

Forgiveness contributes to the moral licensing effect in a multiple victim context

by

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**Abstract**

Although forgiveness is often a psychologically beneficial response, in the current research, I tested a novel consequence of granting forgiveness: a moral license to commit subsequent deviant acts. I tested this possibility in a multiple victim context. I hypothesized that people would express the greatest willingness to act in a deviant manner when all victims (the participant and the other victims) grant the transgressor forgiveness. I also anticipated the feeling pride (i.e., feeling good about one's accomplishments) following forgiveness would mediate the hypothesized moderation effect. Support for the proposed mediated-moderation model was found in two studies using a multiple victim workplace transgression as context. ( $N_{\text{Study 1}} = 359$ ,  $N_{\text{Study 2}} = 417$ ). Results contributed to both the literature on the consequences of forgiveness and moral licensing by providing evidence that granting forgiveness may, perhaps counter-intuitively, result in the forgiver engaging in subsequent immoral behaviour.

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## Introduction

Imagine you are a member of a work team tasked with a project. Your team not only completes the project but does a spectacular job—a job well done that is recognized by your boss. However, Thomas—one of your team members—continually slacked off and did not contribute to the project's success. Yet, you later find out that Thomas received a promotion (with a substantial raise in salary)—all because he illegitimately took credit for the job during private meetings with your boss. It is, of course, natural to be angry because Thomas' behaviour violates expectations of how people should behave. However, another option would be to let go of any negative feelings you may have toward your co-worker. In other words, you may decide to forgive (McCullough, et al., 2000; McCullough & Worthington, 1999).

Why would anyone forgive a person who intentionally harmed them? The answer lies, in part, in the numerous psychological and physiological benefits (e.g., decreased blood pressure, increased life satisfaction) that forgiveness affords the forgiver (Bono, et al., 2008; Karremans, et al., 2003; Toussaint, et al., 2001; Witvliet, et al., 2001). Moreover, when the transgressor is confronted with the wrongdoing, forgiveness can lead to a strengthening of one's relationship with the transgressor (Maio et al., 2008; Paleari, et al., 2005) because the limits and boundaries of acceptable behaviour are made explicit (Wohl et al., 2006). However, forgiveness does not always yield benefits for the forgiver. Forgivers are more likely to experience re-offenses compared to non-forgivers (Strelan et al., 2017). Moreover, in contexts where there are multiple victims—as was the case with the transgression committed by Thomas—a unique forgiver (i.e., forgiving a transgressor when other victims do not) is typically perceived negatively by those who do not grant forgiveness (Raj et al., 2019). Despite the volume of empirical work on the

antecedents and consequences of forgiveness, determining whether forgiving a transgressor has a downstream effect on the forgiver's subsequent moral behaviour has yet to be explored.

Herein, I examined the possibility that forgiveness of a deviant behaviour may give the forgiver the moral license to subsequently act in a deviant manner. Moral licensing occurs when an individual believes they have accumulated moral credits by way of their moral behaviour (Loi et al., 2020). These credits are later spent to allow for deviant or self-serving behaviour. Moral licensing effects have been found with dieting (Chiou et al., 2011), job-related racial profiling (Efron et al., 2009), donating to charity (Khan & Dhar, 2006), and sex-based prejudice (Monin & Miller, 2001). To put a dark line under the issue, sometimes doing good (i.e., moral deeds), can give one the leeway to do bad (i.e., engage in deviance). To my knowledge, researchers have not examined forgiveness as a potential antecedent of the moral licensing effect, despite forgiveness being considered a moral act (Kim & Enright, 2006), and thus may produce moral licensing when granted.

I also examined whether moral licencing was moderated by other victim forgiveness in a multiple victim context. In such a context, the consensus of other victims may change whether or not a forgiver feels that they have a license to act immorally. If all victims forgive, then the forgiver may come to believe that negative consequences will not follow from deviant behaviour—a sentiment that may facilitate moral licensing. However, it was also possible that forgiveness facilitated deviant behavior greatest when the forgiver was a unique forgiver (i.e., when none of the other victims granted forgiveness). In such a scenario, the unique forgiver may view the contrast between their willingness to forgive, and the other victims lack of forgiveness, as a source of moral credentialing. Alternatively, disagreeing with other victims (i.e. forgiving when the other victims do not forgive) in a multiple victim context may cause the forgiver to

anticipate a social cost (for an example, see Etxebarria et al., 2014) —a sentiment that may suppress the forgivers desire to act immorally. Lastly, I tested the idea that relation between forgiveness and moral licencing was mediated by pride. This hypothesis is based on prior research that has demonstrated forgiveness heightens positive self-regard (see Maio et al., 2008; Karremans et al., 2003; Wohl, Kuiken, & Noels, 1996), and pride (a self-regard emotion) is an antecedent of moral licencing (Bureau, et al., 2013; Wilcox, et al., 2011). This mediated moderation model was tested in 2 studies within the context of a multiple victim workplace transgression.

### **Consequences of forgiveness**

Forgiveness encompasses motivational transformations. These transformations include reduced motivation to avoid the transgressor or seek vengeance against them, as well as an increase in benevolence toward that transgressor (McCullough et al., 1997). Said differently, forgiveness is what occurs when the harmed individual decides not to fixate on a wrongdoing, or the source of the wrongdoing; and instead, is able to emotionally disentangle the transgressor from the hurtful event (i.e., the harmed individual lets go of any negative feelings and cognitions previously held again the transgressor; Wohl et al., 2008). Someone who forgives may attempt to maintain the relationship with the transgressor (Wohl et al., 2006), or, at the very least, inhibit harmful psychological preoccupations with the transgression (Zhuang & Qiao, 2018).

Researchers in the field of forgiveness studies typically frame forgiveness as beneficial for the victim of a transgression (e.g., Norman, 2017; Siltonet et al., 2013). Indeed, forgiveness has been shown to be associated with improvements in the forgiver's positive affect (Chan, 2013; Eaton et al., 2014; Green et al., 2012; Kluwer & Karremans, 2009; Little et al., 2007), and over all psychological well-being (Bono, et al., 2008; Ingersoll-Dayton et al., 2009; Karremans et

al., 2003; Reed & Enright, 2006). Forgiveness for transgressions can also improve relationship quality and closeness with the transgressor (Paleari et al., 2005; Maio et al., 2008) and reduce the loss of relationship commitment that can occur after one's romantic partner has committed a transgression (Ysseldyk & Wohl, 2011). Forgivers (and their life) are also placed in a positive light by third party observers (DiDonato et al., 2015). Specifically, DiDonato and colleagues (2015) found that forgivers are judged to be more satisfied with their relationships, more competent, and warm than those who do not forgive (DiDonato et al., 2015). Transgressors are also more likely to feel grateful towards their forgiver and are more likely to express pro-relational intentions (Mooney et al., 2015). Of particular relevance to this study (which will employ a work-related scenario in its procedure), forgiveness has also been shown to yield benefits in the workplace. Toussaint and colleagues (2016) found a positive association between forgiveness and productivity, as well as associations between forgiveness and the positive psychological and physical health of workers. In sum, forgiveness results in an array of benefits for the forgiver.

However, is it always the case that forgiveness is beneficial? Intuition and some research suggest otherwise. Strelan and colleagues (2017), for instance, found that 88% of people felt that forgiveness could ultimately be costly for the forgiver in some contexts (e.g., in an abusive relationship), and 66% could recall at least one episode where their act of forgiveness yielded negative effects. Within the possible deleterious consequences of forgiveness in mind, researchers have also examined the dark side of forgiveness to add more nuance to our understanding of the act (Adams & Inesi, 2016; Luchies & Finkel, 2011; McNulty, 2011). For instance, forgiveness has been found to slow the reduction of physical aggression in intimate relationships (McNulty, 2011), and can signal to unrepentant transgressors that the forgiver can

be taken advantage of again (Luchies & Finkel, 2011). And if the transgressor believed they did nothing wrong, then forgiveness may strain the relationship (Adams & Inesi, 2016). Put simply, forgiveness is not always without negative consequences. One possible negative outcome, which is to my knowledge unexplored by prior research, is that forgiveness may lead to may lead people to think they have a license, or credits, that can be used to act immorally in the future.

### **Moral licensing and forgiveness as a moral act**

There is a growing body of research (e.g., Chiou et al., 2011; Effron et al., 2009; Effron et al., 2012; Monin & Miller, 2001) that suggests that individuals are more likely to act unethically after acting in an ethical manner—an outcome that has been referred to as the moral licensing effect. Moral licensing has been hypothesized to arise from the feeling that one has moral credits after engaging in a moral act that entitles actors to subsequently act in an immoral manner (Loi et al., 2020). Indeed, some people believe that acting morally heightens their moral reputation, which is assumed to protect them from accusations of wrongdoing for subsequent immoral acts (Monin & Miller, 2001; Polman, et al., 2013). Moral credentials can be established simply by affirming past moral behaviour or committing moral acts in front of others (Effron et al., 2009; Effron et al., 2012; Monin & Miller, 2001). Substantiating this belief, Effron and Monin (2010) found that third-party observers perceive questionable (i.e., potentially immoral) behaviour to be less questionable when a target had previously established moral credentials. These findings, when taken together, appear to indicate that moral actions provide, or are at least believed to provide, the moral actor an allowance; which can be cashed in for immoral behaviour later.

The moral licensing effect is not domain specific. Put differently, immoral behaviour has been shown to occur in domains that differ from the domain in which the initial moral behaviour

took place. To illustrate, Khan and Dhar (2006) found that doing something as benign as assisting someone in a laboratory word task, or even imagining doing something helpful, could contribute to moral licensing with regards to charitable behaviour (also see Newman & Brucks, 2018). Even making a positive moral decision in a video game has been shown to generate moral licensing in following laboratory tasks (Ellithorpe et al., 2015). In sum, moral licensing can influence behaviour across contexts, and is not required to be related to the act that generated the moral license in any way.

Although research examining the darker side of forgiveness has shown the negative effects forgiveness can have in certain environments, to my knowledge, no research has assessed whether forgiveness has downstream negative consequences to the forgiver's subsequent moral behaviour. It is possible that forgiveness—which has been characterised as a moral act in the literature (i.e., an act that is in accordance with mostly accepted and deemed good values in society; see Kim & Enright, 2016)—may counterintuitively result in subsequent immoral or deviant behaviour. That is, forgiving someone for committing a transgression may grant the victim a moral license, which would heighten the forgiver's willingness to transgress when the next opportunity arises. In the current research, I explored a negative consequence of forgiveness by examining whether forgiveness, perhaps counterintuitively, increases the forgiver's willingness to transgress at work following being victimised at the workplace. Specifically, I tested the possibility that forgivers of a transgressor (in the workplace) may come to believe that they have accrued moral credits by way of granting forgiveness. The net results may be a greater willingness to engage in deviant behaviour (at the workplace; e.g., stealing from the workplace, taking credit for other people's work, and taking longer breaks that is permitted).

## **Multiple victim transgressions in the workplace**

In the current research, I used a multiple victim scenario to examine forgiveness and its relation with moral licensing. The multiple victim context is often overlooked by the forgiveness literature (for exceptions see, Raj et al., 2019), yet it had important implications for numerous social situations where one person's wrongful behaviour harms more than one person. The workplace is a potential setting for such multiple victim transgressions. In the workplace people often need to work in teams to achieve an objective, and, as such, is one of the few common environments where adults are in a position to be transgressed against while being part of a group that shares both context and goals. The workplace sometimes puts workers in competition with each other for resources; whether that resource is raises, promotions, or materials and time. Competition can potentially encourage transgression between coworkers (Kuchynka et al., 2018). Forgiveness has been found to be one of those potential ways that coworkers can cope with transgression and maintain their relationships in the workplace (Toussaint et al., 2016).

Importantly for the current research, the moral licensing effect has been observed in the workplace (Lin et al., 2016). In a workplace setting, moral licensing may manifest as a willingness to act in a manner that harms the company or other coworkers (Lin et al., 2016). I hypothesized that when an individual acts morally by way of granting forgiveness to a hypothetical transgressor, the individual may subsequently engage in deviance through workplace activity. This would be in line with what was found in the moral licensing research literature (see Chiou et al., 2011; Effron et al., 2009; Ellithorpe et al., 2015; Khan & Dhar, 2006; Newman & Brucks, 2018). However, only if forgiveness generates a moral licensing effect similar to other moral acts used in the literature. And, that individuals see the workplace as an acceptable outlet for their moral licensing.

### **Pride as a mediator in the relation between forgiveness and moral licensing**

I also examined pride as a possible mechanism by which forgiveness increases willingness to engage in deviant behavior (i.e., moral licensing). Pride is a self-conscious, self-evaluative, emotion that is typically elicited when someone feels that they have achieved something of significance (Tracy & Robins, 2007). It is generally experienced as a feeling of accomplishment or success, and often leads to the individual feeling better about themselves because of what they did (Van Osch et al., 2018). Pride can come from extrinsic events such as public recognition, or intrinsic events such as reaching goals or demonstrating ability to oneself (Carver, Sinclair, & Johnson, 2010).

Although, to my knowledge, a direct forgiveness-to-pride association has yet to be empirically assessed, existing research is suggestive of such an association (see Maio et al., 2008; Karremans et al., 2003; Wohl et al., 2006). For instance, some work has found that people feel better about themselves (and their future) after they forgive (Maio et al., 2008; Karremans et al., 2003; Wohl et al., 2006). Similarly, granting forgiveness has been shown to increase the forgiver's self-esteem (Greene & Britton, 2013; Flanagan et al., 2012; Freedman & Enright, 1996; Hong et al., 2020, Strelan, 2007; Weinberg, 2013). Indeed, Enright (2001) argued that a central outcome of forgiveness is an increase in self-esteem and overall self-regard. Moreover, Wohl and colleagues (2006), in their qualitative study of the paths people can take to forgiveness, found that some participants believed that their ability to forgive was an expression of their moral fortitude—a moral achievement given how difficult it was to let go of the negative feelings associated with the perceived illegitimate harm they experienced at the hands of another. According to Graham et al. (2019), pride is a self-praising emotion that occurs when someone believes they have achieved something of significance. In this light, although no

research examined whether forgiveness leads to an increase in pride, existing research is highly suggestive of such an association.

That forgiveness may increase pride is of importance to this current research because pride has been found to be associated with moral licensing (for examples, see Bureau, et al., 2013; Wilcox, et al., 2011). Consumer researchers Khan and Dhar (2006) found that having their undergraduate participants imagine donating money elicited more positive feelings in the form of higher self-regard (i.e., the participants in the licensing condition felt more helpful, compassionate, and warm; than their non-licensed peers). Individuals who made these self-aggrandizing attributions in response to their charitable intentions were more likely to express interest in self-indulgent spending later. Khan and Dhar (2006) reasoned that the boost in self-regard that followed the moral act in the licensing condition buffered the individual's self-concept later when they had the opportunity to make a selfish decision. In other words, the participants who were able to establish themselves as good people (to themselves) did not feel as bad when making selfish decisions. This reduction in negative feelings made these decisions easier to make, and thus these decisions were more often made in the licensing condition. So, it may be that one of the prerequisites of moral licensing is an increase in how the individual feels about themselves, which may be achieved by the emotion of pride.

Relevant to the current study and its multiple victim context, it appears that pride is influenced by social costs. Etxebarria and colleagues (2014) found that going against group consensus by engaging in moral action decreased the pride felt by the actor (results were replicated in Pascal et al., 2020). This research, however, stopped short of assessing the possible influence pride has on subsequent moral action. That pride can be influenced by going against the group is of particular importance to my experiment, as the experiment scenario will be using

a workplace setting in which there are multiple victims who will come to a consensus on forgiving the transgressor. Given Etxebarria and colleagues (2014) findings, it was expected that, if the consensus matched the participant's decision to forgive, then the participant should feel a boost in pride. And, the opposite should be true, in that the participant's pride should be reduced if their moral decision went against the group. If pride is increased, moral licensing should be increased; if pride is decreased, licensing should be decreased.

In sum, I hypothesized that pride would mediate the relation between forgiveness and moral licensing. Specifically, when the participant forgives, this should lead to an increase in pride. Increases in pride should lead to increases in moral licensing in the form of deviant behaviour at the workplace. This simple mediation effect should be moderated by other victim forgiveness. When the participant forgives, and the other victims in the multiple victim scenario also forgive, then the participant should feel proud. This pride should have downstream consequences in the form of an increased willingness to engage in deviant behaviour at the workplace. But, if the other victims do not forgive, and the participant does, then the participant should feel less proud. This would be due to the participant weighing the social costs of forgiveness (see Etxebarria et al, 2014; Raj et al., 2019). In this condition the participant may have reason to be concerned about how the other victims see them, thus feel less proud of their behaviour, and thus may not achieve the buffer to self-regard required for moral licensing to take place (Khan & Dhar, 2006). This condition should have lower deviant behaviour than the agreement condition. When the participant does not forgive there should no reason to engage in excessive deviant behaviour, as there is no moral act to feel proud of.

## Overview of the current research

Herein, I tested the idea that forgiveness (a moral act) would produce a moral licensing effect (i.e., deviant behaviour following moral behaviour). Moreover, that this effect would be influenced by a multiple victim scenario in which the other victims also forgive. Team forgiveness was expected to moderate this effect, in that forgiveness should primarily lead to moral licensing when the team also forgave. If the team did not forgive, then participant forgiveness should not lead to moral licensing. This may possibly be due to the perceived disagreement extinguishing the pride that would have been otherwise experienced through the moral act (see Etxebarria et al., 2014). Pride was expected to act as a mediator of the effect. This mediator effect should be influenced by the moderated effect, in that pride should have the strongest effect on moral licensing when the team forgave. Critically, I hypothesized that forgiveness would predict moral licensing in the form of liberties taken at the workplace (e.g., taking extra breaks).

Study 1 provided an initial test of my hypotheses by placing participants in the role of a marketing team member where one of its members transgressed against the entire team. It featured a 2 (participant forgives: yes, no) x 2 (team forgives: yes, no) design. Participants were asked if they would forgive the transgressor and were then told whether the rest of the team granted forgiveness or not. I then assessed whether participants were or were not willing to do deviant acts (i.e., take extra break time, do less work, and so forth), which served as a measure of moral licensing. Studies 1 harnessed an office-related scenario that put the participant on a productive team, on which there is an unproductive member who betrays the team for their personal benefit. In question was whether forgiveness of the transgressor by the participant would be related to moral licensing, and if the consensus of the team would additionally

influence the moral licensing effect. The purpose of Study 2 was to once again test the proposed mediated moderation model in a different workplace context. Study 2 also refined the measures, which used data from Study 1 and a pair of pilot studies to produce a stress-tested deviance measure and returned to the literature on pride to find a measure that would better represent the construct (in the end, the new measure was taken from Tracy & Robins, 2007).

To achieve appropriate statistical power for these studies, power considerations were based on Preacher, Rucker, and Hayes' (2007) power table for moderated-mediation analyses. According to this table, a minimum of 100 participants are needed to detect a moderate conditional indirect effect with 96% power using the 95% bias-corrected bootstrap confidence interval method with 5000 resamples. For all studies, a participant recruitment goal of 100 participants per cell (in the case of Study 1 and 2, 400 participants total) was set.

All materials and data from these studies (including items and scales collected, but not considered in the present research) are publicly available via the Open Science Framework (OSF): [https://osf.io/kebdz/?view\\_only=0c10281ddd504bfb93e229dff667a90b](https://osf.io/kebdz/?view_only=0c10281ddd504bfb93e229dff667a90b). Please see <https://aspredicted.org/blind.php?x=2by4jg> for the pre-registered hypothesis for Study 1, <https://aspredicted.org/blind.php?x=f6zc2r> for one of the pilot studies (which featured the same design as Study 1 and 2, and piloted the Study 2 scenario), and <https://aspredicted.org/blind.php?x=wb4bv3> for Study 2. There was an additional pilot study, but a preregistration was not made for it. It was a smaller study, that featured a simpler design than the other studies. In any case, its materials are also available in OSF.

### **Study 1**

The purpose of Study 1 was to explore the relation between forgiveness and moral licensing in a multiple victim's context. I investigated whether or not forgiveness would generate

a moral licensing effect, and more specifically, if moral licensing would be affected when a participant was the “unique forgiver” (i.e., the participant forgives when the other victims do not). In previous research using a similar manipulation (Raj et al., 2019), there was no main effect of participant forgiveness; however, in that research, the authors measured participants’ perceptions of the unique forgiver (i.e., the participant was an observer, not the forgiver), and not whether being a unique forgiver influences subsequent moral behaviour. As such, the current research added a novel twist to the existing literature on the antecedents and consequences of moral behaviour as well as the forgiveness literature.

The study relied on a hypothetical scenario in which the participant was asked to consider if they would forgive a co-worker after a transgression. The scenario was embedded in a team context, which depicted the participant as a part of a positive and productive team. However, one team member was singled out as being unproductive. To give the participant an opportunity to forgive, the scenario had the unproductive team member transgress: the team member in question took credit for the team’s work at the last minute on a project and was promoted because of it. This situation was to signal to the participant that the team member who took the credit was undeserving and benefitted at the team’s expense. This was to ensure that forgiveness was sufficiently challenging, so that forgiveness could lead to the deviant behaviour’s predicted by the moral licensing literature. If forgiveness was too easy, the participant may not have engaged in deviant behaviour. But, on that note, if the transgression was too great and too few people forgave, that would harm the analysis. The transgressor gaining a promotion through their misdeed was thought to be severe enough to make forgiveness challenging, but not so severe as to make forgiveness very unlikely.

I also assessed pride (i.e., the feeling associated with an increase in confidence in the self; Van Osch et al., 2018) as a mediator of the aforementioned moderation model. Prior work has showed that pride in one's moral behaviour increases subsequent immoral behaviour (i.e., the moral licensing effect; Newman & Brucks, 2018). It was expected that pride would increase among those who forgave the transgressor, which would subsequently increase willingness to engage in deviant behaviour.

Finally, we assessed the outcome variable (deviant behaviour) through a measure that was invented for this study. I was unable to find a measure in the literature that would pose deviant behaviours appropriate for the study scenario, so instead opted to make a new measure. This measure primarily focused on loafing behaviours, as they are common workplace deviant behaviours individuals could potentially identify with and imagine themselves partaking in should they be engaged by the study scenario.

## **Method**

*Participants.* Four hundred and fifty participants (278 men, 149 women, 24 unspecified) were recruited online using Amazons Mechanical Turk (MTurk). Target sample size was 100 participants per cell based on Preacher, Rucker, and Hayes' (2007) power table for moderated-mediation analyses. According to this table, a minimum of 100 participants are needed to detect a moderate conditional indirect effect with 96% power using the 95% bias-corrected bootstrap confidence interval method with 5000 resamples. Participants ranged in age from 20 to 70 ( $M = 35.25$ ,  $SD = 10.090$ ). The study was described as assessing "how people react to others after a hypothetical event that takes place on your workplace team." The participants were required to be 18 years or older in order to participant and were given monetary compensation (\$0.50 USD) for their time.

*Procedure.* After giving their consent on the consent page, participants read a short scenario which gave a scenario in which a co-worker, Jim, transgressed against them and other co-workers while taking part in a team project. The scenario was as follows:

You work for a large advertising company called Trianon Advertising. At Trianon, you are part of a team of six that is responsible for developing new advertising campaigns for potential clients, and successfully pitching those ideas to these potential clients. Together, you and your teammates brainstorm, generate ideas, and create materials to pitch those ideas to your clients. Often, the six of you spend countless hours collaborating on these ideas, and in general, most of your teammates make an equal contribution to the final sales pitch. One of your teammates, Jim, however, has a tendency to contribute less than others – and often comes up with excuses as to why he is unable to contribute more.

One day at work, your team is assigned to work on an advertising campaign for a well-known consumer products company. The company has not yet decided to hire Trianon, but if your team is able to create an advertising campaign that impresses them, they are likely to select Trianon to lead their advertising campaign. You and your teammates are given four weeks to generate a pitch. While most of your teammates contribute equally to the project, Jim does not. In fact, he contributes almost nothing to the pitch.

On the day of the presentation, Jim jumps in at the last minute and presents the idea to the potential client and takes credit for coming up with the advertising campaign strategy. The potential client loves the idea and chooses Trianon.

Your boss, impressed by the advertising campaign, decides to promote Jim for his good work. You and your other teammates, however, are not praised or rewarded for your work on the project.

After reading participants were asked if they would forgive Jim, and then were assigned to one of two conditions: either the group forgave Jim, or it did not forgive Jim. Thereafter, participants completed a battery of questionnaires. All items were anchored at 1 (strongly disagree) and 7 (strongly agree). Demographic information (age, sex) was collected after the central measured variables.

*Participant forgiveness.* Participants were asked whether or not they would forgive Jim with the response options “Yes, I would forgive Jim” or “No, I would not forgive Jim”; with 31.5% of the participants responding with “yes, I would forgive Jim.”

*Pride.* Participants were asked to “rate the extent to which [their] response would make [them] feel pride,” rated from 1 (*not at all willing*) to 7 (*very willing*).

*Deviant behaviour.* Three items ( $\alpha = .911$ ) were used to assess deviant behaviour. Participants were asked to “Imagine that [they] could engage in any of the following behaviours as an employee at Trianon. How likely would you be to do each of the following?” They were then presented with all three types of deviant behaviours, “Take an additional or longer break than is acceptable at your workplace. “Come in late to work without permission.” “Ask to work from home but you don’t actually work.”

*Exploratory variables.* Other measures used in this study included self-perception, deserving to be heard, deserved salary, deserving of promotion, and the right to hold a grudge.

## Results

*Preliminary analysis.* Three-hundred and fifty-nine participants were used in the final analysis (226 men, 133 women, age 20 to 60;  $M = 35.830$ ,  $SD = 9.955$ ). Four-hundred and fourth-nine participants were recruited, but 18 participants did not complete the survey, and a further 72 participants failed the attention check (that is, they failed to correctly recall their condition towards the end of the questionnaire package).

*Main analysis strategy.* In Table 1, the  $M$ ,  $SD$ , and correlations for the variables of interest<sup>1</sup> are displayed. Table 2 shows the means of both workplace deviance and pride in each of the conditions. Hayes' (2019) PROCESS macro V.3.4 (Model 8) for SPSS Version 25 with 5000 iterations was used to examine whether participant forgiveness (the IV) and team forgiveness (the moderator) interact to increase subsequent deviant behaviour (the outcome variable) via authentic pride (the mediator). The overall statistical significance of mediated moderation was evaluated using the Index of Mediation Moderation (products were mean-centred; Hayes, 2019). Participant forgiveness and team forgiveness were mean-centred in the mediation moderation analyses and thus results are unstandardized.

Participant forgiveness was entered as the independent variable (coded 0 = participant does not forgive, 1 = participant forgives), the team forgiveness condition as the moderator (coded 0 = team does not forgive, 1 = team forgives), with pride as the mediator (see Figure 1).

*Mediated-Moderation.* Results showed that there was a main effect of participant forgiveness on pride,  $B = .468$ ,  $SE = .200$ ,  $p = .020$ , 95% CI [.075, .862], but there was no main effect of team forgiveness,  $B = .033$ ,  $SE = .185$ ,  $p = .859$ , 95% CI [-.330, .396] on pride. The main effect was qualified by a significant interaction between team and participant forgiveness

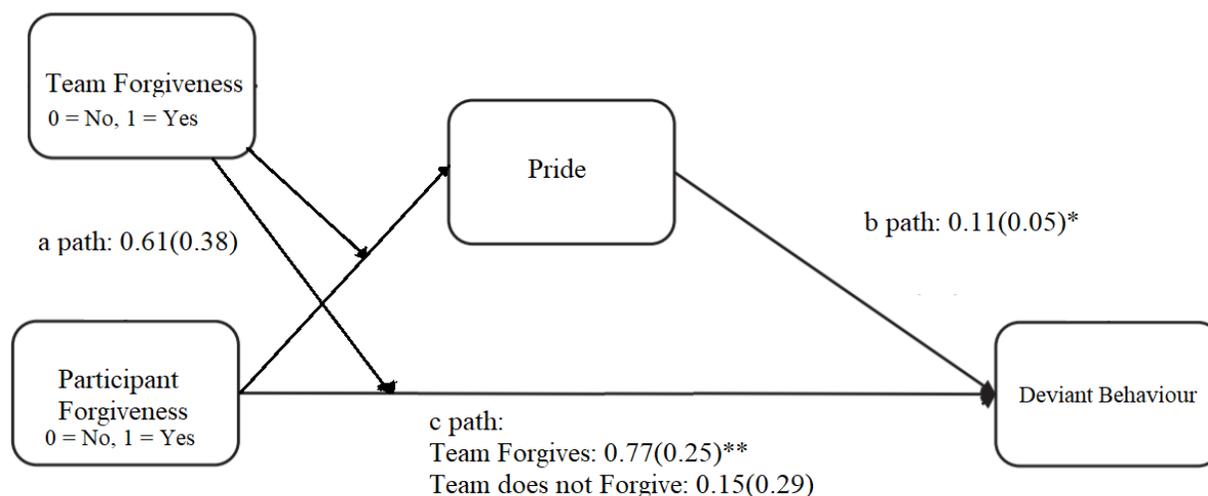
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<sup>1</sup> Other exploratory variables were collected for Study 1 but are not described here. They are available at OSF ([https://osf.io/kebdz/?view\\_only=0c10281ddd504bfb93e229dff667a90b](https://osf.io/kebdz/?view_only=0c10281ddd504bfb93e229dff667a90b)).

on pride,  $B = .804$ ,  $SE = .403$ ,  $p = .047$ , 95% CI [.012, 1.596]. Simple effects analyses revealed that participant forgiveness increased pride when the team also forgave,  $B = .852$ ,  $SE = .262$ ,  $p = .001$ , 95% CI [.338, 1.366]. There was no effect of participant forgiveness on pride when the team did not forgive,  $B = .048$ ,  $SE = .306$ ,  $p = .875$ , 95% CI [-.554, .651].

In the full mediated moderation model, there was a significant main effect of pride on deviant behaviour,  $B = .114$ ,  $SE = .050$ ,  $p = .023$ , 95% CI [.016, .212]. As expected, there was also a significant main effect of participant forgiveness on deviant behaviour,  $B = .472$ ,  $SE = .189$ ,  $p = .013$ , 95% CI [.100, .844]. However, there was no main effect team forgiveness on deviant behaviour,  $B = -.044$ ,  $SE = .173$ ,  $p = .801$ , 95% CI [-.384, .297]. The participant forgiveness by team forgiveness interaction was also not significant,  $B = .613$ ,  $SE = .380$ ,  $p = .108$ , 95% CI [-.134, 1.359]. Nonetheless, I probed the hypothesized interaction. The simple effect analyses revealed that participant forgiveness increased deviant behaviour when the team also forgave,  $B = .765$ ,  $SE = .249$ ,  $p = .002$ , 95% CI [.275, 1.254], but not when the team did not forgive,  $B = .152$ ,  $SE = .287$ ,  $p = .597$ , 95% CI [-.413, .717].

There was a significant indirect effect of participant forgiveness on deviant behaviour via pride when the team forgave,  $B = .097$ ,  $SE = .055$ , 95% CI [.004, .223], but not when the team did not forgive,  $B = .006$ ,  $SE = .035$ , 95% CI [-.068, .077]. However, the Index of Mediated Moderation included zero and as such was not significant, Index = .092,  $SE = .066$ , 95%CI [-.006, .253].



**Illustration 1. Results of mediation moderation analysis of Study 1. Participant forgiveness versus non-forgiveness is the independent variable, pride is the mediating variable, team forgiveness the moderating variable, and deviant behaviour is the dependent variable.**

**Parameter estimates are unstandardized regression coefficients with SEs in parentheses. \***

**$p < .05$ , \*\*  $p < .01$ .**

	M	SD	2	3	4
1. Participant Forgiveness	.310 <sup>1</sup>	.465	N/A <sup>3</sup>	.157**	.139**
2. Team Forgiveness	N/A <sup>2</sup>	N/A <sup>2</sup>	-	.006	.029
3. Deviant Behaviour	2.472	1.650	-	-	.149**
4. Pride	4.110	1.740	-	-	-

**Table 1. Correlations between variables. <sup>1</sup>0 = no, 1 = yes. \*  $p < .05$ , \*\*  $p < .01$ . <sup>2</sup> Team forgiveness was a randomly assigned condition. <sup>3</sup>As team forgiveness was randomly assigned, it is inappropriate to correlate it with the participant forgiveness, which was decided prior to condition assignment.**

Forgiveness Conditions (Y = Yes, N = No)	n	Deviance		Pride	
		M	SD	M	SD
Team=Y, Participant=Y	70	3.024	1.923	4.710	1.505
Team=Y, Participant=N	117	2.162	1.491	3.830	1.922
Team=N, Participant=Y	42	2.579	1.543	4.070	1.454
Team=N, Participant=N	128	2.422	1.592	4.050	1.720

Table 2. Means of deviance behaviours and pride by condition.

## Discussion

There was a direct effect of participant forgiveness on workplace deviant behaviour. Forgiveness may generate a moral licensing effect like other moral acts used in the moral licensing literature (e.g., Chiou et al., 2011; Effron et al., 2009; Effron et al., 2012; Monin & Miller, 2001). However, there was no main effect of team forgiveness, nor was there an interaction between participant forgiveness and team forgiveness on deviant behaviour. There was an interaction between participant and team forgiveness on pride. Regarding the overall mediated moderation model, the results showed a significant interaction between participant and team forgiveness on pride, but only when the team forgave. It also showed a significant participant and team forgiveness interaction with pride as the mediator on deviant behaviour, and upon probing the interaction it was found that there was only a significant effect of participant forgiveness when the team forgave the transgressor. There were no significant effects found in the team *unforgiveness* condition (i.e., the two conditions where the team did not forgive) when looking at pride or deviant behaviour. In summary there was some preliminary evidence for the hypothesized mediated moderation model.

Forgiveness only led to subsequent willingness to engage in deviant behaviour when both the team and the participant forgave. An explanation might be drawn from the Newman and Brucks (2018) study, which found that a moral license (in the study, measured through the participant's willingness to engage in indulgent spending) could be taken through association with brand organizations; but, only when there is perceived overlap (by the participant) between the organization and the individual (in that study, referred to as "self-brand overlap"). In the case of this study, the participants may have perceived some overlap between themselves and the hypothetical team, which they were told that they were a part of. The team was also described as being very functional and positive (except for the transgressor). With this logic, when the team made a moral decision (i.e., forgiving the transgressor) the participant may have felt additionally morally licensed to engage in workplace deviant behaviour by being associated with them, but only when the participant made the same decision. But, unlike the brand organizations of the Newman and Brucks (2018) study, this study provided an opportunity for there to be an incongruence (in the form of a disagreement in the decision to forgive) between the participant and the organization (or, in the case of this study, the team at work) in an event they both directly experienced. When this incongruence occurred, so that the team did not forgive and the participant did, the participant may have felt less a part of the team which evaporated any borrowed moral licensing from being associated with them.

It is not completely clear why there were no significant effect with either pride or forgiveness on deviant behaviour found in the team *unforgiveness* condition. The lack of effect in the condition in which both the participant and the team did not forgive the transgressor may be the most straightforward to understand of the two unforgiveness conditions, as there is no moral action taken by any parties. To be motivated to engage in deviant behaviour, there should

be a moral act to justify it (at least, according to the moral licensing literature). In the other team *unforgiveness* condition, where the participant forgave and the team did appears to be more dynamic. The participant forgave, which could have led to more willingness to engage in deviant behaviour as it did in the other condition where the participant forgave. But, instead this condition has the lowest means of deviant behaviour among all conditions. It would appear that disagreeing with the team on forgiving a transgression, when one wants to forgive and the team does not, discourages one from engaging in deviant behaviour. This could be due to the individual weighing the potential social costs of disagreeing, which the literature has found to reduce the amount of pride someone could feel when engaging in moral action (Etxebarria et al., 2014; Pascual, et al., 2019). This may have led to less willingness to engage in deviant behaviour.

The mediator, pride, may be an important piece of the puzzle that explains both the heightened willingness to engage in deviant behaviour reported in the full forgiveness condition, and the relative lack of willingness to engage in deviant behaviour in the unique forgiver condition. It appears that making the same moral decision (e.g. the decision to forgive) as others in a multiple victim context generates more pride than going against the consensus of the other victims. Moreover, it appears that pride is severely depressed when the participant disagrees with the other victims and forgives the transgressor without their support (see also Etxebarria et al., 2014, Pascual et al., 2019). This may subsequently suppress moral licensing, which has been found to be preceded by an increase in pride (Khan & Dhar, 2006; Aquino, et al., 2011). Without this increase in pride, the moral licensing effect may not be fully experienced. The moral act (e.g., forgiveness), and the consensus (i.e., the team's decision to also forgive) both appear to be required to feel proud of one's decision to forgive, and subsequently be granted a moral license.

Pride was found to significantly mediate the relation between participant forgiveness and the participants willingness to engage in workplace deviant behaviour, but only when the team forgave the participant. This result may be consistent with what was found by Newman and Brucks (2017). In their experiment pride mediated the relationship between consumer-brand overlap (the degree to which the participant associated themselves with the brand in question) and moral licensing, in that the more pride they experienced in the positive brand condition (the brand was presented as moral to the participant; as opposed to the condition in which their brand was shown to be deviant), the more they engaged in morally license acts. The reason that pride may only be acting as a mediator when the team forgives in Study 1 is that the participant forgives x team forgives condition is providing an opportunity for the participant to positively associate themselves with the team (who made the same moral choice that they did), which then generates pride, which strengthened moral licensing. When the team did not forgive, even if the participant was in agreement not to forgive, the association between themselves and the team may not generate as much pride due to the absence of the moral act, and thus greater willingness to engage in deviant behaviour.

A potential limitation of Study 1 was the measures used. I used a single item measure of pride, which may not have been the best representation of the construct. Pride has been found to have two subtypes (Tracy & Robins, 2007), both of which appear to respond to the moral licensing effect differently or to different degrees (Bureau, et al., 2013; Wilcox, et al., 2011). The Tracy and Robins (2007) measure for pride appears in Study 2. The measure of deviant behaviour was also a concern, as prior to Study 1 it was unattested. With the data collected in this study, and in two pilot studies conducted after it, I was in a better position to create a better measure for Study 2. Also, additional bot-check measures should have been applied in Study 1.

There was an unusually high number of failed attention checks, and so the next study would take more measures to address this by better screening out automated responders (i.e., bots). The purpose of the above changes were to better parse precisely what was contributing to the heightened willingness to engage in deviant acts in the participant forgive: yes x team forgive: yes cell, and to make the over all research design and data collection more reliable.

## **Study 2**

The purpose of Study 2 was to replicate the effects observed in Study 1. I was also interested in assessing whether the effect would replicate in a different environment. The new work environment was a constructions site, but the scenario was largely the same as the marketing-team scenario, in that it centered on a transgression committed by a co-worker against the rest of the team. I conserved the elements of the team being presented as productive, the transgressor as unproductive, and the outcome of the situation being that the transgressor was able to take credit for the team's work while also attaining a promotion. Participant feedback in a pair of earlier pilot studies indicated that the new scenario setting was very relatable and easy to understand.

Another goal of Study 2 was to deploy a better measure of pride that better aligned with how the construct was studied in the literature. The intention was to make the findings of this research clearer through better measuring the variable in question. In the literature, pride is often divided into two constructs, which are hubristic pride and authentic pride (Tracy & Robins, 2007). Study 1's single item measure did not separate out these two different facets of pride. This may have added noise into my analysis. The subconstruct of hubristic pride is tied to extrinsic values such as public recognition, while authentic pride comes from intrinsic values such as adaptive achievement and goal recognition (Carver, Sinclair, & Johnson, 2010). Hubristic pride

is associated with traits such as snobbish, pompousness, and being stuck-up; while authentic pride is associated with feeling accomplished, successful, and achieving (Tracy & Robins, 2007). Unsurprisingly, authentic and hubristic pride have divergent personality profiles associated with each, with authentic pride being associated positively with extraversion, agreeableness, conscientiousness, and emotional stability; and hubristic pride is negatively associated with agreeableness and conscientiousness (Tracy & Robins, 2007). But perhaps counterintuitively, authentic pride appears to be more often associated with moral licensing than its counterpart (Bureau, et al., 2013). This makes authentic pride of primary interest to this research.

It also appears that authentic pride is influenced by social costs. Going against the majority has been found to generate less authentic pride than not going against the majority (Etxebarria et al., 2014; Pascual, et al., 2019). Etxebarria and colleagues (2014), who based their measure of pride on Tracy and Robins (2007) authentic pride measure, found that when going against group consensus in deciding to engage in helping behaviour decreased the pride felt by the helper. Punishment for moral actions also reduced pride (results were replicated with young adults in Pascual et al., 2020). That authentic pride can be influenced by social costs is of particular importance to my experiment, as the experiment scenario is using a workplace setting in which there are multiple victims who will come to a consensus on forgiving the transgressor. If the consensus matches the participant's decision to forgive, then the participant should feel a boost in authentic pride. And, the opposite should be true, in that the participant's moral pride should be reduced if it goes against the group. If pride is increased, moral licensing should be increased; if pride is decreased, licensing should be decreased.

The measure for the deviance outcome variable was also significantly expanded. In Study 1 it was narrowly focused on loafing behaviours, but in Study 2 it also included actions against

the team (e.g., stealing credit for other people's work), and actions that were harmful to the work environment (e.g., stealing tools). The behaviours covered in the measure were expanded to determine if forgiveness would result in a wide variety of deviant behaviours, as opposed to only with regards to loafing behaviours.

Some of the other measures in the study were also adjusted from the measures used in Study 1 based on the data produced by the earlier versions of the study measures. The purpose of these modifications was to improve the quality of the measures (a few of which were created for the purpose of this research, and as such needed some refinement), and to add measures that would help me better understand the effects that were observed in Study 1<sup>2</sup>. Also, Study 2 included a bot-detection captcha, a bot-detection algorithm available through Qualtrics, and more open-ended items which would act as both an attention check and bot-detection system.

## **Method**

*Participants.* Four-hundred and fifty-one participants were recruited (203 men, 201 women, 42 unspecified, 5 other). These participants were recruited from Mturk. As in Study 1, Target sample size was at least 100 participants per cell based on Preacher, Rucker, and Hayes' (2007) power table for moderated-mediation analyses. The participants were required to be 18 years or older to participant and were given monetary compensation (\$0.70 USD) for their time.

*Procedure.* This was similar to Study 1. After giving their consent on the consent page, participants read a short scenario which gave a scenario in which a co-worker, Jim, transgressed

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<sup>2</sup> Prior to Study 2 two other pilot studies were conducted on Mturk to experiment with the new scenario, and to test some new measures, and a potential new design. Both studies failed to fully replicate the moderated-mediation results of Study 1, but did generally continue to find relationships between deviance and forgiveness (whether the expected influences of team forgiveness, or participant forgiveness), and provided valuable data that contributed to the final measures used in this study. These pilot studies can be found on OSF [https://osf.io/kebdz/?view\\_only=0c10281ddd504bfb93e229dff667a90b](https://osf.io/kebdz/?view_only=0c10281ddd504bfb93e229dff667a90b).

against them and other co-workers while taking part in a team project. The new scenario used a construction site as its setting, with a construction crew as the team. The scenario was as follows:

You work for a large construction company called Trianon Construction. At Trianon, you are part of a crew of six that is responsible for getting a house completed before the buyer's deadline. If you meet the deadline, your boss has promised the team a bonus. Together, you and your crew plan all the work that needs to be done to get the job done on time. Often, the six of you spend countless hours collaborating on the project, and in general, most of your crew make an equal contribution. One of your crew, Jim, however, has a tendency to work less than others – and often comes up with excuses as to why he is unable to work more.

Near the last day on the site, the buyer's come to the house to see the progress and to chat with your crew about the work done. Jim jumps in and takes the home buyer for a walk around the property while the rest of the crew continues working. After a very long tour, the crew observes Jim chatting with the buyer at his car. They are pointing at various parts of the house, smiling, and nodding.

Your boss later informs the crew that the buyer was so impressed with the work Jim did on the project that he has hired Trianon for another job. The boss tells everyone that they will be the crew for that new job with Jim as their new foreman—a promotion that comes with a substantial raise. You and your other teammates, however, are not praised or given a raise.

After reading participants were asked if they would forgive Jim, and then were told that the construction crew decided to (not) forgive Jim. Thereafter, participants completed a battery of questionnaires. All items were anchored at 1 (not at all) and 7 (very much so). Demographic information (age, sex) was collected after the central measured variables. See Appendix II at end of document for full measures.

*Participant forgiveness.* Participants were asked whether or not they would forgive Jim; with 44.4% of the participants responding with “yes.”

*Pride.* Participants were asked to “think about [their] decision to [forgive or not forgive] Jim and [their] teams’ decision to forgive Jim makes [them] feel.”. They were then presented with six different feelings, and a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). This scale has two subscales, authentic pride (corresponding to feelings such as “fulfilled,” “productive,” and “self-worth;”  $\alpha = .849$ ) and hubristic pride (corresponding to “pompous,” “smug,” and “stuck-up;”  $\alpha = .905$ ). This scale was taken from Tracy & Robins (2007).

*Deviant Behaviour.* Thirteen items ( $\alpha = 0.965$ ) were used to assess the moral licensing effect. Participants were asked to “Imagine that [they] could engage in any of the following behaviours as an employee at Trianon. How likely would you be to do each of the following?” They were then be presented with thirteen types of deviant behaviour, such as “take longer breaks”, “put in less effort at work”, “call in sick when you are not sick”, and “take work tools if there was no risk in being caught”.

*Exploratory Variables.* Exploratory variables included moral pride, team-self overlap, entitlement, prosocial behaviour, and idiosyncrasy credits.

## Results

*Preliminary analysis.* Four-hundred and seventeen participants were used in the final analysis (185 men, 225 women, 5 other, 2 unspecified; age range 18-74,  $M = 39.09$ ). Four-hundred and fifty-one participants were recruited, and 34 were removed. Twelve participants did not pass the attention check, and 22 participants had off-topic answers to the open-ended questions (these participants were assumed to either be not paying attention, or were bots that were able to bypass the captcha and bot-detection algorithm).

*Main analysis strategy.* In Table 3, the M, SD, and correlations for the variables of interest<sup>3</sup> are displayed. Table 4 shows the means of both workplace deviance and pride in each of the conditions. To test the hypothesized mediated moderation model, I used Hayes' (2019) PROCESS macro V.3.4 (Model 8) for SPSS Version 25 with 5000 iterations to examine whether participant forgiveness (the IV) and team forgiveness (the moderator) interact to increase subsequent deviant behaviour (the outcome variable) via authentic pride (the mediator).. The overall statistical significance of mediation moderation was evaluated using the Index of Mediation Moderation (products were mean-centred; Hayes, 2019). Participant forgiveness and team forgiveness were mean-centred in the mediation moderation analyses and thus results are unstandardized.

I tested a moderated-mediation model in which participant forgiveness was entered as the independent variable (coded 0 = participant does not forgive, 1= participant forgives), the team forgiveness condition as the moderator (coded 0 = team does not forgive, 1= team forgives), pride as the mediator.

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<sup>3</sup> Other exploratory variables were collected for Study 2 but are not described here. They are available at OSF ([https://osf.io/kebdz/?view\\_only=0c10281ddd504bfb93e229dff667a90b](https://osf.io/kebdz/?view_only=0c10281ddd504bfb93e229dff667a90b)).

*Mediated-Moderation.* As predicted, there was a significant main effect of participant forgiveness on pride,  $B = .803$ ,  $SE = .156$ ,  $p < .001$ , 95% CI [.495, 1.110], but no main effect of team forgiveness on pride,  $B = .029$ ,  $SE = .156$ ,  $p = .853$ , 95% CI [-.277, .334]. However, these main effects were qualified by a significant interaction between team and participant forgiveness on pride,  $B = 1.007$ ,  $SE = .313$ ,  $p = .001$ , 95% CI [.391, 1.623]. Specifically, participant forgiveness increased pride when the team also forgave,  $B = 1.282$ ,  $SE = .213$ ,  $p < .001$ , 95% CI [.862, 1.701], but not when the team did not forgive,  $B = .275$ ,  $SE = .230$ ,  $p = .232$ , 95% CI [-.176, .726].

In the full mediated moderation model, there was a significant main effect of participant forgiveness,  $B = .607$ ,  $SE = .140$ ,  $p < .001$ , 95% CI [.332, .883], and pride,  $B = .092$ ,  $SE = .043$ ,  $p = .033$ , 95% CI [.008, .176] on deviant behaviour. However, there was no significant main effect of team forgiveness on deviant behaviour,  $B = .220$ ,  $SE = .135$ ,  $p = .104$ , 95% CI [-.045, .486]. However, these main effects were qualified by a significant participant forgiveness by team forgiveness interaction,  $B = .552$ ,  $SE = .276$ ,  $p = .046$ , 95% CI [.006, 1.094]. Participant forgiveness increased deviant behaviour when the team also forgave,  $B = .870$ ,  $SE = .194$ ,  $p < .001$ , 95% CI [.490, 1.250], but not when the team did not forgive,  $B = .318$ ,  $SE = .200$ ,  $p = .112$ , 95% CI [-.075, .711]. Importantly, and as predicted, there was a significant indirect effect of participant forgiveness on deviant behaviour via pride when the team forgave,  $B = .118$ ,  $SE = .066$ , 95% CI [.001, .264], but not when the team did not forgive,  $B = .025$ ,  $SE = .025$ , 95% CI [-.014, .084]. The Index of Mediated Moderation was significant, Index = .093,  $SE = .059$ , 95%CI [.001, .228], thus providing further evidence for the hypothesized mediated moderation model.

	M	SD	2	3	4
1. Participant Forgiveness <sup>1</sup>	0.444	0.4974	N/A <sup>3</sup>	.247**	.248**
2. Team Forgiveness <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	-	.100*	.032
3. Deviant Behaviour	2.285	1.422	-	-	.176**
4. Authentic Pride	3.957	0.080	-	-	-

**Table 3. Correlations between variables. <sup>1</sup>0 = no, 1 = yes. \*\*  $p < .01$ . <sup>2</sup>Team forgiveness was a randomly assigned condition. <sup>3</sup>As team forgiveness was randomly assigned, it is inappropriate to correlate it with the participant forgiveness, which was decided prior to condition assignment.**

Forgiveness Conditions (Y = Yes, N = No)	n	Deviance		Pride	
		M	SD	M	SD
Team=Y, Participant=Y	107	2.927	1.824	4.657	1.546
Team=Y, Participant=N	111	1.933	1.080	3.376	1.668
Team=N, Participant=Y	78	2.335	1.382	4.069	1.403
Team=N, Participant=N	120	2.006	1.100	3.794	1.605

**Table 4. Means of deviance behaviours and pride by condition.**

**Descriptive Statistics by Condition**

	Team=Y, Participant=N			Team=N, Participant=N			Team=N, Participant=Y			Team=Y, Participant=Y		
	N	M	SD									
	Promotion	111	4.69	1.45	120	4.50	1.35	78	4.45	1.29	106	4.72
Team-self Overlap	110	6.52	1.72	121	7.38	1.83	77	6.91	1.70	106	7.57	1.66
Single-item Pride	110	1.85	1.40	119	2.48	1.87	77	2.53	1.73	107	3.64	2.01
Hubristic Pride	107	2.10	1.28	120	2.27	1.52	77	2.43	1.58	107	3.10	1.95
Entitlement	111	4.34	1.28	121	4.51	1.11	78	4.18	1.04	105	4.48	1.21
Prosocial Tendencies	111	4.22	1.47	121	4.52	1.39	78	4.89	1.39	107	4.91	1.25

**Table 5. Summary statistics of exploratory variables by condition.**

## Discussion

As in Study 1 there was a direct effect of participant forgiveness on workplace deviant behaviour, which further provides evidence that forgiveness may generate a moral licensing effect same as other moral acts used in the moral licensing literature (e.g., Chiou et al., 2011; Effron et al., 2009; Effron et al., 2012; Monin & Miller, 2001). But, unlike in Study 1, there was a significant interaction between participant forgiveness and team forgiveness on deviant behaviour. The nature of this interaction followed the same pattern of results from Study 1 (though in Study 1 the model fell short of significance), in that the highest means for deviant behaviours were found in the cell where both the participant and the team forgave, with the lowest means being when the participant forgave while the team did not (Table 3). This was not only true for deviance, but also for pride. On that note, there was an interaction between participant and team forgiveness on pride; with team forgiveness playing the most significant

role. Regarding the overall mediated moderation model, the results showed a significant interaction between participant and team forgiveness on pride, but only when the team forgave. It also showed a significant participant and team forgiveness interaction with pride as the mediator, on deviant behaviour, again only when the team forgave the transgressor. There were no significant effects found in the team *unforgiveness* condition (i.e., the two conditions where the team did not forgive) when looking at pride, or deviant behaviour. And, the Index for Mediated Moderation was significant, indicating that this study was successfully able to refine the methods and measures of Study 1. In summary Study 2 found more evidence for the hypothesized mediated moderation model, but significance only occurred when the team forgave.

This study provided evidence that the social context may be important for predicting the influence of the moral licensing effect when it takes place in a social context. In the study, it seemed that the agreement between the participant and the team, in addition to the moral act, was important for encouraging deviant behaviour. As an exploratory variable I also included a measure of team-self overlap, and, like pride and deviance, it was highest when the team and the participant agreed (Table 5). This would be consistent with the idea that the sense of overlap between the team and the self is important for moral licensing in the multiple-victim context. However, unlike pride and deviance, it was not significantly different from the condition in which neither the team nor the participant forgave (which is logical, as it would be expected that the most relevant variable influencing team-self overlap directly is not the moral act, but the agreement between the participant and the group). Finally, the pattern of data seemed to suggest that that the moral licensing effect was only occurring when both the participant and the team forgave and was not occurring simply when the participant forgave (in fact, it appeared that moral licensing was suppressed when the team did not forgive). In this study, the perceived social

context appeared to have a powerful influence on the moral licensing effect as measured by willingness to engage in deviant acts.

This study, similar Study 1, provided some evidence for the hypothesis that authentic pride mediates the relationship between the moral act (in this case, forgiveness) and moral licensing (in this case, deviant workplace behaviours). This is consistent with the literature that finds that people feel better about themselves when they are in agreement in the group on a decision (Etxebarria et al., 2014; Pascual et al., 2019), and that moral licensing is preceded by the individual feeling better about themselves (Aquino, et al., 2011; Khan & Dhar, 2006). And, as in Study 1, it appears that the reason the results may have been null in the team *unforgiveness* conditions is that the interplay between making a moral decision and experiencing an increase in authentic pride through alignment with the team was absent. And, like what may have been predicted from reading Raj et al. (2019), the multiple-victim context may have created a situation where perceived disagreement between the participant and the team may have induced a social-costs related threat. This perceived threat may have suppressed both moral licensing, and authentic pride.

Authentic pride was found to significantly mediate the relation between participant forgiveness and the participants willingness to engage in workplace deviant behaviour, but only when the team forgave the participant. This might be explained by the Newman and Brucks (2017) study. In that experiment it was found that pride mediated the relationship between consumer-brand overlap (the degree to which the participant associated themselves with the brand in question) and moral licensing, in that the more pride they experienced in the positive brand condition (the brand was presented as moral to the participant; as opposed to the condition in which their brand was shown to be deviant), the more they engaged in morally license acts.

The reason that pride may only be acting as a mediator when the team forgives in Study 1 is that the participant forgives x team forgives condition is providing an opportunity for the participant to positively associate themselves with the team (who made the same moral choice that they did), which then generates pride, which strengthens moral licensing. When the team does not forgive, even if the participant was in agreement, the association between themselves and the team may not generate as much pride due to the absence of the moral act, and thus less moral licensing.

### **General Discussion**

The psychological literature on forgiveness has tended to focus on the benefits a victim yields from letting go of the negative feelings and cognitions they hold toward their transgressor (e.g., Norman, 2017; Siltonet et al., 2013). For example, forgiveness has been shown to, among other psychological and physiological benefits, decreased the forgiver's blood pressure and increased the forgiver's life satisfaction (Bono, et al., 2008; Karremans, et al., 2003; Toussaint, et al., 2001; Witvliet, et al., 2001). Forgiveness can also lead to a strengthening of one's relationship with a transgressor (Maio et al., 2008; Paleari, et al., 2005; Wohl et al., 2006). But forgiveness does have a dark side (McNulty, 2011). Forgiving domestic violence slows the reduction of physical aggression in intimate relationships (McNulty, 2011) likely because forgiveness signals to the transgressor that they can take advantage of their victim's tendency to forgive (Luchies & Finkel, 2011). Moreover, expressing forgiveness may strain the relationship between the transgression and victim if the transgressor believed they did nothing wrong (Adams & Inesi, 2016). However, to my knowledge, no research has examined whether there are negative consequences for the forgiver's own behaviour following their act of forgiveness. In the current research, I tested the possibility forgiveness may (counterintuitively) lead the forgiver to engage in subsequent immoral behaviour.

My supposition that the granting of forgiveness may result in the forgiver engaging in subsequent immoral behaviour finds its foundation in prior work on moral licensing (Chiou et al., 2011; Effron et al., 2009; Effron et al., 2012; Monin & Miller, 2001), which is a phenomenon by which individuals use moral credits to act immorally (Loi et al., 2020), or use their moral activities to buffer their reputations against the tarnishing effects of their immoral activities (Monin & Miller, 2001; Polman, et al., 2013). In the spirit of such research, I hypothesized that the act of forgiveness (which has been argued is a moral act; see Kim & Enright, 2006) results in some forgivers believing they have moral credits that can be used as justification for committing subsequent deviant behaviour. I also hypothesized that the extent to which people report a willingness to engage in deviant following the act of forgiveness should be heightened when the transgression included multiple victims and all the other victims also grant forgiveness. Lastly, I hypothesized that pride plays a mediating role—forgiveness should increase willingness to engage in subsequent immoral behavior to the extent that people feel pride following their act of forgiveness. Previous work has shown that pride can result from forgiveness (see Maio et al., 2008; Karremans et al., 2003; Wohl et al., 2006), and pride is also an antecedent of moral licensing (Bureau, et al., 2013; Wilcox, et al., 2011). To test this mediated-moderation model, I conducted two experiments using a work context in which a person transgresses against their team, which includes the participant.

In Study 1, as predicted, pride was elevated when both the participant and the team forgive. Additionally, in line with prior research, pride increased deviant behaviour. Moreover, forgiveness had a direct effect on deviant behaviour. However, the hypothesized interaction between participant forgiveness and team forgiveness on deviant behaviour fell just outside of traditional levels of significance. Nonetheless, a probe of the hypothesized indirect effect of

forgiveness on deviant behaviour via pride as a function of whether or not the team forgave revealed a greater willingness to engage in deviant behaviour when both the participants and team forgive via pride. No indirect effect was observed when the team did not forgive.

Possible reasons why the hypothesized mediated moderation effect fell outside of traditional levels of significance is poor data quality (e.g., a high number of participants failed the attention check items) and the use of a single item measure of pride (single item measures are notoriously unreliable). The purpose of Study 2 was to examine whether support for my hypothesized model would be observed when better controls were put in place to improve data quality (e.g., use of captcha to detect bots) and the use of an established multi-item measure of pride—one that directly captured authentic pride (i.e., pride related to a sense of achievement for acting in relation to one's intrinsic values), which has previously been shown to be associated with subsequent deviant behaviour (Bureau, et al., 2013; Wilcox, et al., 2011). I hypothesized that the link between forgiveness and deviant behaviour would be mediated by authentic pride. In this second study, I used a slightly different work context (i.e., a member of a team of construction works transgresses against his fellow team members).

In line with predications, when both the participant and the team forgave, participants not only reported greater authentic pride they also expressed greater willingness to engage in deviant behaviour. Additionally, in support the predicted mediated-moderation model, authentic pride mediated the aforementioned moderation effect on willingness to engage in deviant behavior. Only when the participant and the team forgave did willingness to engage in deviant behavior increase via heightened authentic pride. And, as opposed to Study 1, the index of moderated-mediation was statistically significant. I believe that this success over Study 1 was primarily due to the application of better measures for the study variables, and by better ensuing responder

quality by including better attention checks and bot-detection measures. Improving the quality of the study measures was particularly important, as refining the measures with better literature (as with the pride measure, through using Tracy & Robins, 2008) or with better data (as with the deviance measure, through using the data of Study 1 and the pilot studies) would have had the effect of improving construct and criterion validity, which would have made it easier to probe the complex relationships investigated in this study.

These studies provided preliminary support for my supposition that the act of granting forgiveness can result in subsequent deviant behaviour. In other words, people who forgive may believe that their act of forgiveness provides them with moral credits, which licenses them to engage in subsequent immoral behaviour (i.e., forgiveness leads to moral licensing). Moreover, that the decision of other victims may be important in predicting the influence of moral licensing in a multiple victim context. Specifically, participant forgiveness may only result in deviant behaviour if the other victims also forgive. Otherwise, an increase in deviant behaviour will not take place. This may be a function of pride, as pride mediated the relationship between the moral act (in this case, forgiveness) and moral licensing (in this case, deviant workplace behaviours). In the multiple victim context, it was found that individuals only felt pride in their act of forgiveness when the team also forgave, and felt less pride when the team did not; even if the participant themselves forgave the transgressor. Although forgiveness has been found to be a means by which coworkers cope with transgression and maintain their relationships in the workplace (Toussaint et al., 2016), moral licensing may be a potential consequence. And, as this research shows, especially if the transgression was forgiven by other workers.

## Implications

Forgiveness has been found to have many benefits. For example, Toussaint and colleagues (2016) found a positive association between forgiveness and productivity, as well as associations between forgiveness and the positive psychological and physical health of workers. However, my study using a workplace scenario found an additional, and potentially problematic outcome: deviant behaviour at the workplace. This increase in deviant behaviour may be explained by the moral licensing effect—the tendency for people to engage in immoral activities following engagement in moral activities. (Chiou et al., 2011; Effron et al., 2009; Effron et al., 2012; Monin & Miller, 2001). In the current research, forgiving a workplace transgression resulted in an increased willingness to take liberties at the workplace in the form of deviant behaviour. And, across a wide variety of deviant acts (e.g., taking longer breaks than allotted, stealing tools, taking credit for other people's work). This is in line with research that has examined the moral licensing phenomena that has shown subsequent immoral behaviour is not restricted to the domain in which the original moral behaviour was enacted (Ellithorpe et al., 2015; Khan & Dhar, 2006; Newman & Brucks, 2018).

Put succinctly, the current research suggests that the act of forgiveness can (ironically) result in the forgiver engaging in subsequent negative behaviours. That forgiveness can result in deviant behaviour may be important to be aware of for workers and for managers of workers. If there is an unpleasant event at the workplace that results in very positive outcomes (e.g., a transgression at the office that is responded to with prosocial intention and reconciliation), people may want to take note if there appears to be an increase in the deviant behaviours such as the ones covered in this study. If such behaviours are observed in oneself, then it may be best to just be aware and try to extinguish the behaviour. If in a managerial position, and observing this

pattern of behaviour across a team, then an intervention may be necessary. Researchers have found that humility (the antithesis of pride) is negatively associated with counterproductive workplace behaviour (Wiltshire et al., 2014), so encouraging it may reduce workplace moral licensing behaviours.

It is also important to note that multiple victim scenarios are often overlooked by the forgiveness literature (for exceptions see, Raj et al., 2019), despite that decisions of other group members on whether or not to sanction a moral act are found to influence moral licensing (Etxebarria et al., 2015). This research extends the literature on multiple victim scenarios by finding a new context where the multiple victim nature of the incident influences the behaviour of individual actors (i.e., the workplace), and by finding a new outcome of the multiple victim scenario (i.e., encouraging, or suppressing, deviant behaviour). The moral licensing effect may not operate the same in a multiple victim scenario, as it would with an event that only affects an individual actor. Overlooking multiple victim scenarios can, as this research has found, result in an incorrect prediction of deviant behaviour following a transgression if one assumes that the moral licensing effect operates the same whether or not other victims were affected by a transgression. This research shows the importance of considering the wider social environment present during a moral act when anticipating the possibility of deviant behaviour in a multiple victim context. This may be especially true of the workplace, as the workplace sometimes puts workers in competition with each other for resources; whether that resource is raises, promotions, or materials and time (Kuchynka et al., 2018). In a multiple victim transgression, it is important to understand not only the forgiveness of certain actors, but of how their forgiveness relates to the decision of other victims. This relation may determine whether or not the individual actors experience moral licensing.

## Limitations

Some limitation of the current research should be noted. First, in both scenarios the transgressor was given a promotion over the participant and other team members. This may have influenced the outcome variable of deviance because the relationship between the transgressor and the participant changed after the transgression. If the participant was resentful of the transgressor, deviance against the workplace could have been interpreted as deviance against the new supervisor (i.e., the transgressor). To illustrate, perhaps “com[ing] in late to work without permission (a Study 2 deviance item)” could have been understood as a way to get back at the transgressor, who is now responsible for the participant’s tardiness. This could be especially true of the Study 2 scenario, where the transgressor was promoted to foreman (a supervisory position). Though, if the participant was concerned of reprisal from the transgressor (who now has new authority), perhaps they would have been less inclined to engage in deviance against the workplace. That being said, there were no statistical differences found between different types of deviant behaviour (e.g., against the workplace, or against the team), which may indicate that this did not occur. However, future research could determine if the results are the same when the relationship between the participant and the transgressor does not change after the transgression (i.e., the transgressor retains the same position relative to the participant after the transgression and does not gain authority). The participant may have also been more, or less, inclined to forgive the transgressor due to this change in relationship as well; more inclined to forgive if they wanted to limit the possibility of reprisal from the newly empowered transgressor, or less inclined if the participant dislikes authority. In summary, the change in the transgressor’s role, and more specifically the change in the transgressors power relative the participant, may have influenced the participant’s willingness to forgive and engage in deviant behaviour.

Additionally, these studies focused on one type of transgression. That is, the transgressor took disproportionate credit for work that they did not contribute significantly to and benefitted substantially in terms of a promotion and recognition from upper management. It is possible that different types of transgressions, with different degrees of severity, could influenced the results differently. Presumably, more severe transgressions would have resulted in a more challenging forgiveness, which could have resulted in more deviant behaviour. However, the moral licensing literature also finds that comparatively small acts (such as in Ellithorpe, et al., 2015; Khan & Dhar, 2006) can result in significant liberties taken later. Perhaps similar results could be found with less severe transgressions than the one used in the current studies, for example forgiving co-workers for unintentionally inconveniencing the participant. Future research could try different scenarios, with transgressions that differ from each other in terms of severity. This could establish if the found effects only apply to severe situations or can even apply to more mundane transgressions.

Finally, as a pair of studies that posed hypothetical scenarios, they did not actually test the participants willingness to engage in deviant acts after forgiveness; but, rather, their stated willingness to engage in said acts. A study that gives the opportunity for the participant to engage in deviant behaviour may better provide evidence for establishing both the moral licensing effect of forgiveness, as well as the influence of the multiple-victim context. Also, having the participant forgive an actual transgression, as opposed to responding to a hypothetical transgression like the one use in this study, may be better at generating pride in the participant. If this is the case, a lab study where the participant experiences a real transgression would be a useful path for future research as it may result in more deviant behaviour. Another possible limitation is that participants were not assigned to forgiveness or lack of forgiveness conditions,

instead they were simply asked whether they would forgive Jim for his transgression. This was done to ensure as much as possible that the forgiveness was genuine, but it also means that social desirability may have played a role in participants' answers and created a bias in the data. The people more likely to forgive could have also been more likely to engage in the measured deviant behaviour, for reasons other than the moral licensing effect. For example, one of the pilot studies found that workplace sociopathic behaviour was associated with both participant forgiveness and deviant behaviour. This may be problematic, as research has found that participants who score higher on dark triad traits are more likely to "fake-good" on psychological assessments (MacNeil, 2009). There may be a population of participants faking-good on the binary yes-no forgiveness measure, who also score higher than average on the deviance measure. Future studies may try to assign participants to either forgiveness, or possibly create scenarios where forgiveness is easier or harder in order to try to better mitigate any bias in the data.

## **Conclusions**

This research provides some evidence that forgiveness may result in deviant behaviour at the workplace. Moreover, that the mechanism that influences deviant behaviour may be related to an improvement in how the individuals feel about themselves; more specifically, the feelings of pride that comes from forgiveness. The multiple victim scenario adds an additional layer of consideration, as both pride and deviant behaviour may be influenced by the decisions of other coworkers who were also affected by the transgression that spurred the forgiveness. If the participant is one victim of many, and find themselves in disagreement with the majority on forgiving the transgression, they may not experience an increase in subsequent deviant behaviour nor pride in their moral actions. Moreover, they may experience *less* of an increase in deviant behaviour and pride than if they did not engage in the moral act at all. But, if their forgiveness is

shared by the majority, then they may feel more inclined to engage in workplace deviance.

Forgiveness may be a good thing to encourage in the workplace (Toussaint et al., 2016), but it should not be assumed to have entirely positive outcomes.

## References

- Adams, G. S., & Inesi, M. E. (2016). Impediments to forgiveness: Victim and transgressor attributions of intent and guilt. *Journal of personality and social psychology, 111*(6), 866–881. <https://doi.org/10.1037/pspi0000070>
- Aquino, K., McFerran, B., & Laven, M. (2011). Moral identity and the experience of moral elevation in response to acts of uncommon goodness. *Journal of Personality and Social Psychology, 100*(4), 703-718. <https://doi.org/10.1037/a0022540>
- Bono, G., McCullough, M. E., & Root, L. M. (2008). Forgiveness, Feeling Connected to Others, and Well-Being: Two Longitudinal Studies. *Personality and Social Psychology Bulletin, 34*(2), 182-195. <https://doi.org/10.1177/0146167207310025>
- Bureau, J. S., Vallerand, R. J., Ntoumanis, N., & Lafrenière, M. K. (2013). On passion and moral behavior in achievement settings: The mediating role of pride. *Motivation and Emotion, 37*(2013), 121–133.  
<http://dx.doi.org.proxy.library.carleton.ca/10.1007/s11031-012-9292-7>
- Cárdenas, M., Páez, D., Rimé, B., Bilbao, Á., & Asún, D. (2014). Personal emotions, emotional climate, social sharing, beliefs, and values among people affected and unaffected by past political violence. *Peace and Conflict: Journal of Peace Psychology, 20*(4), 452-464.  
<http://dx.doi.org.proxy.library.carleton.ca/10.1037/pac0000038>
- Carver, C. S., Sinclair, S., & Johnson, S. L. (2010). Authentic and hubristic pride: Differential relations to aspects of goal regulation, affect, and self-control. *Journal of Research in Personality, 44*(6). 698-703, <https://doi.org/10.1016/j.jrp.2010.09.004>
- Chan, D. W. (2013). Subjective well-being of Hong Kong Chinese teachers: The contribution of gratitude, forgiveness, and the orientations to happiness. *Teaching and Teacher*

*Education*, 32, 22-30.

<http://dx.doi.org.proxy.library.carleton.ca/10.1016/j.tate.2012.12.005>

Chiou, W., Yang, C., & Wan, C. (2011). Ironic effects of dietary supplementation illusory invulnerability created by taking dietary supplements licenses health-risk behaviors. *Psychological Science*, 22(8), 1081-6. <https://doi.org/10.1177/0956797611416253>

DiDonato, T. E., McIlwee, L. J., & Carlucci, M. E. (2015). The fallout of forgiveness: How forgiveness predicts third-party perceptions of the forgiver and the forgiver's relationships. *Journal of Social and Personal Relationships*, 32(4), 417-440. <https://doi.org/10.1177/0265407514536291>

Eaton, J., Struthers, C. W., & Santelli, A. G. (2006). Dispositional and state forgiveness: The role of self-esteem, need for structure, and narcissism. *Personality and Individual Differences*, 41(2), 371-380.

[doi:http://dx.doi.org.proxy.library.carleton.ca/10.1016/j.paid.2006.02.005](http://dx.doi.org.proxy.library.carleton.ca/10.1016/j.paid.2006.02.005)

Eaton, R. J., Bradley, G., & Morrissey, S. (2014). Positive predispositions, quality of life and chronic illness. *Psychology, Health & Medicine*, 19(4), 473-489.

<http://dx.doi.org.proxy.library.carleton.ca/10.1080/13548506.2013.824593>

Effron, D. A., & Monin, B. (2010). Letting people off the hook: When do good deeds excuse transgressions? . *Personality and Social Psychology Bulletin*, 36(12), 1618-1634. <https://doi.org/10.1177/0146167210385922>

Effron, D., Cameron, J., & Monin, B. (2009). Endorsing Obama licenses favoring whites. *Journal of Experimental Social Psychology*, 45(3), 590-593.

<https://doi.org/10.1016/j.jesp.2009.02.001>

- Effron, D., Miller, D., & Monin, B. (2012). Inventing racist roads not taken: The licensing effect of immoral counterfactual behaviors. *Journal of Personality and Social Psychology*, *103*(6), 916–932. <https://doi.org/10.1037/a0030008>
- Ellithorpe, M., Cruz, C., Velez, J., Ewoldsen, D., & Bogert, A. (2015). Moral license in video games: When being right can mean doing wrong. *Cyberpsychology, Behavior, and Social Networking*, *18*(4), 203-207. <https://doi.org/10.1089/cyber.2014.0599>
- Enright, R. D., & Group, t. H. (1991). The moral development of forgiveness. In W. Kurtines, & J. G. (Eds.), *Handbook of Moral Behavior and Development Volume 1* (pp. 123-152). Hillsdale, NJ: Lawrence Erlbaum.
- Enright, R., & Group, t. H. (1994). Piaget on the moral development of forgiveness: Identity or reciprocity? *Human Development*, *37*(1), 63-80.  
<http://dx.doi.org.proxy.library.carleton.ca/10.1159/000278239>
- Etxebarria, I., Ortiz, M. J., Apodaca, P., Pascual, A., & Conejero, S. (2014). Antecedents of moral pride: The harder the action, the greater the pride? *The Spanish Journal of Psychology*, *17*(2), 1-33. <https://doi.org/10.1017/sjp.2014.56>
- Etxebarria, I., Ortiz, M., Apodaca, P., Pascual, A., & Conejero, S. (2015). Pride as moral motive: Moral pride and prosocial behaviour. *Infancia y Aprendizaje: Journal for the Study of Education and Development*, *38*(4), 746-774.  
<https://doi.org/10.1080/02103702.2015.1076267>
- Exline, J., Baumeister, R., Zell, A., Kraft, A., & Witvliet, C. (2008). Not so innocent: Does seeing one's own capacity for wrongdoing predict forgiveness? *Journal of Personality and Social Psychology*, *94*(3), 495-515. <https://doi.org/10.1037/0022-3514.94.3.495>

- Flanagan, K. S., Vanden Hoek, K. K., Ranter, J. M., & Reich, H. A. (2012). The potential of forgiveness as a response for coping with negative peer experiences. *Journal of Adolescence, 35*(5), 1215-1223.  
<http://dx.doi.org.proxy.library.carleton.ca/10.1016/j.adolescence.2012.04.004>
- Freedman, S. R., & Enright, R. D. (1996). Forgiveness as an intervention goal with incest survivors. *Journal of Consulting and Clinical Psychology, 64*(5), 983-992.  
<http://dx.doi.org.proxy.library.carleton.ca/10.1037/0022-006X.64.5.983>
- Fu, H., Watkins, D., & Hui, E. K. (2004). Personality correlates of the disposition towards interpersonal forgiveness: A Chinese perspective. *International Journal of Psychology, 39*(4), 305-316. <http://dx.doi.org.proxy.library.carleton.ca/10.1080/00207590344000402>
- Graham, L. E., Thomson, A. L., Nakamura, J., Brandt, I. A., & Siegel, J. T. (2019). Finding a family: A categorization of enjoyable emotions. *The Journal of Positive Psychology, 14*(2), 206-229. <http://dx.doi.org.proxy.library.carleton.ca/10.1080/17439760>
- Green, M., DeCourville, N., & Sadava, S. (2012). Positive affect, negative affect, stress, and social support as mediators of the forgiveness-health relationship. *The Journal of Social Psychology, 152*(3), 288-307.  
<http://dx.doi.org.proxy.library.carleton.ca/10.1080/00224545.2011.603767>
- Greene, D. C., & Britton, P. J. (2013). The influence of forgiveness on lesbian, gay, bisexual, transgender, and questioning individuals' shame and self-esteem. *Journal of Counseling & Development, 91*(2), 195-205.  
<http://dx.doi.org.proxy.library.carleton.ca/10.1002/j.1556-6676.2013.00086.x>
- Hong, W., Liu, R., Ding, Y., Oei, T. P., Fu, X., Jiang, R., & Jiang, S. (2020). Self-esteem moderates the effect of compromising thinking on forgiveness among Chinese early

- adolescents. *Frontiers in Psychology*, *11*(9).  
<http://dx.doi.org.proxy.library.carleton.ca/10.3389/fpsyg.2020.00104>
- Ingersoll-Dayton, B., Campbell, R., & Ha, J. (2009). Enhancing forgiveness: A group intervention for the elderly. *Journal of Gerontological Social Work*, *52*(1), 2-16.  
<https://doi.org/10.1080/01634370802561901>
- Karremans, J. C., Van Lange, P. A., Ouwerkerk, J. W., & Kluwer, E. S. (2003). When forgiving enhances psychological well-being: The role of interpersonal commitment. *Journal of Personality and Social Psychology*, *84*(5), 1011–1026.  
<https://doi.org/10.1037/0022-3514.84.5.1011>
- Khan, U., & Dhar, R. (2006). Licensing effect in consumer choice. *Journal of Marketing Research American Marketing Association ISSN*, *43*(1), 259-266.  
<https://doi.org/10.1509/jmkr.43.2.259>
- Kim, J. J., & Enright, R. D. (2016). “State and trait forgiveness”: A philosophical analysis and implications for psychotherapy. *Spirituality in Clinical Practice*, *3*(1), 32-44.  
<https://doi.org/10.1037/scp0000090>
- Kimmes, J., & Durtschi, J. (2016). Forgiveness in romantic relationships: The roles of attachment, empathy, and attributions. *Journal of Marital and Family Therapy*, *42*(4), 645-658, <https://doi.org/10.1111/jmft.12171>
- Kluwer, E. S., . Karremans, J. (2009). Unforgiving motivations following infidelity: Should we make peace with our past. *Journal of Social and Clinical Psychology*, *28*(10), 1298-1325.  
<http://dx.doi.org.proxy.library.carleton.ca/10.1521/jscp.2009.28.10.1298>

- Konstam, V., Chernoff, M., & Deveney, S. (2001). Toward forgiveness: The role of shame, guilt, anger, and empathy. *Counseling and Values, 46*(1), 26-39.  
<http://dx.doi.org.proxy.library.carleton.ca/10.1002/j.2161-007X.2001.tb00204.x>
- Kuchynka, S. L., Bosson, J. K., Vandello, J. A., & Puryear, C. (2018). Zero-sum thinking and the masculinity contest: Perceived intergroup competition and workplace gender bias. *Journal of Social Issues, 74*(3), 529-550. doi:10.1111/josi.12281
- Lin, S., Ma, J., & Johnson, R. E. (2016). When ethical leader behavior breaks bad: How ethical leader behavior can turn abusive via ego depletion and moral licensing. *Journal of Applied Psychology, 101*(6), 815– 830. <https://doi.org/10.1037/apl0000098>
- Little, L. M., Simmons, B. L., & Nelson, D. L. (2007). Health among leaders: Positive and negative affect, engagement and burnout, forgiveness and revenge. *Journal of Management Studies, 44*(2), 44(2), 243-260.  
<http://dx.doi.org.proxy.library.carleton.ca/10.1111/j.1467-6486.2007.00687.x>
- Loi, T., Kuhn, K., Sahaym, A., Butterfield, K., & Tripp, T. (2020). From helping hands to harmful acts: When and how employee volunteering promotes workplace deviance. *Journal of Applied Psychology, 105*(9), 944–958. <https://doi.org/10.1037/apl0000477>
- Luchies, L., & Finkel. (2011). The doormat effect: On the dangers of resolving conflict via unilateral forgiveness. In *The Psychology of Social Conflict and Aggression* (pp.217-230, doi:10.4324/9780203803813). Psychology Press.
- Macaskill, A., Maltby, J., & Day, L. (2002). Forgiveness and emotional empathy. *The Journal of Social Psychology, 142*(5), 663-665. <https://doi.org/10.1080/00224540209603925>
- MacNeil, B. M. (2009). The dark triad and faking ability on self-report personality inventories and autobiographical accounts. (Order No. AAINR44563), Retrieved from

<https://proxy.library.carleton.ca/login?url=https://www-proquest-com.proxy.library.carleton.ca/dissertations-theses/dark-triad-faking-ability-on-self-report/docview/622067011/se-2?accountid=9894>

- Maio, G. R., Thomas, G., Fincham, F. D., & Carnelley, K. B. (2008). Unraveling the role of forgiveness in family relationships. *Journal of Personality and Social Psychology*, *94*(2), 307–319. <https://doi.org/10.1037/0022-3514.94.2.307>
- McCullough, M. E., Worthington, E. L., & Rachal, K. C. (1997). Interpersonal forgiving in close relationships. *Journal of Personality and Social Psychology*, *73*(2), 321-336. <https://doi.org/10.1037/0022-3514.73.2.321>
- McCullough, M., Rachal, C., Sandage, S., Worthington, E., Brown, S., & Hight, T. (1998). Interpersonal forgiving in close relationships: II. Theoretical Elaboration and Measurement. *Journal of Personality and Social Psychology*, *75*(6), 1586-603. <https://doi.org/10.1037/0022-3514.75.6.1586>
- McNulty, J. (2011). The dark side of forgiveness: The tendency to forgive predicts continued psychological and physical aggression in marriage. *Personality & Social Psychology Bulletin*, *37*(6), 770-783. <https://doi.org/10.1177/0146167211407077>
- Monin, B., & Miller, D. (2001). Moral credentials and the expression of prejudice. *Journal of Personality and Social Psychology*, *81*(1), 33-43. <https://doi.org/10.1037/0022-3514.81.1.33>
- Mooney, L., Strelan, P., & Mckee, I. (2015). How forgiveness promotes offender pro-relational intentions: The mediating role of offender gratitude. *The British Journal of Social Psychology / the British Psychological Society*, *55*(1), 44-64. <https://doi.org/10.1111/bjso.12120>

- Newman, K. P., & Brucks, M. (2018). The influence of corporate social responsibility efforts on the moral behavior of high self-brand overlap consumers. *Journal of Consumer Psychology, 28*(2), 253-271. <https://doi.org/10.1002/jcpy.1027>
- Norman, K. (2017). Forgiveness: How it manifests in our physical health, psychological well-being and longevity. University of Pennsylvania ScholarlyCommons. Retrieved from [http://repository.upenn.edu/mapp\\_capstone/122](http://repository.upenn.edu/mapp_capstone/122)
- Paleari, F. G., Regalia, C., & Fincham, F. (2005). Marital quality, forgiveness, empathy, and rumination: A longitudinal analysis. *Personality and Social Psychology Bulletin, 31*(3), 368–378. <https://doi.org/10.1177/0146167204271597>
- Pascual, A., Conejero, S., & Etxebarria, I. (2020). Moral pride: A paradoxical effect also present in young adults? *The Journal of Psychology Interdisciplinary and Applied, 154*(2), 1-17. <https://doi.org/10.1080/00223980.2019.1661344>
- Piaget, J. (1932/1965). *The moral judgment of the child*. New York: Free Press.
- Polman, E., Pettit, N. C., & Wiesenfeld, B. M. (2013). Effects of wrongdoer status on moral licensing. *Journal of Experimental Social Psychology, 49*(4), 614-623. <http://dx.doi.org.proxy.library.carleton.ca/10.1016/j.jesp.2013.03.012>
- Preacher, K., Rucker, D., & Hayes, A. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research, 42*(1), 185-227. <https://doi.org/10.1080/00273170701341316>
- Raj, M., Wiltermuth, S., & Adams, G. (2019). The social costs of forgiving following multiple-victim transgressions. *Journal of Personality and Social Psychology: Interpersonal Relations and Group Processes, 119*(2), 1-23. <https://doi.org/10.1037/pspi0000215>

- Reed, G. L., & Enright, R. D. (2006). The effects of forgiveness therapy on depression, anxiety, and posttraumatic stress for women after spousal emotional abuse. *Journal of Consulting and Clinical Psychology, 74*(5), 920-929. <https://doi.org/10.1037/0022-006X.74.5.920>
- Silton, N. R., Flannelly, K. J., & Lutjen, L. J. (2013). It pays to forgive! Aging, forgiveness, hostility, and health. *Journal of Adult Development, 20*(4), 222-231. <https://doi.org/10.1007/s10804-013-9173-7>
- Strelan, P. (2007). Who forgives others, themselves, and situations? The roles of narcissism, guilt, self-esteem, and agreeableness. *Personality and Individual Differences, 42*(2), 259-269. <http://dx.doi.org.proxy.library.carleton.ca/10.1016/j.paid.2006.06.017>
- Strelan, P., Crabb, S., Chan, D., & Jones, L. (2017). Lay perspectives on the costs and risks of forgiving. *Personal Relationships, 24*(2), 392-407. <https://doi.org/10.1111/per.12189>
- Toussaint, L., Worthington, E., Van Tongeren, D., Hook, J., Berry, J., Miller, A., & Davis, D. (2016). Forgiveness working: Forgiveness, health, and productivity in the workplace. *American Journal of Health Promotion, 32*(1), 59-67. <https://doi.org/10.1177/0890117116662312>
- Tracy, J. L., & Robins, R. W. (2007). The psychological structure of pride: A tale of two facets. *Journal of Personality and Social Psychology, 92*(3), 506-525.
- Turnage, B. F., Hong, Y. J., Stevenson, A. P., & Edwards, B. (2012). Social work students' perceptions of themselves and others: Self-esteem, empathy, and forgiveness. *Journal of Social Service Research, 38*(1), 89-99. <http://dx.doi.org.proxy.library.carleton.ca/10.1080/01488376.2011.610201>

- Van Osch, Y., Zeelenberg, M., & Breugelmans, S. M. (2018). The self and others in the experience of pride. *Cognition and Emotion*, *32*(2), 404-413.  
<https://doi.org/10.1080/02699931.2017.1290586>
- Weinberg, M. (2013). The bidirectional dyadic association between tendency to forgive, self-esteem, social support, and PTSD symptoms among terror - attack survivors and their spouses. *Journal of Traumatic Stress*, *26*(6), 744-752.  
<http://dx.doi.org.proxy.library.carleton.ca/10.1002/jts.21864>
- Wilcox, K., Kramer, T., & Sen, S. (2011). Indulgence or self-control: A dual process model of the effect of incidental pride on indulgent choice. *Journal of Consumer Research*, *38*, 151-163. <http://dx.doi.org.proxy.library.carleton.ca/10.1086/657606>
- Wiltshire, J., Bourdage, J. S., & Lee, K. (2014). Honesty-humility and perceptions of organizational politics in predicting workplace outcomes. *Journal of Business and Psychology*, *29*(2), 235-251.  
<http://dx.doi.org.proxy.library.carleton.ca/10.1007/s10869-013-9310-0>
- Wohl, M. J., DeShea, L., & Wahkinney, R. L. (2008). Looking within: The state forgiveness scale. *Canadian Journal of Behavioural Science*, *40*(1), 1-10,  
<https://doi.org/10.1037/0008-400x.40.1.1.1>
- Wohl, M., Kuiken, D., & Noels, K. (2006). Three ways to forgive: A numerically aided phenomenological study. *The British Journal of Social Psychology / the British Psychological Society*, *45*(3), 547-61. <https://doi.org/10.1348/014466605X53695>
- Ysseldyk, R., & Wohl, M. (2011). I forgive therefore I'm committed: A longitudinal examination of commitment after a romantic relationship transgression. *Canadian Journal of*

*Behavioural Science/Revue canadienne des sciences du comportement*, 44(4), 257–263.

<https://doi.org/10.1037/a0025463>

Zhuang, Z., & Qiao, W. (2018). A study on college students' psychology of revenge and interpersonal forgiveness and the relationship with health education. *EURASIA Journal of Mathematics, Science and Technology Education*, 14(6), 2487-2492.

<https://doi.org/10.29333/ejmste/89517>

## Appendix A: University of Virginia Study 1 Consent Form

### Informed Consent Agreement

Please read this consent agreement carefully before you decide to participate in the study.

**Purpose of the research study:** The purpose of the study is to understand how people react to others after a hypothetical event that takes place on your workplace team.

**What you will do in the study:** You will be asked to read a scenario and to answer some questions about it.

**Time required:** The study will take approximately 5-15 minutes to complete. **Risks:** There are no anticipated risks in this study.

**Benefits:** There are no direct benefits to you for participating in this research study.

**Confidentiality:** No information will be collected that could identify you.

**Voluntary participation:** Your participation in the study is completely voluntary.

**Right to withdraw from the study:** You have the right to withdraw from the study at any time without penalty.

**How to withdraw from the study:** If you would like to withdraw from the study, please notify the experimenter or close the browser window. Because your data are not identifiable, we cannot withdraw any data you have submitted.

**Payment:** You will receive \$0.50 as payment for this study.

If you have questions about the study, contact:

Gabrielle Adams Batten School of Public Policy 235 McCormick Rd

University of Virginia, Charlottesville, VA 22903.

Telephone: (434)243-2405

gadams@virginia.edu

To obtain more information about the study, ask questions about the research procedures, express concerns about your participation, or report illness, injury or other problems, please contact:

Tonya R. Moon, Ph.D.

Chair, Institutional Review Board for the Social and Behavioral Sciences

One Morton Dr Suite 500

University of Virginia, P.O. Box 800392  
Charlottesville, VA 22908-0392  
Telephone: (434) 924-5999  
Email: [irbsbshelp@virginia.edu](mailto:irbsbshelp@virginia.edu)

Website: [www.virginia.edu/vpr/irb/sbs](http://www.virginia.edu/vpr/irb/sbs) Agreement: By clicking “>>” you agree to participate in the research study described above.

Page Break

Captcha Before you proceed to the survey, please complete the captcha below.

Skip To: End of Survey If Before you proceed to the survey, please complete the captcha below.() Is Displayed

End of Block: Informed Consent

## Appendix B: Study 1 Scenario

Please read the following scenario.

You work for a large advertising company called Trianon Advertising. At Trianon, you are part of a team of six that is responsible for developing new advertising campaigns for potential clients, and successfully pitching those ideas to these potential clients. Together, you and your teammates brainstorm, generate ideas, and create materials to pitch those ideas to your clients. Often, the six of you spend countless hours collaborating on these ideas, and in general, most of your teammates make an equal contribution to the final sales pitch. One of your teammates, Jim, however, has a tendency to contribute less than others – and often comes up with excuses as to why he is unable to contribute more.

One day at work, your team is assigned to work on an advertising campaign for a well-known consumer products company. The company has not yet decided to hire Trianon, but if your team is able to create an advertising campaign that impresses them, they are likely to select Trianon to lead their advertising campaign. You and your teammates are given four weeks to generate a pitch. While most of your teammates contribute equally to the project, Jim does not. In fact, he contributes almost nothing to the pitch.

On the day of the presentation, Jim jumps in at the last minute and presents the idea to the potential client and takes credit for coming up with the advertising campaign strategy. The potential client loves the idea and chooses Trianon.

Your boss, impressed by the advertising campaign, decides to promote Jim for his good work. You and your other teammates, however, are not praised or rewarded for your work on the project.

Would you forgive Jim for what happened?

Yes, I would forgive Jim.

No, I would not forgive Jim.

How willing would you be to forgive Jim for what happened?

Not at all			Moderately			Very Much
1	2	3	4	5	6	7

*Condition 1* Your other teammates decide to forgive Jim for what happened. They convey their decision to forgive to Jim. In other words, they explicitly tell Jim how they feel.

*Condition 2* Your other teammates decide not to forgive Jim for what happened. They convey their unwillingness to forgive to Jim. In other words, they explicitly tell Jim how they feel.

## Appendix C: Study 1 Questionnaire

Think about the situation just described to you. Compared to your other teammates, how much would your response make you feel...

	Not at all			Moderately			Very Much
Intelligent?	1	2	3	4	5	6	7
Confident?	1	2	3	4	5	6	7
Moral?	1	2	3	4	5	6	7
Virtuous?	1	2	3	4	5	6	7

Rate the extent to which your response would make you feel pride:

Not at all	Moderately			Very Much
1 2 3	4	5	6	7

In general, I deserve to be heard.

Strongly disagree	Neither agree nor disagree				Strongly agree
1 2 3	4	5	6	7	

I have a right to speak up.

Strongly disagree	Neither agree nor disagree				Strongly agree
1 2 3	4	5	6	7	

Imagine that your boss's boss finds out about what happened and offers to also promote someone else on your team. How much would you think you deserve to be that person?

Not at all	Moderately			Very Much
1 2 3	4	5	6	7

Imagine that your boss's boss finds out about what happened and offers to make reparations by giving your entire team a bonus of \$1,000, to be allocated as the group wishes. What % would you think you deserve?

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Imagine that you could engage in any of the following behaviors as an employee at Trianon. How likely would you be to do each of the following?

- Taken an additional or longer break than is acceptable at your workplace
- Come in late to work without permission
- Ask to work from home but you don't actually work

Not at all		Moderately likely		Very likely
1	2	3	4	5
				6
				7

If a similar situation happened in the future, I would have a right to hold a grudge against Jim even if everyone else on my team forgave him.

Strongly disagree		Neither agree nor disagree		Strongly agree
1	2	3	4	5
			6	7

If a similar situation happened in the future, I would have a right to forgive Jim even if everyone else on my team held a grudge against him.

Strongly disagree		Neither agree nor disagree		Strongly agree
1	2	3	4	5
			6	7

Did your teammates forgive Jim?

Yes

No

I don't remember

Was there anything unusual about the first study, or did you have any other reactions to the first study that you would like to share?

---

**Appendix D: Study 1 Demographics Questionnaire**

What is your gender?

Man

Woman

Other

Please enter your age:

---

Your ethnic background is:

White

Black

Hispanic/Latinx

Asian

Other/Mixed Race

## Appendix E: Study 1 Debriefing

**Purpose of the research study:** The purpose of the study is to understand how people reacted when people transgress against other group members. We aim to understand the psychological process underlying moral outrage and forgiveness.

**Confidentiality:** Because of the manner in which we have collected the data, we cannot link any information that would identify you the data. Your name will not be used in any report or any published dataset. Your data will only be analyzed and reported in aggregate.

The experimenter does not know which responses are yours. In this study, you were asked to describe how you would react to another student's response to the rally that took place. The results from this study will enable us to understand how people do and do not react to transgressions such as these.

If you feel especially concerned about the topic of this study, please feel free to phone the PI, Gabrielle Adams, at 434-243-2405 about options for counseling. Alternatively, you could also phone the UVA Counseling and Psychological Services (434-243-5556) or the Mary D. Ainsworth Psychological Clinic in the psychology department (434-982-4737) (provide alternative contacts if participants may need additional help).

Thank you for your participation in this study. If you have further questions about the study, please contact [gadams.uva@gmail.com](mailto:gadams.uva@gmail.com). In addition, if you have any concerns about any aspect of the study, you may contact Tonya Moon, Ph.D., Chair, Institutional Review Board for the Social and Behavioral Sciences, One Morton Drive, Suite 500, University of Virginia, P.O. Box 800392, Charlottesville, VA 22908-0392. Telephone: (434) 924-5999.

Additional Reading: <https://www.nytimes.com/2016/10/09/jobs/conflict-at-work-empathy-can-smooth-ruffled-feathers.html> <https://hbr.org/2015/09/the-organizational-apology>

## **Appendix F: Study 2 Announcement for Recruitment**

**Title of the study:** Workplace behavior.

**Eligibility Requirements** We are looking for adults, age 18 or over.

This research is being conducted by Dr. Michael J. A. Wohl, Dr. Gabrielle Adams, Alexander McCaffrey, and Mackenzie Dowson.

Your participation as well as your responses will be strictly confidential. Only researchers associated with the project will know that you participated in the study and no one will know how you responded to the questions asked.

We can anticipate no physical discomfort to you as a result of your participation in this study. You may, however, experience some anxiety or distress when thinking about some social issues. In the event that you feel anxiety or distress, you may withdraw at any time during the study without penalty. Information will then be provided linking you to appropriate health services in your local area.

**Eligibility Requirements:**

1. Must be at least 18 years of age

This study takes approximately 10 minutes, and upon completion, you will receive US \$0.70 for your participation.

This study has received clearance by the Carleton University Research Ethics Board B (CUREB-B Clearance # 112492) and is supported by a research grant from the Social Sciences and Humanities Research Council of Canada to Dr. Wohl.

## Appendix G: Study 2 Carleton University Consent Form

### Informed Consent

The purpose of an informed consent is to ensure that you understand the purpose of the study and the nature of your involvement. The informed consent must provide sufficient information such that you have the opportunity to determine whether you wish to participate in the study.

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**Present study:** To forgive or not to forgive? Transgressions in the workplace.

**Research personnel:** The following people are involved in this study, and may be contacted at any time if you have questions or concerns:

Dr. Michael Wohl (Faculty Member; michael.wohl@carleton.ca; +1-613-520-2600, ext. 2908).

Dr. Gabrielle Adams (Faculty Member; gadams@virginia.edu; +1-434-243-2405).

Alex McCaffrey (Graduate Student; alexmccaffrey@cmail.carleton.ca).

Mackenzie Dowson (Research Assistance; mackenziedowson@cmail.carleton.ca)

**Concerns:** Should you have any ethical concerns with the study, please contact the REB Chair, Carleton University Research Ethics Board-B (by phone: 613-520-2600 ext. 4085 or by email: ethics@carleton.ca). For all other questions about the study, please contact the researcher. The study is registered under CUREB-B Clearance # 112492.

**Purpose and Task Requirements:** In this study, we are looking for individuals 18 years of age or older to answer a variety of questions about a scenario. The purpose of the study is to understand how people react to others after a hypothetical event that takes place on your workplace team. The study will take approximately <10 minutes to complete.

**Potential Risk/Discomfort:** We can anticipate no physical discomfort to you as a result of your participation in this study. If you feel any discomfort or distress while reading a question in this study please feel free to leave it blank – no penalty will be incurred.

**Benefits/Compensation:** You are eligible for compensation of \$0.70 if you are 18 years or older.

**Anonymity/Confidentiality:** Your participation in this study is anonymous. No identifying information (e.g., name, IP address) will be collected as part of your participation in this study. All data on the Qualtrics server is encrypted and protected using multiple layers of security (e.g., encrypted websites and password protected storage). For more information about the security of data on Qualtrics, please see the Qualtrics security and privacy policy, which can be found at the following link: <http://www.qualtrics.com/security-statement/>

Your data will be stored and protected by Qualtrics, but may be disclosed via a court order or data breach. In view of this we cannot absolutely guarantee the full confidentiality and anonymity of your data. With your consent to participate in this study you acknowledge this.

**Data Storage and Sharing.** The data collected in this study are strictly confidential, once transferred from Qualtrics to the research team. There will be no personal information attached to your data that can be used identify you personally. The data will be stored on the computers of the researchers and research assistants involved with this project. As there will be no personal information associated with the data, this dataset will be stored electronically and kept indefinitely on servers in Toronto. Additionally, we will upload this anonymized data set to an online data repository called Open Science Framework (<https://osf.io/>) for research and teaching purposes. Anonymized data may also be used for publication and presentation purposes, in which case only aggregate data will be presented.

**Right to withdraw:** Your participation in this study is entirely voluntary. At any point during the study, you have the right not to complete certain questions or to withdraw with no penalty whatsoever. If you withdraw, you have the right to request that your data be deleted. If, after participating, you decide you want your data withdrawn, please email one of the researchers identified on the debriefing form. The researcher will then delete any record of your participation in this study, as well as the email you sent. We anticipate the study will be complete by the end of November 2020. Once the study is complete, all identifying information will be deleted and thus researchers will have no way of identifying your responses. In this situation, the researchers will not be able to delete your data. If you would like to withdraw from the study and NOT have your data deleted, simply follow the instructions stated below:

To withdraw at any point, simply click the “proceed” button at the bottom of each page until you reach the debriefing. In the debriefing, you can learn more about the study and retrieve your Completion Code.

**Research Funding.** This research is supported by a research grant from the Social Sciences and Humanities Research Council of Canada (#435-2019-0692) to Dr. Wohl.

## Appendix H: Study 2 Study Scenario

Please read the following scenario.

You work for a large construction company called Trianon Construction. At Trianon, you are part of a crew of six that is responsible for getting a house completed before the buyer's deadline. If you meet the deadline, your boss has promised the team a bonus. Together, you and your crew plan all the work that needs to be done to get the job done on time. Often, the six of you spend countless hours collaborating on the project, and in general, most of your crew make an equal contribution. One of your crew, Jim, however, has a tendency to work less than others – and often comes up with excuses as to why he is unable to work more.

Near the last day on the site, the buyer's come to the house to see the progress and to chat with your crew about the work done. Jim jumps in and takes the home buyer for a walk around the property while the rest of the crew continues working. After a very long tour, the crew observes Jim chatting with the buyer at his car. They are pointing at various parts of the house, smiling, and nodding.

Your boss later informs the crew that the buyer was so impressed with the work Jim did on the project that he has hired Trianon for another job. The boss tells everyone that they will be the crew for that new job with Jim as their new foreman—a promotion that comes with a substantial raise. You and your other teammates, however, are not praised or given a raise.

Would you forgive Jim for what happened?

Yes, I would forgive Jim.

No, I would not forgive Jim.

### *Condition 1*

Your other teammates decide **not to forgive** Jim for what happened.

They **convey** their decision to forgive to Jim. In other words, they explicitly tell Jim how they feel.

### *Condition 2*

Your other teammates decide **to forgive** Jim for what happened.

They **convey** their decision to forgive to Jim. In other words, they explicitly tell Jim how they feel.

Please briefly describe the situation and the outcome:

---

## Appendix I: Study 2 Questionnaire

Imagine that you could engage in any of the following behaviors as an employee at Trianon. How likely would you be to do each of the following?

- ... take an additional or longer break than is acceptable at your workplace.
- ... come in late to work without permission.
- ... ask to work from home but you don't actually work.
- ... call in sick when you are not sick.
- ... take work tools if there was no risk in being caught.
- ... look the other way if you saw someone stealing tools.
- ... tell a buyer you have done more work on a project than you have actually done.
- ... over charge a buyer.
- ... tell a white lie.
- ... take more credit for your crew's work than justified.
- ... criticize another crew member's work behind their back.
- ... interfere someone's work to get them in trouble.
- ... share troubling gossip about another crew member.

In the space provided below, please list three things you would like to purchase:

---



---



---

Imagine that you could engage in any of the following behaviors as an employee at Trianon. How likely would you be to do each of the following?

- ... volunteer to put in more hours at work.
- ... donate to charities supported by Trianon if asked to do so.
- ... help the company by volunteering to recruit more workers.
- ... help other crew members in need.
- ... trade shifts to help the team.
- ... give credit to crew members when talking about the team's work.

Rate the extent to which your response to the situation at Trianon made you feel pride:

Not at all			Moderately			Very Much		
1	2	3	4	5	6	7		

For this question, we would like you to think about your decision to [insert decision] Jim and your teams' decision to forgive Jim makes you feel. I feel...

	Strongly disagree						Strongly agree					
... fulfilled	1	2	3	4	5	6	7					
...pompous	1	2	3	4	5	6	7					

...productive	1	2	3	4	5	6	7
... self-worth	1	2	3	4	5	6	7
...smug	1	2	3	4	5	6	7
...stuck-up	1	2	3	4	5	6	7

Not at all		Moderately likely		Very likely		
1	2	3	4	5	6	7

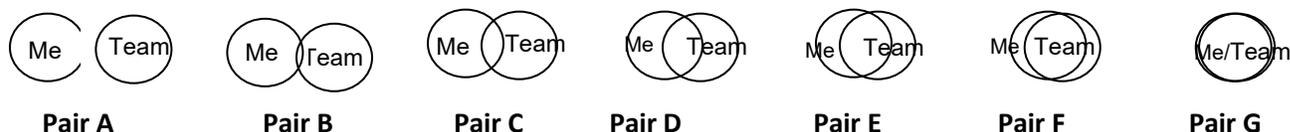
Imagine that your boss could promote someone else on your team. How much would you think you deserve to be that person?

Not at all		Moderately		Very Much		
1	2	3	4	5	6	7

*Group-self overlap (adapted from Aron, Aron, & Smollan, 1992)*

Please look at the pairs of circles below. In each pair, the circle on the left represents you and the circle on the right represents your team.

If the situation described at Trianon were to happen to you at work, or at a past job, which pair of circles would best represents how close you would feel to your team due to such a situation?



*Idiosyncrasy credits (invented measure)*

Imagine that you could engage in any of the following behaviors as an employee at Trianon. How likely would you be to do each of the following?

- ... suggest new ideas at meetings.
- ... take charge on the job site.
- ... interrupt coworkers if they seem not to be understanding something.
- ... openly criticize a project's direction if it seems wrong.
- ... work in a way that's best, not necessarily what is standard.

*Entitlement (from Zitek et al., 2010)*

At the moment (i.e., right now), how much would you say you disagree or agree with the following statements?

I am entitled not to suffer too much

I deserve good things in my life  
I deserve an extra break now and then  
I should not have to inconvenience myself for others

Strong disagreement                      Strong agreement  
1       2       3       4       5       6       7

Did your teammates forgive Jim?

Yes

No

I don't remember

**Appendix J: Study 2 Demographics Questionnaire**

D1. What is your gender?

Man  
Woman  
Other

D2. Please enter your age:

[open ended]

D3. Your ethnic background is:

White Black Hispanic/Latinx Asian Other/Mixed Race

## Appendix K: Study 2 Carleton University Debriefing Form

### Debriefing

#### Michael Wohl (Principle Investigator)

Carleton University, Department of Psychology  
Tel.: 613-520-2600 x 2908  
Email: michael.wohl@carleton.ca

#### Alexander McCaffrey (Graduate Student)

Carleton University, Department of Psychology  
Tel.: 613-520-2600 x 6312  
Email: alexmccaffrey@cmail.carleton.ca

#### Gabrielle Adams (Associate Professor)

University of Virginia, Batten School of Public Policy  
Tel.: 434-243-2405  
Email: [gadams@virginia.edu](mailto:gadams@virginia.edu)

#### Mackenzie Dowson (Research Assistance)

Carleton University, Department of Psychology  
Tel.: 613-520-2600 x 2683  
Email: mackenziedowson@cmail.carleton.ca

Research Board: CUREB-B

Clearance #: 112492

Date of Clearance: 2020/12/4

### What are we trying to learn in this research?

The purpose of the study is to understand how people reacted when people transgress against other group members. We aim to understand the psychological process underlying moral outrage and forgiveness.

### Why is this important to scientists or the general public?

This research contributes to psychologists' knowledge and understanding of intergroup relations. Specifically, findings from this study shed light on the psychological factors (e.g. forgiveness) underlying people's feelings about other people.

### What are our hypotheses and predictions?

We predict that other individuals have an impact about how we feel about forgiving/not forgiving others. Also, that this changes how people act in the workplace.

### Is there anything I can do if I found this experiment to be emotionally upsetting?

Yes. If you feel any negative emotion or anxiety due to your participant in this study (e.g., due to the topic of the study) please feel free to contact one of the helplines nearest your location. Alternatively, The Toronto Distress Centre helpline offers an open space for anyone who feels distress to talk about their feelings anonymously and be heard. More information about this helpline can be found at <https://www.torontodistresscentre.com>.

**What if I have questions later?**

If you have any remaining concerns, questions, or comments about this research, please feel free to contact: Dr. Michael Wohl (Principal Investigator; michael.wohl@carleton.ca; +1-613-520-2600, ext. 2908).

Ethics contact information: Should you have any ethical concerns with the study, please contact the REB Chair, Carleton University Research Ethics Board-B (by phone: 613-520-2600 ext. 4085 or by email: ethics@carleton.ca). For all other questions about the study, please contact the researcher.

Thank you for participating in this research!

## Appendix L: Study 2 Ineligibility Debriefing Form

### Ineligible Debriefing

Thank you for your interest. Unfortunately, at this time, you are ineligible to participate in this study. If you have further questions, please contact Dr. Michael Wohl ([michael.wohl@carleton.ca](mailto:michael.wohl@carleton.ca)).

Ethics contact information: Should you have any ethical concerns with the study, please contact the REB Chair, Carleton University Research Ethics Board-B (by phone: 613-520-2600 ext. 4085 or by email: [ethics@carleton.ca](mailto:ethics@carleton.ca)). The study is registered under CUREB-B Clearance #112492. For all other questions about the study, please contact the researcher.