example, the sexual value of a mate is largely the product of cues indicating fertility and health. This can include large breasts and a wide waist in females (Sugiyama, 2005). Presence of either of these cues would increase the magnitude of the sexual value variable, thus increasing the WTR towards the individual in the process in hopes of reproducing. Sexual value

[5] r x $b(other) > c(you)$ where r = relatedness, b = benefits to the other person, and c = costs to you.

is discounted, however, by the input of the kinship index, which has its own set of cues (Delton & Robertson, 2016; Tooby et al., 2008). A high kinship index, meaning a high likelihood of relatedness, would effectively lower the sexual value variable to zero, even if the other cues are indicative of a high sexual value (Tooby et al., 2008). A low kinship index, on the other hand, would signal that the person is most likely not a genetic relative, allowing more weight to be placed on the cues influencing sexual value. This relationship comprises a large part of the incest avoidance system, which is an innate mechanism that deters sexual relationships between genetic relatives (Tooby et al., 2008).

Estimating the WTR of others is another important factor in dyadic interactions (Delton & Robertson, 2016; Petersen et al., 2010; Tooby et al., 2008). If, for example, you are asked to help a bully with their homework but remember they have recently broken your favorite pencil, you will be less likely to take time out of your day to help them. In so doing, you are estimating that they hold a low WTR towards yourself, meaning they are willing to impose a cost on you (a broken pencil) for little benefit to themselves (childish enjoyment). This can be taken one step further. If the bully's estimated WTR is lower than what you think their WTR should be, it is likely that you will become angry at them (Petersen et al., 2010; Tooby et al., 2008). In this case, anger is not an affective state, but rather an adaptive response system designed to upregulate the WTR of the bully.

Anger in Terms of WTRs

The disparity between the actual vs. expected value of a social partner's WTR forms the basis for the Recalibrational Theory of Anger (Tooby et al., 2008). Instead of anger being framed as a response to the infliction of harm, it is framed as a response to a low-observed WTR when there was a high-expected WTR (Tooby et al., 2008). Anger, then, serves as a method of

bargaining for better treatment by upregulating the target individual's WTR. More specifically, anger serves as a threat to either withdraw benefits or inflict costs (Petersen et al., 2010; Tooby et al., 2008). If successful, the target individual will begin to place greater weight on the actor's welfare and avoid inflicting costs on them in the future, effectively raising their WTR towards the actor. Going back to the bully analogy, you would likely become angry at the destruction of your pencil. This could manifest in you either stopping to loan them pencils or telling the teacher, both of which would reveal the harm of their actions. All else being equal, this should lead them to apologize and promise not to touch any more of your pencils. The apology, if sincere, would likely cause you to stop feeling angry towards them. This is because sincere apologies serve as reliable indicators of an upregulation of a WTR, which is the goal of anger in the first place (McCullough et al., 2014; Tooby et al., 2008)

The Recalibrational Theory also predicts characteristics that may predispose someone to becoming angry. Formidable men (i.e., those possessing greater upper body strength), for instance, are theorized to be more prone anger due to their ability to inflict costs (Sell et al., 2009; Tooby et al., 2008). Ancestrally, if someone were to not value a formidable man's welfare sufficiently, they would be at the risk of being injured or killed. Therefore, stronger men should expect higher WTRs from others because they hold greater physical leverage in social interactions. The same thought process applies to women, but with attractiveness as the predictor of anger in lieu of physical strength (Sell et al., 2009). Attractiveness in women reflects both health and fertility, rendering them more desirable sexual partners and allies. Attractive women should thus demand higher WTRs, since they are in the position to withdraw benefits if their desired WTR is not met. Indeed, data confirm both these predictions. Stronger men were found to be more prone to anger, feel entitled to better treatment, and have a greater history of fighting

when compared to weaker men (Sell et al., 2009). Self-reported attractiveness in women was also positively correlated with proneness to anger, feelings of entitlement, and attitudes toward aggression (Sell et al., 2009).

It is important to understand that the examples of the Recalibrational Theory I have given are from a second party perspective. Second party anger entails becoming angry at those who have undervalued your WTR. Recall the bully example: you became angry at them because they broke your pencil, which subsequently revealed to you that they do not value your WTR as much as they should. Now, let's say the same bully pushes your close friend off the swing. Intuitively, it makes sense you would become angry at the bully. You might not be as angry as if they had pushed you off the swing, but you would be angry that they caused suffering to your friend, nonetheless. While this makes sense on the surface, trying to explain this using the Recalibrational Theory is a little more difficult. Here, anger's function is not to upregulate the bully's WTR towards yourself, per se, but rather to upregulate the bully's WTR towards your friend. It is seemingly paradoxical that natural selection would favor genes that motivate an individual to act like this: to become angry on another's behalf. If, however, we reframe the act of the bully pushing your friend as an indirect affront to your WTR, the use of anger becomes much more logical.

Friends are friends because they, in one way or another, confer benefits (Tooby & Cosmides, 1996). These benefits could be a useful skill, supportive attitude, or even the willingness to pick up an expensive bar tab. In any case, a friend benefits you and you benefit them, representing a reciprocal relationship where the WTRs are positive in both directions. This means that, in a sense, friends are a part of your welfare. So, when someone comes around and hurts your valued friend, they are essentially exhibiting that they do not sufficiently care about

your welfare. The only logical response to this is to become angry, to demonstrate that an assault on your friend's welfare is equally an assault on your own. The same logic applies to a situation where a family member is wronged, except the reasoning also includes the degree of relatedness aspect pertaining to inclusive fitness.

Anger can also be active in situations where one's welfare is seemingly not being affected at all. A relevant example of this is angry jurors. Courtroom studies reveal that in emotionally valanced cases, such as those involving gruesome photographs or victim impact statements, jurors are more likely to experience and express anger (through severity of punishment) towards the defendant.[6] Using the recalibrational definition of anger, it is perplexing that these jurors feel angry at the defendant. While the crime itself may be heinous or destructive, it does not affect the welfare of the jurors whatsoever. In fact, the defendant does not even possess a WTR towards the jurors since they are not social partners. So, why do jurors feel angry towards an act that has no repercussions on them or their loved ones? It is possible that the emotional nature of the case leads jurors to view the crime as a personal offense, activating evolved systems of revenge (including the anger system) that encourage harsher punishments (Roberts & Murray, 2012). Anger could also serve as a method to deter transgressors from exploiting oneself in the future (McCullough et al., 2013; Petersen et al., 2012). Ancestral societies were small-scale and close-knit, meaning that an unchecked transgressor was more dangerous. The use of third-party anger, along with corresponding punishment, would therefore help prevent the transgressor from exploiting the angry individual as well as discourage would-be transgressors from being exploitive (McCullough et al., 2013; Petersen et al., 2012). Both these theories require more backing research, however.

[6] For a review of the effects of gruesome photographs and victim impact states on juror decision making, see (Bandes & Salerno, 2014).

Reexamining Judicial Anger with an Evolutionary Perspective

It is important to note that the Recalibrational Theory of Anger's usefulness does not stem from being directly applied to the courtroom. It is hard to imagine the success of a legal system that attempts to evade anger by requiring judges, lawyers, and defendants to have their WTRs individually calculated and matched to each other. Rather, the recalibrational definition of anger serves to strengthen the theoretical footing in existing judicial anger literature. In so doing, it allows for more anger-related hypotheses to be developed, which can then benefit the courtroom indirectly by either helping create anger management strategies or develop predictions about who is more prone to becoming angry. First, it is necessary to review existing literature to see where the recalibrational definition of anger fits in.

The most comprehensive review of judicial anger comes from Terry Maroney. Titled "Angry Judges," the paper examines anger from both a philosophical and psychological perspective while also analyzing whether it is possible for a judge to be "righteously angry" (Maroney, 2012). The explanations of anger Maroney provides are not too dissimilar from that of the Recalibrational Theory. She frames anger as an apology-seeking emotion that is activated when someone has committed an unwarranted wrongdoing, which is then accompanied by the desire to blame the offender. This is in line with the emphasis the Recalibrational Theory places on the difference between expected and observed behavior as well as the overarching goal of anger being to upregulate the WTR of the offender (Tooby et al., 2008). Moreover, Maroney includes wrongdoings against one's loved ones in her definition, which is comparable to the second-party vs. third-party distinction of the Recalibrational Theory. In terms of when anger should be activated, Maroney mentions that anger is more likely to be activated in situations

where someone believes they have a sense of control. The Recalibrational Theory supports this but adds the aspect of formidability into the perceived level of control.

Though these two definitions are not necessarily incompatible, the Recalibrational Theory offers far more depth than the definition Maroney provides in her paper. The provided surface level analysis deals mainly in terms of the proximate causes of anger and lacks the computational/ultimate causes (i.e., what environmental pressures caused anger to evolve). For example, Maroney (2012) mentions that anger is apology-seeking but does not delve into how an apology is a reliable indicator that an offender upregulated their WTR. Understanding this aspect of anger is crucial to both having a sound understanding of anger as an emotion and developing accurate hypotheses.

"Faces of Judicial Anger" takes a more philosophical approach to examining judicial anger than Maroney. Belleau, Johnson, and Bouchard (2008) do this by looking at anger within the written opinions of five judges in a Canadian supreme court case. They define anger as a "passing violent state, stemming from a feeling of having been attacked or offended." This definition frames anger as a response to harm, rather than a response to an exceedingly low WTR. Moreover, the definition describes anger as "violent," which is usually not the case since anger usually occurs in valued relationships (Averill, 1982). Failing to account for these properties of anger reveals a lack of understanding on both the proximate and ultimate levels. Considering that the authors discuss the importance of understanding the target of judicial anger later in the paper, it would be beneficial to include the expected vs. observed behavior property of the Recalibrational Theory.

Morris Hoffman (2014) presents a fantastic look into how he and other judges process emotions in his book "The Punisher's Brain." He successfully discusses why punishment

evolved, how it breaks down into first, second, and third-party perspectives, and how evolutionary insights can benefit the legal system. One of his chapters focuses on angry judges, and how it is important for judges to not feel second-party revenge emotions in the courtroom. He does not, however, discuss an evolutionary view of anger. This is worrying considering anger serves a large role in revenge (McCullough et al., 2013). When discussing second-party urges, it is important to include their relationship with anger and how revenge seeks to right an offense that was below the expected level of treatment (McCullough et al., 2013).

Other research about judicial emotion only mention anger in passing. Bergman Blix and Wettergen (2015) investigate judicial emotion in Swedish courts in "A Sociological Perspective on Emotions in the Judiciary." As the title suggests, they primarily utilize sociology-derived definitions of emotions. In the case of anger, they mention that a sociological perspective would add that anger is influenced by the amount of power one holds over the object of anger. This aligns with the Recalibrational Theory in that more powerful people expect a higher WTR and are thus more prone to anger (Sell et al., 2009; Tooby et al., 2008). One might qualify Bergman Blix and Wettergen's definition of "power" with formidability in men and attractiveness in women, however. Roach Anleu, Rottman, and Mack (2016) also overview judicial emotion in "The Emotional Dimension of Judging." There is no provided definition of anger, however they do hint at judicial anger being a result of the undermining of judicial authority. This could be refined by discussing how judges expect a higher WTR and are therefore likely to become angry when their expectations are not met.

Future Directions

Despite recent promising research, judicial emotion remains an understudied discipline. Considering the weight that judges hold over the courtroom and society in general, it is necessary to develop a better understanding of how judges interpret and regulate emotion. This can then be useful in developing emotional regulation strategies, rather than naively telling judges to suppress/ignore their emotions (Maroney, 2011b). These strategies can encapsulate a wide array of emotions (e.g., sadness, joy, pleasure), but anger is one that warrants special attention due to its regular appearance in the courtroom (Maroney, 2011b; Maroney, 2012). Knowledge of what characteristics predispose a judge to becoming angry is crucial to helping judges control episodes of anger. The Recalibrational Theory of Anger has the potential to help with this, particularly in the realm of formidability/attractiveness.

More formidable men/more attractive women have been found to be more prone to anger compared to weaker men and less attractive women (Sell et al., 2009). It is possible that the same trend applies to judges. Operationalizing a study in the same way Sell et al., (2009) did would be difficult, since judges are a special population that are often hesistant to talk to researchers (Maroney, 2019). Moreover, a formidability study would involve taking intrusive measurements (i.e., strength, self-reported attractiveness) rather than simply observing the judge or giving them a survey as most judicial emotion studies do (Maroney, 2019). It is possible that the study could be conducted using laypeople acting as a judge, however doubts have been cast upon whether this as externally valid as using a sample of judges themselves (Scherer, 2007). In any case, measuring formidability/attractiveness in judges would help create more effective emotion regulation strategies and lead to a better understanding of judicial emotion overall.

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