Motivations and Consequences of Punishment: A Justice Motive Theory Perspective

Charli Sky Sherman

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Department of Psychology

University of Essex

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Abstract

This thesis explores punishment as a reaction to injustice from the perspective of just-world theory, which argues that individuals are motivated to believe that the world is a just and fair place where people get what they deserve. Despite the theory's prominence, there has been limited research on punishment. Evidence from mock-jury studies (Devine & Caughlin, 2014; Mazzella & Feingold, 1994) suggests that punishment and guilt attributions can be biased by extra-legal factors relating to victims and defendants, potentially leading to wrongful punishment and innocent individuals suffering within the criminal justice system.

The research first examined whether extra-legal attributes, irrelevant to legal proceedings, could influence punishment severity. Chapter 2 found no significant effect of a defendant's appearance on punishment severity. Chapter 3 expanded on this by exploring additional extra-legal attributes, such as socio-economic status and the target's character (victims and defendants), either in isolation or in combination with other attributes. The results showed that the defendant's character affected punishment severity, either alone or interacting with the victim's attributes, and these effects were mediated by perceptions of injustice and deservingness, in line with the just-world theory. Highlighting how bias from extra-legal attributes could lead to unjust punishment decisions for the defendant. Chapter 4 examined reactions to exonerees who had been wrongfully imprisoned, showing that character derogation occurred when the miscarriage of justice was more severe. Finally, Chapter 5 used a novel eye-tracking method to explore selective exposure to guilt- and innocence-affirming information based on the severity and resolution of miscarriages of justice. Showing that people spent more time on guilt-affirming documents when the cases were unresolved compared to innocence affirming documents. Overall, the research opens promising avenues for further investigation into normative and counter-normative responses

to injustice. The findings deepen our understanding of how extra-legal factors influence judgements within the criminal justice system and how people react to clear instances of injustice exonerees face.

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Chapter 1: General Introduction.

In the first five weeks after the documentary "Making a Murderer" was released, it was reported that over 19.3 million people watched Steven Avery's unsuccessful plea for freedom (Miller, 2017). Public interest in true crime documentaries and television series that dramatise crime and justice has grown in recent years (Richards, 2023). One possible explanation for the public's interest in these sorts of cases could stem from Lerner's (1980) just-world theory and the learned commitment to deservingness. According to just-world theory when there is evidence that contradicts the idea that the world is just and fair, for example, a person suffering undeservedly, we are more likely to respond in a way which attempts to restore or rationalise the threat it poses to the 'just-world' (Hafer & Rubel, 2015; Lerner, 1980).

In line with this, more so than ever before, the public has access to information via news outlets about the suffering of people all around the world. This around-the-clock access to crime news reports can be problematic in courts as it can allow jurors to have a pretrial publicity bias about the case, which allows jurors to make assumptions and have pre-trial biases including prejudices against the defendant and the victim before the proceedings begin (Daftary-Kapur, 2009; Ruva et al., 2006). Mock jury research suggests that the jurors' guilt and punishment judgements of defendants are also influenced by extra-legal attributes of victims and defendants which hold no legal weighting. These extra-legal factors can include attractiveness, race, age, gender, socio-economic status and pre-trial publicity, all of which should not skew jurors' perceptions of the defendant (or victim) when considering attributions of guilt or recommended punishment (Devine & Caughlin, 2014; Mazzella & Feingold, 1994). Thus, suggesting that punishment could be partially influenced by the attributes of those involved in the trial instead of depending solely on factual evidence. These

biases may contribute to the mounting numbers of wrongfully convicted individuals who have subsequently had their convictions overturned in the last 35 years (Innocence Project, 2024; The National Registry of Exonerations 2014). Unlike 'prototypical' victims[1] these wrongfully convicted individuals have suffered at the hands of the criminal justice system. Yet following their release from prison these individuals face stigmatisation from the public, even having their innocence questioned and receiving a general lack of support for their reintegration into society (Clow & Leach, 2015; Clow & Ricciardelli, 2014; Westervelt & Cook, 2010). The following section will explore what is known about these victims of wrongful convictions and miscarriages of justice (MCJ) and how the suffering of these less 'prototypical victims' can be understood according to theory.

Miscarriages of justice and consequences of punishment

The availability of documentaries on streaming services has fuelled public interest in cases of miscarriages of justice. For example, the highly publicised case of Amanda Knox via the Netflix documentary "Amanda Knox" (Innocence Project, 2024). Much of the information presented in these documentaries is widely accessible to the public in online databases, including The National Registry of Exonerations. Since 1989, there have been over 3,464 convictions successfully overturned with the assistance of charities including the Innocence Project (Innocence Project, 2024). Numerous convictions have been overturned after the advancement in forensic evidence analysis (The National Registry of Exonerations, 2024). One distinction that should be made is that convictions can be overturned for various reasons; however, the appeals court must be certain that the current conviction is unsafe. This

[1] Throughout the thesis the term "prototypical victims" will be used which refers to victims in the more traditional sense as seen throughout just-world research,

can mean insufficient evidence that the convicted person was guilty or sufficient evidence that clears them or implicates another person, thus they are ‘factually innocent’ (Aglialoro, 2013).

Just-world research has typically explored reactions to the undeserved suffering of ‘prototypical victims’ that is, a person who has suffered at no fault of their own. Examples include a victim who has suffered at the hands of another person or a random misfortune (Hafer, 2000). Unlike the suffering experienced by these ‘prototypical victims’ that is often caused by another person or random fate, the suffering experienced by exonerees is caused by the justice system itself. From the just-world perspective, it advocates that people have a deeply engrained motivation to maintain justice. The criminal justice system’s effectiveness is a fundamental part of maintaining a just-world. The criminal justice system applies the laws, promoting and reinforcing the commitment to deserved outcomes as ‘bad guys’ get what they deserve. Therefore, wrongful convictions could be threatening to this perspective for multiple reasons. Firstly, the absence of a guilty suspect (after the exoneration of the wrongfully convicted person) often leads to the reopening of the original case and brings to light the renewed injustice for the original victim. Secondly, there would be injustice created by the time spent wrongfully behind bars for the exoneree. Thus the exoneration of the wrongfully convicted individual creates injustice not only for themselves as a result of them suffering unjustly but also the original victim who no longer has justice for what happened to them. The presence of the wrongful conviction also suggests that there are failings within the criminal justice system which can threaten the legitimacy of the system and the perception that the world is just and fair.

According to System Justification Theory (SJT) people are motivated to defend and bolster social, political and economic systems to reinforce and justify the status quo (Jost et

al., 2004). Thus, the undeserved suffering experienced by an exoneree not only threatens the perception of the just-world, but it also threatens the legitimacy of the system that also attempts to reinforce the predictable nature of actions and outcomes in the real world. Therefore, exonerees could motivate similar reactions from observers (e.g., derogation and blame) to justify their suffering, akin to the reactions people engage with when rejecting the undeserved suffering of a 'prototypical' victim to protect ones BJW (see Dawtry et al., 2020 for a review).

To date, much of the research into reactions to exonerees has explored public perceptions and feelings about exonerees being reintegrated into their local area (Clow & Leach, 2015; Scherr et al., 2020). This suggests that exonerees can have their innocence questioned and face further stigmatisation even after their convictions are overturned (Clow & Leach, 2015). These 'false confessors' have also been seen to be less intelligent and more likely to have a mental health condition, and this can be seen as a contributing factor(s) to why they falsely confessed in the first place (Chojnacki et al., 2008). Further evidence reinforces the idea that false confessors are viewed as less innocent and having mental health conditions in addition to being less deserving of reintegration support (Norris et al., 2019). The contributing factors to their wrongful conviction are also influential, with exonerees who falsely confessed to a crime that they did not commit perceived as being more guilty than those who were misidentified or implicated by a jailhouse snitch (Clow & Leach, 2015). These reactions to exonerees resonate with findings on rejecting victims from BJW research, for example, by devaluing the victim's character or blaming their behaviour instead of meeting the victims with sympathy and compassion (for a review see Dawtry et al., 2020). Exonerees may also face similar reactions as they threaten justice in many ways, as highlighted earlier, as a result of their victimisation and suffering. Thus, people may be more

motivated to rationalise their suffering as being deserved, as opposed to the idea that the world may not be just and fair.

In the case of exonerees, qualitative research suggests that the public supports wrongfully convicted individuals and believes that they should receive both compensation and a public apology to reinforce their innocence and restore faith in the criminal justice system (Clow et al., 2011). Yet more recently research has suggested that the public has little desire to support the services that are in place to reintegrate exonerees into the community (Privitelli et al., 2023). Another parallel with responses to 'prototypical' victims according to BJW is that in socially driven situations people often behave and respond in socially normative and acceptable ways. Research by Dawtry et al. (2018) explored the influence that using relative and absolute worded questions had on how much a person would derogate a victim. The results suggested that more derogation was reported towards the innocent victims when the questions used a relative scale compared to an absolute scale. It was inferred that the relative measures were less suppression-prone than the absolute judgements, meaning the participants derogated the innocent victims more freely without explicitly breaching social norms by doing so (Dawtry et al., 2018). Reactions to victims according to Justice Motive Theory (JMT) can be divided into rational and non-rational reactions, each attempt to maintain and protect the observer's belief in the just world. These reactions and motibvations for them will be discussed in turn (Hafer & Rubel, 2015).

Justice Motive Theory

Justice Motive Theory suggests that people have an inherent need to believe that the world is a just and fair place where individuals get what they deserve (Lerner, 1980). The belief begins to develop in childhood and helps people make sense of the world and engage

in everyday activities with confidence that their efforts will eventually be rewarded (Lerner, 1965, 1977; Long & Lerner, 1974; Piaget, 1965; 2013). Children learn to delay gratification by believing that by doing so will lead to them receiving their deserved outcomes (Lerner, 1977). This belief extends to others, creating the perception that the world is fair for everyone (Hafer & Rubel, 2015). However, everyday experiences can challenge this belief, such that when people witness undeserved suffering or rewards (Callan et al., 2013a; Harvey et al., 2016). Despite these contradictions, people often defend the just-world belief to maintain their sense of predictability and fairness, sometimes even at the expense of those who suffer (Lerner & Simmons, 1966).

Lerner (1977) noted that this commitment to deservingness allows people to pursue long-term goals with confidence. Research suggests that those who hold onto this belief are more likely to use defensive strategies to protect their worldview (Hafer, 2000; Hafer & Gosse, 2010; Lerner & Clayton, 2011). Although this belief has been referred to as a "fundamental delusion" (Lerner, 1980; Hafer & Rubel, 2015), people are motivated to restore justice when it is threatened, often by any means necessary, sometimes via cognitive strategies that do not actually restore justice, just the observers perception of it. Some of these just-world strategies will be explored in turn.

How people react to the injustice that is caused by another person's suffering has captured the interest of social psychologists for the latter half of the twentieth century (Dawtry et al., 2020; Hafer & Rubel, 2015; Lerner, 2003). Much research has explored what motivates non-rational reactions (or strategies) to injustice (Lerner & Simmons, 1966; Hafer & Rubel, 2015). These include devaluing the victim's character or blaming their behaviour to rebalance the threat that the person's suffering poses to the just-world by seeing their outcome as deserved and thus protecting the just-world (Dawtry et al., 2020). Early research

by Lerner and Simmons (1966) investigated reactions (rejection and derogation) of an innocent victim. The task showed a 'victim' receiving electrical shocks when they incorrectly answered questions before being assigned to one of a possible six conditions and rating the 'victims' character. The results suggested that when the participants could help to stop the 'victims' suffering they rejected the victim less. Conversely when they were unable to stop the 'victims' suffering or if participants were unsure if the victim would be compensated the victim was more likely to face rejection and devaluation. Although counter-normative, these reactions support their hypotheses that the rejection and devaluation of the suffering victim does support the observer's need to believe in the just-world (Lerner & Simmons, 1966). The rejection and devaluation of the victim allows the observer to reframe their undeserved suffering as being deserved as this devaluation means the victim now 'deserved' their suffering as according to BJW "people deserve what they get and they get what they deserve" (Lerner, 1980).

Non-Rational Reactions to Injustice

These 'non-rational' responses to injustice allow the observer to deem the individual *deserving* of the outcome they received, however they do not directly offer justice for the suffering individual, unlike rational responses. However, rational responses require a more proactive response from the observer. They are not always readily available when the incident occurs (e.g., punishing a perpetrator can take months as it requires a police investigation). Each of these responses will be explored in turn.

The act of devaluing or blaming a victim for their misfortune has attracted a lot of research attention from social psychologists since Lerner and Simmons (1966) seminal work. These non-rational reactions to a person suffering breach social and moral norms as victims

should be treated with sympathy and compassion (Dawtry et al., 2018). Further emphasis is placed on the driving force that the commitment to the just-world can play in reactions to victims and the rationalising of their suffering (Lerner, 1998; Lerner & Goldberg, 1999). This integral commitment to justice can be seen when we consider how people react differently even when people are believed to suffer the same fate. For example, suggesting that people who are more (vs. less) attractive or younger (vs. older) can be seen to suffer different amounts even when the events and suffering are consistent (Callan et al, 2007; Callan et al., 2012). This suggests that people are motivated to rationalise or even reconstruct events in ways that deem some people more deserving of a negative outcome by virtue of their character or behaviour (Callan et al., 2009).

Evidence from the seminal early work by Lerner and Simmons (1966) identified differences in the devaluation of the learner who was observed being shocked for incorrect answers as part of a learning game by the participant under numerous conditions. When the victims' (confederates) suffering persisted or when it was unclear if they would be compensated for their suffering, they were devalued and rejected more. While more recent research by Haynes and Olson (2006) explored just-world reactions to a victim suffering by manipulating their character (likeable vs. unlikeable) and behavioural responsibility for causing the accident themselves (high vs. low). The results suggested that unlikeable victims with low responsibility for their suffering faced more derogation, in contrast to the likeable victims who were highly responsible for their suffering own suffering. Thus supporting early work which suggested that devaluing and rejecting the victim, allowed for the victims suffering to be construed as deserved and, in turn, less threatening to the just world as the victim got what they deserved (Lerner, 1980). Distorting the perceptions of the victim's character and blameworthiness in this way allows for the observer to perceive the

victimisation as relatively more deserved and, overall, less threatening to the just-world (for a review see Dawtry et al., 2020).

Blaming a person for their own victimisation entails rationalising their behaviour as being somewhat responsible for the suffering that they endured (Lerner & Miller, 1978). Work by Lanström et al. (2016) explored how blameworthy victims (and perpetrators) were of a sexual assault (vs. sexual harassment) when the victim presented flirtatious (vs. non-flirtatious) behaviour. The results suggested that the most blame was attributed towards perpetrators than the victims, however, the victims who were flirtatious in both the sexual harassment and sexual assault cases were attributed more blame the non-flirtatious victims. Victim blaming has also been attributed towards rape victims who were intoxicated at the time of their attack with intoxicated victims being blamed more for their attack than sober ones (for a review see Grubb & Turner, 2012).

Victim blaming enables observers to rationalise and reinterpret the reasons why the person's behaviour was to blame. Another way to rationalise the threat to justice is to reconstruct memories in ways whereby it reinforces our beliefs, at times at the expense of the victim. Research by Dawtry et al. (2018) explored how memory reconstruction and rape myth-accepting beliefs could facilitate victim blaming. The results suggested that in line with earlier work by Callan et al. (2009) that memory construction was goal orientated and linked with motivations to recall information that was congruent with rape-myths. Further reinforcing how memory construction can assist in enabling victim blaming (Dawtry et al., 2019). The earlier work by Callan et al, (2009) indicated that recalled information was in line with justice concerns, more specifically in Study 1 the particpants recalled that the amount that a person won on the lottery was lower on average when the lottery winner was a bad (vs. good person. By doing so, the lottery winner is being rewarded with less winnings as they

deserve less than if the person was deseribed as ‘good’ (vs. bad). Thus, the victim deserved what they experienced whilst the observer/ participant psychologically protects themselves from the idea that they could also similarly becoming a victim to such a misfortune as the information they recall seperates them from the vulnerabilities that lead the victim to face misfortune (Hafer, 2000).

While the most convicting evidence for the justice motive (Lerner, 1980; 1998) comes from how people react to injustice to maintain their commitment to justice. To date, much of the evidence comes from non-rational reactions, including victim derogation and blame (Dawtry et al., 2020). Although both are motivated by the need to maintain and protect the idea that the world is predictable, they are conceptually different (Lerner & Miller, 1978). Derogation rationalises injustice by devaluing the character of the person to deem them deserving of the outcome (Dawtry et al., 2020; Lerner & Simmons, 1966). While blame rationalises injustice by blaming their behaviour as a justification for the misfortune (Dawtry et al., 2019). Unjust outcomes can also be understood by immanent justice reasoning, which attributes a person’s prior misdeeds as the cause of their current suffering even when there is no plausible link between them (Callan et al., 2010; Callan et al., 2013b). These non-rational strategies allow for a persons current misfortunes to be construed as being deserved in some way, thus less threatening to the just-world (Callan, et al., 2006; Callan et al., 2013b). In contrast, rational reactions to injustice have received substantially less attention in existing research. These rational reactions to injustice include punishing the person responsible (Halabi et al., 2015) or assisting the victim in some way to address the injustice experienced directly (Zagefka et al., 2011).

Rational Reactions to Injustice

In comparison to the non-rational reactions to the observed threats to justice, there is also a range of normative ways that, although they require a more proactive and intentional approach as they require the observer to invest time and effort to assist the victim in some way and are often less prevalent as they are not always viable options and can be costly for the observer (Lerner, 1980). One such way is by assisting the victim, for example, by donating to charities that provide aid for victims of natural disasters (Zagefka et al., 2011). This allows the observer to actively attempt to reduce the victims' suffering whilst also maintaining their just-world beliefs (Gaucher et al., 2010).

Another is punishing the person responsible, which can enable the observer to protect their perception that the world is just and fair whilst simultaneously providing justice for the victim and punishing the individual responsible (Halabi et al., 2015). The value placed on the victim has been shown to influence how much an observer punishes the person responsible for their misfortune. Research by Callan et al. (2007) suggested that observers were more punitive towards a person when the victim of the crime was more (vs. less) physically attractive. Similar effects were seen in more recent research by Callan et al. (2012) were seen in response to younger (vs. older) people. Across three studies, the observers rated a car crash experienced by an older (vs. younger) person as less unfair and allocated less punishment (Study 1). The recommended punishment on behalf of the older (vs. younger) person was less as their belief-in-the-just-world (BJW) was less threatened (Study 2). Finally, observers who were higher in ageism downplayed the suffering of the older (vs. younger) victim by rating it as less unfair and recommended less punishment for the wrongdoer (Study 3) (Callan et al., 2012). Thus how much people want to punish on behalf of victims can depend on how they

are valued. In turn how deserving the victim are of being punished can be at least in part be due to a persons observable attributes.

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Social and Psychological Bases of Punishment

The work throughout this thesis will primarily explore retributive motivations for punishment, whereby the punishment severity should match the suffering caused to a person by ensuring the wrongdoer gets their ‘just desserts’ which is typically motivated by moral

outrage and deserved outcomes (Carlsmith & Darley, 2008; Darley & Pittman, 2003). This chapter will begin by drawing on research that has explored social motivations of punishment, such as social control and deterrence which often means that the punishment is more severe than the crime as a means to "make an example of" the wrongdoer.

Punishment arguably attempts to maintain control over offenders, whether it is by deterring future offending, incapacitating them so they cannot offend or rehabilitating them into model citizens and reducing reoffending in the future. These motivations all aim to reduce future offending by controlling the offender in some way (Van Prooijen, 2017). In some cases where there is an increase in a particular type of offending, an offender may be made an example by receiving a harsh sentence. These sentences attempt to not only deter the individual from reoffending but also to deter the public from offending more generally (Carlsmith et al., 2002; Paternoser, 2010). The deterrence motive assumes that people behave rationally. Thus, according to the deterrence motive punishing a person more severely should imply that the repercussions of being caught would outweigh the positive associated with committing the crime (Carlsmith et al., 2002; Carlsmith & Darley, 2008). Thus the deterrence motive is seen as a tool that is used to prevent future crime. In contrast, this thesis will explore the role of retributive punishment which focuses on punishing in a way that people get their just desserts for the crime that they have already committed (Tan & Xiao, 2018). Yet evidence suggests that although often people report that they support deterrence-based punishment often their punishment allocations represent a retributive-based punishment (Crockett et al., 2014; Twardawski et al., 2020; Vidmar & Miller, 1980).

Kant's (1952; 2017) early philosophy suggested that the primary motivation for punishment should be to rebalance the scales of justice by punishing the offender to even out the moral wrong that was caused to the victim. Research by Gerber and Jackson (2013)

attempted to disentangle the confusion around the definition of retributive justice. Using an online survey, they explored if retribution was used more often as revenge against the offender to make them suffer, or if retribution was used as just desserts to restore justice by proportionately compensating the victim. The results suggested that these two motivations likely co-exist in the same domain of deservingness but should equally be treated as two separate concepts. Whilst they do appear to co-exist retribution as revenge was associated with harsher punishment compared to retribution via just desserts which were predicted by value restoration whereby moral balance can be restored by assigning punishment to an offender in line with the harm inflicted (Gerber & Jackson, 2013). Retributive justice suggests that a person must *deserve* the punishment that they receive in response to the moral wrong that they caused (Feather, 1999; Goodwin & Gromet, 2014). The role that deservingness plays in punishment can also be seen in just-world responses to the injustice that is created when someone's value does not align with the outcome that they receive (Goodwin & Gromet, 2014; Lerner, 1971; Lerner, 1980; Lerner & Simmons, 1966). The injustice originates from a person receiving an outcome that they did not deserve for example, a 'good' person facing misfortune, which by virtue of their 'good' character threatens the just-world as they do not deserve misfortune (Lerner et al., 1976) and these parallels will be explored more directly from a just-world perspective in turn. The motivation to punish from a just-world perspective also heavily relies on the commitment to deservingness when faced with injustice (Feather, 1996; 1999; Hafer & Rubel, 2015)

Early work by Christie (1986) suggested that for a person to receive the complete legitimacy of being an 'ideal' victim they would possess a range of attributes. This 'ideal' victim stereotype includes (but is not limited to) the person being a little old lady who was mugged by a big unknown drug addict after caring for her sick sister (Bouris, 2007; Christie, 1986). The consequences of this could be that when a victim fits this ideal victim stereotype

the punishment on their behalf may be driven by the extra-legal attributes of the victim and therefore harsher. The notion that there are such a thing as 'ideal victims' are also echoed in findings from mock jury research. Which suggests that discrepancies in the sentence severity desired towards defendants and on behalf of victims have been associated with extra-legal attributes of victims and defendants (Mazzella & Feingold, 1994). These can include physical attractiveness (Beaver et al., 2019; Sigall & Ostrove, 1975), socioeconomic status (SES; Berg et al., 2017; Freeman, 2006) and gender (Shechory-Bitton & Zvi, 2015; Winters et al., 2020). These attributes will each be explored, more specifically if they motivate punishment severity on behalf of the victim to ensure that the defendant gets the punishment they deserve. Research also shows that the attributes of the defendants can influence punishment judgements. In the next section we discuss evidence showing how extra-legal attributes of defendants can bias legal judgements including how harshly the defendant is punished.

The evidence in the following section explores how extra-legal attributes influence guilt and punishment judgments. Whether extra-legal attributes of both the victim and the defendant influence the observers punishment judgements. Thus, exploring if information about a person including information which can be gauged from first impressions such as observable attributes, including physical attractiveness and gender (Sporer & Goodman-Delahunty, 2009). This is problematic as these early impressions of a person in a courtroom (i.e., extra-legal attributes of the defendant) can influence guilt attributions and could threaten the legitimacy of the criminal justice system as they can lead to inconsistencies in recommended punishment severity, which should not be influenced by factors which are not legally relevant. Vidmar (2002) also suggested that information gained via pre-trial publicity also classified as extra-legal and can bias punishment judgements. However, this is a secondary consideration. These extra-legal attributes may bias real-world decisions made by jurors. As such, whether motivations to punish associated with the extra-legal attributes of the

victim or the defendant could have knock-on effects and, ultimately, consequences of unfair sentencing and even lead to wrongful convictions. The following section will begin by exploring what is known about the influence that the extra-legal attributes of victims and defendants have on punishment judgements, before taking into account what is known about the role that victim *and* defendant attributes simultaneously have on punishment judgements.

Extra-legal attributes as motivators for punishment

A recent meta-analysis by Devine and Caughlin (2014) argued that a defendant's extra-legal, often observable, attributes can lead to the defendant being perceived as more guilty and receiving harsher sentences. The meta-analysis explored how the extra-legal attributes of defendants and jurors influenced jury decisions including punishment and attribution of guilt. Over the last fifty years, much research has explored the role that a person's physical attractiveness plays in how they experience the world, which lead to the Attractive Leniency phenomenon which arose from the "beauty is good" stereotype (Dion et al., 1972; Westfall et al., 2019). Which suggested that physically attractive people are more desirable and, in turn, can be treated more favourably by others than those who are less physically attractive (Dion & Dion, 1987; Dion et al., 1972). Further support for the "beauty is good" stereotype comes from the Halo effect which similarly suggests that physically attractive people are believed to possess socially desirable attributes (Pohl, 2016). As a result, these physically attractive people are seen to possess more socially desirable attributes, which make them more likely to be chosen as romantic partners (Montoya et al., 2018; Westfall et al., 2019) and are seen as more competent at their jobs, even being promoted more frequently (Hosoda et al., 2003). The way that people experience everyday situations could partly be explained by physically attractive people being more deserving of good (vs. bad) outcomes

(Callan et al., 2007). As discussed earlier these physically attractive people are more deserving of good and less deserving of bad outcomes according to just-world theory.

Physical Attractiveness

Several studies show that the defendant's attractiveness can influence outcomes in judicial settings. Such that physically attractive defendants are seen as less threatening, less guilty, less likely to re-offend, and even resulting in acquittals instead of convictions (Abel & Watters, 2005; Ahola et al., 2009; Mazzella & Feingold, 1994; Sigall & Ostrove, 1975; Westfall et al., 2019). There is also evidence that suggests that a victim's physical attractiveness can influence punishment judgements. Research by Callan et al. (2007) explored if/how the "beauty is good" stereotype put forward by Dion and Dion (1987) is in line with motivations from just-world theory, by examining whether people are motivated to respond to injustice differently depending on a victims physical attractiveness. The results suggested that the death of the physically attractive person was rated as being more tragic and unjust than the death of the less attractive victim, with the severity of punishment reactions increasing in response to the death of the physically attractive target (Study 1). This research supports that the more physically attractive victims deserve to see the wrongdoer, irrespective of who it was, be punished more harshly on their behalf to protect the idea that the world is just and fair (Lerner, 1965; Lerner, 1980). Next, the researchers expanded these findings by measuring the perceived attractiveness of the victim by selecting the victim from a selection of images in response to the incident, which varied in how much the victim suffered. Study 2 identified that when a victim was seen to suffer to a greater extent, the images of the victim selected by the participant were less attractive than those who suffered less (Callan et al., 2007).

Socio-economic Status

Another attribute that is reportedly influential in punishment judgements is the socioeconomic status (SES) of victims and defendants (Hoffman, 1981; da Silva & Oliveria Lima, 2016). The SES of a person can be inferred from their occupation (Freeman, 2006), tone of voice (Berg et al., 2017) and their appearance (Kraus & Keltner, 2009). All of these are easily obtained or visually salient from the position of a juror in a court room setting. Research from the 1980s by Hoffman (1981) suggested that a person was punished more harshly when they fit the "typical offender" stereotype, for example, if they were physically less attractive and had a low SES. Hypothetical sexual assaults that were committed with a date rape drug by a man with a higher SES (doctor vs lower SES – bus driver) were judged more leniently as these men were more desirable to women, and the sexual assault was not "necessary" for them (Black & Gold, 2008). Over the last thirty years, two meta-analyses that investigated mock-juror responses have yielded similar results (Devine & Caughlin, 2024 Mazzella & Feingold, 1994). Whilst there was no effect of the victim's SES on punishment severity, there was a modest effect of a defendant's SES on punishment severity reported, with more lenient punishment severity towards defendants with a higher SES (Devine & Caughlin, 2014; Mazzella & Feingold, 1994). Similar results were also seen in a sample of District Judges in Brazil who assigned harsher sentences to poorer defendants than wealthier ones (da Silva & Oliveria Lima, 2016).

Another attribute of victims and defendants that has been shown to influence punishment judgements is gender (Ahola et al., 2009; Devine & Caughlin, 2014; Mazzella & Feingold, 1994). The 'ideal' victim stereotype put forward by Christie (1986) suggested that for a person to receive complete legitimacy and support for being a victim they would possess a subset of attributes, one being that they were a female. More recent evidence by

Lewis et al. (2021) reiterated the ideal victim stereotype put forward by Christie (1986). Work by Lewis et al. (2021) emphasised the value of the victim based on their gender, innocence, vulnerability, helplessness and the harm experienced. The consequences of which can be seen in reactions towards victims of rape who arguably do not fit this prototype, such as sexually promiscuous females and male victims. These victims were seen to be more accountable for their misfortune and punishment allocations were less severe to their attackers (Schwarz et al., 2021). Similarly, when males are victims of female swindlers, they are seen to also be more responsible for their misfortune, particularly when they are a less physically attractive female (Shechory-Bitton & Zvi, 2015).

Gender

Evidence also suggests that the gender of the defendant can influence punishment judgements. In teacher-student sexual assault cases, when the teacher is a male, they are perceived as more guilty, whereas when the teacher is a female, the victims are seen as being less credible (Winters et al., 2020). The meta-analysis by Mazzella and Feingold (1994) identified that there was a slight tendency to be more punitive towards male compared to female defendants. A more recent meta-analysis suggested that male defendants were only punished more so when the scales used in studies were continuous and not dichotomous (Devine & Caughlin, 2014). It could be speculated that the newer scales introduce a greater variability, thus punishment is more varied when scales are continuous and not dichotomous scales.

Character

Unlike physical attractiveness, SES and gender that are salient and immediately available about the victim or defendant, their character is not. However, in a courtroom

setting, character statements are often provided to the jury. This allows jurors to make judgements about the victim and the defendant, which can construe how deserving they were of the outcome they received. Early research by Landy and Aronson (1969) suggested that punishment severity towards the defendant was marginally significant and harsher when the victim was described as having an attractive (vs unattractive) character. The results also suggested that defendants with an unattractive (vs attractive) character were punished more severely and that their unattractive character was emphasised when the victim also had an attractive character (Landy &Aronson, 1969).

More recent research by Cheung and Lagnado (2023) identified that when a defendant had a 'bad' character whereby they were described as being rude to an elderly lady in a shop and had previous convictions they were punished more severely than the 'good' defendant who was helpful. Additionally, research by Callan et al. (2013a) manipulated the moral character of their targets via audio clips before having the participants select the outcomes they deserved. The visual data from the eye-tracker suggested that even before the participants knew the true outcome of the event, they looked ahead to the outcome that the target deserved based on their moral worth (Callan et al., 2013a). The research demonstrates how the character of a person can motivate and facilitate this commitment to deserved outcomes.

Further support for the commitment to deservingness comes from Harvey et al. (2016), who explored how participants selectively expose themselves to information based on the deservingness of the character. Over the seven studies, the 'good' and 'bad' character of the target was expressed in a series of ways (e.g., as saving a puppy from a river/ throwing a puppy in the river (Studies 1-3)) or they put all their loose change in the charity pot/ stole from the charity pot (study 4). The results suggested that even when it can take more effort to

do so (studies 5 and 6) the participants were willing to invest time and effort to selectively expose themselves to outcomes that the targets deserved whilst avoiding the undeserved outcomes (Harvey et al., 2016).

From a theoretical perspective, the character of victims and defendants plays an integral role in the understanding of deservingness according to the just-world theory (Hafer & Rubel, 2015; Lerner, 1980; Lerner & Simmons, 1966). Such that people expect and want to see good (bad) people receive good (bad) outcomes (Callan et al., 2013a; Harvey et al, 2016). In addition, people react more strongly in both favourable and unfavourable ways to victims who seem good/ undeserving of their suffering. Evidence from Dawtry et al. (2018) suggested that the commitment to social norms discouraged people from expressing negative reactions towards victims.

The meta-analysis by Mazzella and Feingold (1994) indicated that some of the effects of victim and defendant attributes on punishment judgements have been small and inconsistent, while others only occur under particular conditions. One inconsistency is that although unattractive people are typically punished more, the reverse effect is present when physically attractive people use their attractiveness to their advantage to perform a swindle (Shechory & Zvi, 2015; Sigall & Ostrove, 1975). Another inconsistency is that although "beauty is good" according to the attractive leniency bias, physical attractiveness showed to result in more lenient punishment for female defendants, but not physically attractive male defendants (Ahola et al., 2009; Beaver et al., 2019; Devine & Caughlin, 2014; Mazzella & Feingold, 1994).

Differences were also seen depending on the type or severity of crimes. More recent research by Dahl-Monroe (2017) predicted that the crimes committed by more physically

attractive perpetrators would be seen as less serious. Yet, there were no differences were reported in terms of perceived crime severity regardless of the defendant's physical attractiveness. Whilst physically attractive students who committed serious academic plagiarism were more deserving of harsher punishments, these differences were not seen in minor academic offences (Swami et al., 2017). Taken together the results suggest that the physical attractiveness can at times work in the favour of defendants, unless they use their attractiveness to deceive another person.

'Ideal victims' and 'Ideal defendants'

Taken together, the evidence suggest that victims can motivate harsher punishment judgements depending on their extra-legal attributes. More specifically, punishment is harsher on victims' behalf when the victim is physically attractive, female, has a high SES or a 'good' character (Landy & Aronson, 1969; Mazzella & Feingold, 1994). In addition, recent work by Lewis et al. (2021) which reinforced Christie (1986) 'ideal' victim stereotype, describes the legitimacy of a victim can also be influenced by how innocent they were, how vulnerable they were and how much harm they experienced. A potential consequence of a perpetrator offending an 'ideal' victim or a victim with any (or a combination) of these desirable attributes is more severe punishment reactions and possibly therefore unjust outcomes.

In parallel, there is a "stereotypical criminal" which similarly suggests that defendants with particular attribute combinations may also motivate punishment judgements. The research over the years has investigated the stereotypical criminal appearance, and focus groups conducted by Madriz (1997) explored perceptions of victims and criminals. The list was quite extensive; some perceptions of a stereotypical criminal included the criminal being

a black or Hispanic male who were bad, undeserving, dirty, and seen as animals who were on a low income (Madriz, 1997). This does mirror some of the more recent findings from meta-analyses, which suggest that punishment severity is often harsher towards less physically attractive male defendants with a lower SES (Devine & Cauglin, 2014; Mazzella & Feingold, 1994).

These findings could suggest that the punishment judgements towards a person are at least partially construed to be due to deservingness. It could be inferred that victims would motivate harsher punishment when they possess a combination of attributes which portray the as less deserving of bad outcomes; thus, when they face bad outcomes, they create more injustice and punishment should be 'done' on their behalf. While the reverse attributes appear to be associated with the 'stereotypical criminal', thus when a defendant possesses these attributes, they are seen as more deserving of punishment to rebalance the just world. Yet these motivations on behalf of 'ideal' victims and towards 'stereotypical criminals' could result in unfair sentences and wrongful convictions.

To this point, the chapter has explored how punishment as a response to injustice can be biased by the extra-legal attributes of victims and defendants. While exploring how reactions to injustices from just-world theory could underpin motivations of punishment judgements via deservingness. The extent that extra-legal attributes can bias punishment judgements can suggest that errors in punishment could in part be due to extra-legal attributes which should hold no legal weighting to court cases (Sporer & Goodman-Delahunty, 2009). It suggests that, at times, people could be unfairly sentenced and, in extreme cases, face wrongful conviction. This can create long-term problems as the fight to prove a person's innocence once they have been convicted can take many years, even with the help of the Innocence Project (Innocence Project, 2024). Suggesting that punishment can also lead to

injustice. From a just-world perspective, although the contexts are slightly different, conceptually, they likely work on a similar premise (i.e., deservingness and injustice). To date, little work has explored punishment in this way from just-world theory. There has not been research directly exploring how punishment can itself lead to injustice because judgements are motivated by extra-legal attributes rather than the crime committed.

Thus, questions arise as to how people would react to these less 'prototypical victims' whose injustice was created by a systematic failing. The presence of wrongful convictions, which have unnecessarily resulted in individuals spending numerous years in prison, can suggest flaws in the criminal justice system. The threat this poses to the legitimacy and public attitudes of the criminal justice system are two-fold, firstly by implying that not only has the criminal justice system failed the wrongfully imprisoned person, but secondly that the true suspect of the original crime could still be free amongst the public that the criminal justice system is designed to protect (Norris et al., 2019; Wakslak et al., 2007).

Motivation for thesis

In summary the reviewed research throughout this chapter highlights how extra-legal attributes can influence punishment judgements. It was assumed that when victims possessed any combination of the 'ideal victim' attributes, the defendant would be punished harshly. Alternatively, in parallel to this, defendants who had attributes which suited the 'stereotypical criminal' stereotype would be attributed harsher punishment. In the foreground, these extra-legal attributes of victims and defendants should not influence punishment as they do not hold any weighting to the facts of the case or the ways in which the defendant should be punished. Yet these discrepancies in punishment allocation could result in unfair convictions and even wrongful convictions. Although wrongful convictions are contextually different,

they threaten the legitimacy of the criminal justice system, which has a purpose to maintain order through law and sanctions. Therefore, wrongful convictions threaten this and could motivate non-rational reactions to exonerees to protect the system.

In broader terms, this research is important as it attempted to extend beyond theoretical implications. Practical implications of the research could include understanding biases that can lead to unfair sentencing, wrongful convictions and victimisation of exonerees.

The existing work reviewed above suggests that the attractive leniency bias often leads to physically attractive people being punished more leniently (Abel & Watters, 2005; Ahola et al., 2009). While work from just-world theory suggested that people with a bad character are more deserving of punishment. The first half of the empirical work in this thesis began exploring how the extra-legal attributes of defendants and victims influenced punishment judgements. Chapter 2 explored how the physical appearance of the defendant (i.e., their physical attractiveness, gender and their implicit character) influenced punishment judgements, and how, if at all, these were motivated by deservingness. The work in Chapter 3 then expanded the preliminary work from Chapter 2 by exploring a wider scope of attributes. Overall, it explored how the physical attractiveness, gender, character, and SES of victims and defendants motivated punishment judgements. Again, the research explored how their deservingness influenced punishment judgements.

The second half of the empirical work which begins in Chapter 4 attempts to explore how work from just-world theory that had typically explored the victimisation of 'prototypical victims' could be applied to those who had been wrongfully convicted (i.e., exonerees). The existing work had indicated that exonerees may, at times, have their

innocence doubted and face stigmatisation. Finally, Chapter 5, explored how the severity and the resolution status of a MCJ motivated people to explore guilt and innocence affirming information using a novel eye-tracking method.

In sum, this thesis attempts to contribute to the empirical research to date by exploring how the motivations to maintain a sense of deservingness based on the attributes of victims and defendants evoke punishment (Chapter 2 and 3). The final chapters investigate previously unexplored territory by considering If reactions that are typically seen in response to the suffering of a 'prototypical victim' translate towards a niche sample of people (i.e., exoneree's) who have been failed by the same system that is designed to protect them (Chapters 4 and 5).

Chapter 2: Face Value Justice: The Effect of Defendants' Attractiveness and Perceived Character on Punishment

Research indicates that physically attractive people are often viewed more favourably and perceived to have more socially desirable traits, granting them certain societal privileges than less attractive people (Dion et al., 1972; Westfall et al., 2019). This "attractive leniency" phenomenon has been seen in occupational settings, wherein, attractive employees are seen as more competent and are promoted more frequently than less physically attractive employees (Hosoda et al., 2003). To judicial settings where attractive defendants have been seen as less of a threat and are sentenced more leniently than less physically attractive defendants who are seen as more likely to re-offend (Sigall & Ostrove, 1975; Westfall et al., 2019). These inconsistencies in punishment can also be seen across genders and can, at times, lead to male offenders receiving harsher punishments compared to female offenders for the same crimes (Bontrager et al., 2013; Mazzella & Feingold, 1994). It is concerning that these inconsistencies can occur due to a defendant's physical attractiveness; potentially threatening the public trust in the criminal justice system (Landy & Aronson, 1969; Shechory-Bitton & Zvi, 2015).

This chapter will primarily explore how a defendant's appearance influences perceptions of their deservedness of punishment and the severity of the punishment that they should receive. It will also explore the role implicit inferences about a person (based on a set of pre-rated faces) can play in deservingness and punishment severity. In general, implicit inferences are unstated conclusions drawn from context and subtle cues, requiring an individual to read between the lines to grasp underlying meanings. In this context, the implicit inferences made about a defendant's character based on their physical appearance

and attractiveness will be explored concerning how their appearance influenced how deserving they are of being punished and how harsh their punishment should be.

The attractive leniency bias phenomenon stemmed from the 'beauty is good' stereotype, whereby physically attractive people are seen as more desirable and receive favourable treatment (Dion & Dion 1987; Dion et al., 1972). Prior work suggested that physically attractive defendants are seen as less threatening and less likely to re-offend, resulting in less severe punishment compared to less physically attractive defendants (Sigall & Ostrove, 1975). A meta-analysis by Devine and Caughlin (2014) argued that a defendant's extra-legal, often observable, attributes can lead to the defendant being perceived as more guilty and receiving harsher punishment. At times, these effects have been small and inconsistent, some of which appear to be conditional. For example, the attractive leniency bias phenomena worked in favour of attractive female defendants but not in favour of physically attractive male defendants (Ahola et al., 2009; Beaver et al., 2019; Devine & Caughlin, 2014; Mazzella & Feingold, 1994). However, the effect was only observed for robbery, cheating, and theft, but the reverse effect was observed for swindling. Additionally, defendants who knowingly used their physical appearance to conduct the swindle were found to be punished more severely (Shechory-Bitton & Zvi, 2015; Sigall & Ostrove, 1975). More recent research by Dahl-Monroe (2017) anticipated that crimes with more physically attractive defendants would be rated as less severe. However, their results suggested no difference in crime severity, irrespective of the defendant's physical attractiveness. Research by Swami et al. (2017) also suggested that the more physically attractive students deserved harsher punishment in serious cases of academic plagiarism. However, these differences were not observed in cases of minor plagiarism, further reinforcing the inconsistent and conditional nature of the attractive leniency effect.

In addition to the attractive leniency phenomena, the existing research also suggests that female defendants are treated more leniently and often receive less severe punishment than male defendants (Devine & Caughlin, 2014; Mazzella & Feingold, 1994). For example, in teacher and student-based sexual assault scenarios, male teachers were perceived as more guilty compared to female teachers. However, this did not influence the verdicts or sentences (Winters et al., 2020). Findings from Shechory-Bitton and Zvi (2015) further argue that male victims of female swindlers are seen as responsible for their own misfortune. This effect was mediated by the female defendants' attractiveness, with more accountability being allocated when the female swindler was less physically attractive. Taken together, the existing research suggests that there are times when a defendant's physical attractiveness, or gender, may result in differences in how deserving they are of punishment and how much punishment they received.

The notion that people seem to differ in how deserving they are due to their attractiveness may explain why they are punished differently. The idea that people differ in how deserving they are based on their attractiveness may explain why they receive different punishments. Just-world theory (JWT) suggests that people believe individuals deserve their outcomes (Lerner, 2003; Lerner et al., 1976). While JMT posits that inconsistencies in punishment allocation may reinforce an observer's motivation to maintain a sense of justice by ensuring that individuals get what they deserve (Hafer & Rubel, 2015; Zagefka et al., 2011). In addition to the experimental research from JMT, it is important to acknowledge individual differences' role in the responsiveness to just-world threats. Research widely argues that an individual's BJW is a key motivator in the attribution of blame and the devaluing of the victims' character when faced with transgressions, for example, victims of sex offences can face greater blame in an attempt to alleviate the threat to the just-world (Hafer & Sutton, 2016; Lerner & Simmons, 1966; Strömwell et al., 2012; Yamawaki, 2009). In addition to the

greater endorsement of harsher punitive measures, BJW is higher in outgroups (Levy & Reuven, 2017), with less blame being attributed and less severe punishment to in-group members who are victims (Halabi et al., 2015). It was anticipated that high BJW believers would be more receptive to injustice, perceiving the defendants as more deserving of punishment when the injustice increases, and overall punishment severity would be harsher.

Punishment, as determined by the criminal justice system, serves various purposes, including deterring future offences, rehabilitating defendants, and ensuring public safety through incarceration (Darley et al., 2000; Darley & Pittman, 2003; Goodwin & Gromet, 2014). According to Darley and Pittman (2003), observers are often motivated to punish a transgressor due to the moral outrage their actions provoke. A person's deservingness is assessed based on their values and the outcomes of their actions, particularly when these elements do not align. For example, when a 'good' person experiences a 'bad' outcome, observers tend to rationalise to perceive them as deserving (Feather, 1999; Harvey et al., 2016). Discrepancies in conviction rates and sentence severity have been linked to a defendant's extra-legal attributes, such as physical attractiveness and gender (Abel & Watters, 2005; Ahola et al., 2010; Devine & Caughlin, 2014; Mazzella & Feingold, 1994)

In summary, existing research suggests that punishment and deservingness vary based on a person's physical attractiveness (Sigall & Ostrove, 1975; Westfall et al., 2019). The attractive leniency phenomenon suggests that physically attractive defendants receive more lenient punishments (Dion at al., 1972). Conversely, JMT proposes that harsher punishment aligns with maintaining deservingness based on the defendant's perceived value (Goodwin & Gromet, 2014; Lerner, 1971, 1980). Consequently, less attractive defendants may be deemed more deserving of harsh punishment. This chapter will explore how a person's attractiveness affects the perceived deservingness of punishment and its severity. This chapter initially

explored the differences in deservingness and punishment severity assigned to defendants based on their physical attractiveness in Experiment 1. It was hypothesised that unattractive defendants would be perceived as more deserving of harsher punishment and, indeed, be punished more severely. Subsequently, Experiment 2 investigated whether the defendant's implicit character influenced their perceived deservingness of punishment and the severity of punishment meted out. The prediction was that pre-tested images of defendants with a 'bad' character would be judged more deserving of punishment and receive more severe sentences. Additionally, it was hypothesised that male defendants would be deemed more deserving of punishment and receive harsher sentences than female defendants. Both experiments examined individual differences in BJW as a potential moderating variable for these effects.

Experiment 1

In Experiment 1, the defendant's physical attractiveness was manipulated before the participants were assessed on the extent to which they believed the defendant deserved to be punished and how severe their punishment should be. It was predicted that less physically attractive defendants would be more deserving of punishment and allocated harsher punishment than more physically attractive defendants. Individual differences in BJW were also explored as a potential moderator of these effects.

Method

Participants

Participants were recruited online via Prolific (www.prolific.com) and the University of Essex's undergraduate sampling pool. The participants received either monetary reimbursement (£7ph) or course credits (0.25) for their participation. Six participants were

excluded for providing incomplete responses, and the final sample comprised 278 participants (67.99% female, M_{age} = 32.76 years, SD_{age} = 11.93). I sought to recruit at least 260 participants, which, according to a sensitivity power analysis, would enable the detection of an effect of 0.35 or above at $\alpha < .05$ with 80% power. The experiment used a between-subjects design where the participants completed 4 (of 8 total) scenarios from one level of attractiveness manipulation (attractive/unattractive defendant images).

Materials and Procedure

Participants began by completing the 7-items (e.g., "I feel that people earn the rewards and punishment that they get") Global-Just-World-Belief-Scale (GJWBS) scaled from 0 = "Strongly Disagree" to 6 = "Strongly Agree" (Lipkus, 1991) (Appendix A). The items had good internal reliability ($\alpha = 0.88$) and were averaged to form the measure "BJW". Participants were randomly assigned to view the first of four crime scenarios which ranged from hit and run to armed robbery, and each scenario was presented with an image of either an attractive or an unattractive defendant. The selected images were all white males from Version 5 of the Face Research Lab London Set database (see Figure 1[2]; DeBruine & Jones, 2017). Participants were randomly allocated to view four face/scenario pairings, with the attractiveness manipulation serving as a between-subjects measure. Consequently, each participant was exposed to either four attractive or four unattractive images exclusively. The

[2] The photographs from the database were pre-rated by a sample of 2513 people (scaled from 1 = *'Much less attractive than the average"* to 7 = *"Much more attractive than average"*). The images selected were +/- 1 SD (0.590) above the mean (2.684) attractiveness rating of the male images in the database. Upon reflection, the rating of the attractive male image 1 (image 026) did not meet this criterion; however, the removal of this image did not significantly influence the mean overall deservingness and overall punishment severity scores between the attractive and unattractive images. The alternative analyses with the attractive male image 1 (image 026) excluded can be seen in Appendix D. Thus, all the images were included in the full analysis. The attractive male images had ratings from 2.849 to 3.923 and the unattractive male images had ratings from 1.342 to 1.457.

complete set of scenarios and images employed in this study can be found in Appendix B and C[3]. Participants responded to two items about the defendant's deservingness of punishment (e.g., "If found guilty, they deserve to be harshly punished") (scaled from 1 = "Strongly Disagree" to 7 = "Strongly Agree"). Finally, the participants rated how severely the defendant should be punished (e.g., "If the person above is found guilty, what would be a suitable prison sentence for them?") (scaled from 1 = "Minimum for the offence" to 7 = "Maximum for the offence"). Both scales had good internal reliability (α's = 0.84 and 0.87, respectively), and the items were averaged to form the measures "Deservingness of punishment" and "Punishment severity". Participants completed four trials before being debriefed.

[3] All materials used throughout this thesis are available on the OSF (https://osf.io/q4uef/?view_only=1df343242ebb439ca5d17dd8e0f02441).

Figure 1

Example of Faces used as Stimuli in Experiment 1 (Left: Attractive and Right: Unattractive)

Note. Stimuli were selected from the Face Research Lab London Set (version 5) (DeBruine & Jones, 2017). The images were selected based on their attractiveness ratings, with attractive images being at least 0.5 *SD* above the overall mean attractiveness score from the males in the database (2.684). The unattractive male images were selected for being at least 0.5 *SD* below the mean attractiveness score.

Results

Scenario checking

All scenarios and faces were fully crossed throughout the experiment. A one-way analysis-of-variance (ANOVA) was used to explore the consistency in the severity of the four crimes described in the scenarios. This was conducted by exploring the deservingness of punishment ratings, based on the scenarios alone and irrespective of the image. The results suggested a significant main effect of the crime scenario on the deservingness of punishment ratings $F(3, 1108) = 48.11$, $p < .001$, $\eta^2_p = 0.12$. Post-hoc pairwise comparisons were

explored using Tukey Honest Significant Difference (HSD) test, which indicated that there was a significant difference in the deservingness of punishment between most of the scenarios (see Table 1) except between scenario 1 (breaking into a property) and scenario 2 (hit and run) (p = .834). There also was not a significant difference between scenario 2 (hit and run) and scenario 4 (attempted child abduction) (p = .430). Table 1

Tukey HSD Post Hoc comparisons of deservingness by scenario context

		M diff	*Sig.*
Scenario 1	Scenario 2	0.079	.834
	Scenario 3	-0.777	< .001***
	Scenario 4	0.268	.023*
Scenario 2	Scenario 3	-0.856	< .001***
	Scenario 4	-0.053	.184
Scenario 3	Scenario 4	0.803	< .001***

Note: ***p < .001, **p <.01, *p <.05

Differences in deservingness of punishment and punishment severity between defendant attractiveness

Two independent t-tests were conducted to explore the differences in deservingness of punishment and recommended punishment severity ratings between the attractive and unattractive defendants. No significant differences were observed in the deservingness of punishment ratings between the attractive (M = 5.66, SD = 0.76) and unattractive defendants (M = 5.51, SD = 1.02), t(248.5) = 1.39, p = .167, d = 0.17. Furthermore, there were no significant differences observed between the punishment severity of the attractive (M = 5.34,

SD = 0.93) and unattractive defendants (*M* = 5.51, *SD* = 1.05), *t*(274) = 1.48, *p* = .139, *d* = 0.18

Two separate mixed-ANOVAs explored the effects of defendant attractiveness (attractive vs unattractive) and crime type (scenarios 1 to 4) on deservingness of punishment and punishment severity ratings.

For deservingness of punishment, there was not a significant main effect of attractiveness $F(1, 276) = 1.84$, $p = .176$, $\eta^2_p = 0.00$, such that attractive defendants (*M* = 5.66, *SD* = 1.08) were not more deserving of punishment than unattractive defendants (*M* = 5.51, *SD* = 1.26). However, there was a significant main effect of crime type, $F(3, 828) = 105.45$, $p < .001$, $\eta^2_p = 0.12$. Such that the defendant was perceived as most deserving of punishment following scenario 4 (*M* = 5.96, *SD* =1.10) and the least deserving following scenario 3 (*M* = 4.92, *SD* = 1.18). The interaction between attractiveness and crime type was not significant, $F(3, 828) = 0.11$, $p = .956$, $\eta^2_p = 0.00$.

For punishment severity, there was not a significant main effect of the defendant's attractiveness $F(1,276) = 2.12$, $p = .146$, $\eta^2_p = 0.01$, such that unattractive defendants were not assigned harsher punishment (*M* = 5.50, *SD* = 1.37) than attractive defendants (*M* = 5.33, *SD* = 1.39). There was a significant main effect of crime type on punishment severity $F(3,828) = 124.72$, $p < .001$, $\eta_p^2 = 0.15$. Such that the defendant's punishment severity was harshest following scenario 4 (*M* = 5.97, *SD* =1.28) and the least severe punishment recommended following scenario 3 (*M* = 4.52, *SD* = 1.35). However, there was not a significant interaction between the defendants' attractiveness and the crime-type $F(3, 828) = 1.03$, $p = .376$, $\eta_p^2 = 0.00$.

Moderation Analyses by BJW

Deservingness of punishment and punishment severity were explored in separate simple moderation analyses using Model 1 of the PROCESS (Hayes, 2017) in R (Version 4.2.2; R Core Team, 2021). Both models used the defendant's physical attractiveness (coded attractive = 1 and unattractive = 2) as the predictor variable and the participant's BJW scores as the moderator variable. The relationship between the defendants physical attractiveness on deservingness of punishment $b = 0.03$, $SE = 0.06$, 95% CI [-0.09, 0.16], $t(1108) = 0.55$, $p = .585$, and punishment severity $b = 0.09$, $SE = 0.08$, 95% CI [- 0.06, 0.24], $t(1108) = 1.20$, $p = .229$ were not moderated by BJW.

Discussion

The results provided no evidence that physically attractive defendants compared to unattractive defendants were deemed more deserving of punishment or received harsher punishment. These findings did not support hypotheses aligned with the attractive leniency bias, which suggests that attractive defendants typically receive more lenient treatment (Dion et al., 1972; Landy & Aronson, 1969; Thorndike, 1920). However, the results add to those of with Dahl-Monroe's (2017) research, which posits that whilst physical attractiveness generally confers advantages, it does not influence perceptions of crime severity, whereas the results from Experiment 1 measured recommended punishment severity instead of crime severity. Furthermore, the observer's BJW did not moderate ratings of punishment deservingness or punishment severity.

This experiment encountered some limitations. Firstly, one of the "physically attractive defendant" images failed to meet the selection criteria, as its pre-tested physical attractiveness rating did not exceed 1 *SD* above the mean, unlike the other three attractive

images. However, t-tests yielded similar results regardless of its inclusion in the analyses (see Appendix D). Secondly, the crime component across the four scenario levels lacked consistency. Scenario checking (Table 1) revealed significant differences in deservingness of punishment ratings across many scenarios. Although crime type was not a primary focus of this experiment, it was crucial to account for potential differences arising from this variable. The absence of an interaction suggests that differences observed in deservingness of punishment and punishment severity ratings were attributable to either attractiveness or crime type independently, rather than a combined effect of these factors.

Experiment 2

Although the findings from Experiment 1 indicate that the defendant's physical attractiveness does not independently affect punishment measures, previous research suggests that other characteristics can be inferred from a person's face. For instance, faces perceived as trustworthy are often viewed as less criminal (Flowe, 2012; Porter et al., 2008). This implies that facial features may influence judgements in more nuanced ways than mere attractiveness alone. In addition to the overpowering stance of the "beauty is good" phenomenon, physically attractive individuals are seen as more desirable and are treated more positively (Dion et al., 1972; Thorndike, 1920). From a just-world perspective, one might expect punishment to be influenced by how people are valued in terms of their perceived goodness. However, the results from Experiment 1 did not support the prediction that physically attractive defendants would receive less severe punishments due to being perceived as more of a 'good' person. This finding challenges the notion that attractiveness automatically confers a positive moral judgement or leads to more lenient treatment within the criminal justice system. These biases (inferences) can be made with minimal information. This suggests that a person's physical appearance alone could significantly influence how

they are perceived when on trial and potentially affect judgements about their deservingness of punishment. Such unconscious biases based solely on appearance raise important questions about fairness and impartiality within the judicial process.

To unravel the inferences about a defendant's deservingness of punishment, Experiment 2 investigated the implicit manipulation of the defendant's character. This was achieved through a set of pre-rated faces, which were expected to influence perceptions of how deserving the defendants were of punishment and the severity of their sentences. The pre-tested images included both male and female targets, allowing for an exploration of gender effects. It was hypothesised that there would be main effects of both character ('good' vs 'bad') and gender (male vs female) on the perceived deservingness of punishment and sentence severity. More specifically 'bad' and male defendants would be more deserving and would be allocated harsher punishments. The design of the experiment also allowed for the exploration of whether attractiveness differently effected punishment between gender as previous research had suggested (Bontrager et al., 2013; Mazzella & Feingold, 1994). The mixed-effects model deployed in Experiment 2 allowed for the effect of attractiveness to be explored as varying across the different crime types. The approach allowed for the exploration of whether the effect of attractiveness was significant irrespective of crime type. Individual differences in BJW were measured and sought to examine whether they moderated the effects of the manipulation.

Method

Participants

Participants were recruited online (N = 102, 39.7% male; M_{age} = 30.99 years, SD_{age} = 10.69) via Prolific (www.prolific.com) and the participants received monetary reimbursement

for their participation (£7 per hour). One participant did not complete all the required trials and was excluded from the full analysis. The experiment used a within-subjects design and participants were randomly assigned to 1 of the 16 sets of stimuli (Appendix E). The sample size was pre-determined by previous research, and guidelines in Table 2 from Judd et al. (2012)[4] based on the number of stimuli presented.

Materials

Online Pre-test for Image Selection

A selection of 100 images with an equal split of both male and female were extracted from version 2.5 of the Chicago Face Database (Ma et al., 2020). The images were selected based on their attractiveness, trustworthiness, dominance, and threateningness ratings that were available in the norming data file for the database. This was done by using the ratings from the Chicage Face Database (Ma et al., 2020) and selecting faces which were the furthest from the mean in the four selection criteria (attractiveness, trustworthiness, dominance threateningness). Of the 100 images of faces 50 were selected for either being rated the highest in attractiveness and trustworthiness were often also lower in dominance and threateningness ratings *or* the reverse (low attractiveness and trustworthiness, with high threateningness and dominance ratings).

[4] See Table 2: Judd, C. M., Westfall, J., & Kenny, D. A. (2012). Treating stimuli as a random factor in social psychology: A new and comprehensive solution to a pervasive but largely ignored problem. *Journal of Personality and Social Psychology*, *103*(1), 54–69. https://doi.org/10.1037/a0028347

Testing the Pre-Test Images

In total 20 participants (76.2% female, M_{age} = 36.76 years, SD_{age} = 11.47) were recruited via Prolific (www.prolific.com). The participants rated the perceived character of all 100 faces. The first item asked, "How negative-to-positive would you evaluate them as a person?" (scaled from 1 = "Very negatively" to 7 = "Very positively"). The second item asked, "Overall, I believe that they are a good person" (scaled from 1 = "Strongly disagree" to 7 = "Strongly agree"). The items had good internal consistency (α = 0.88) and were averaged to form the "Perceived character" measure.

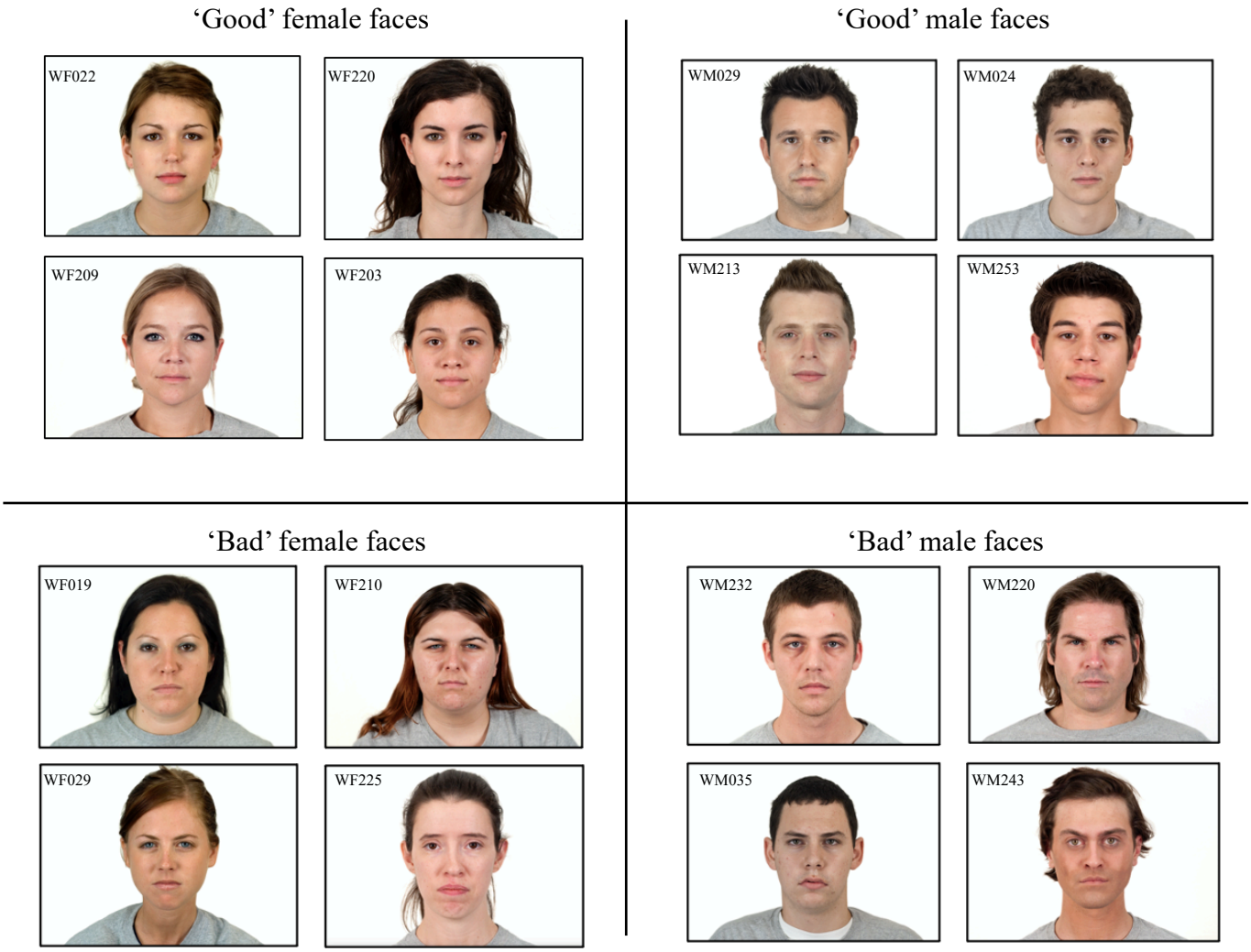
Descriptive statistics were conducted to determine the overall mean scores of the male and female faces before subsequently measuring a z-score. The final subset of images was selected for being at least 1.5 *SD* above or below the overall mean. Overall, four images were selected from the upper and lower range of scores for both the male and female images resulting in a final set of 16 images (see Figure 2). The character ratings of 'good' females (M = 4.82, SD = 0.56) were significantly higher, and thus more favourable than the ratings of 'bad' females (M = 3.96, SD = 0.66), $t(19) = 8.38$, $p < .001$, $d = 1.87$. The 'good' male images (M = 4.36, SD = 0.56) were rated as more favourable than the 'bad' male images (M = 3.57, SD = 0.66), $t(19) = 9.34$, $p < .001$, $d = 2.09$.

The pre-rated attractiveness scores from the Chicago Face Database (Ma et al., 2020) were analysed to determine whether the selected images differed in attractiveness ratings between male and female images. For female images, those classified as 'good' (M = 5.34, SD = 0.09) were rated significantly more attractive than those classified as 'bad' (M = 3.38, SD = 0.15), $t(6) = 22.70$, $p < .001$, $d = 16.05$. Similarly, for male images, those classified as

'good' (M = 4.48, SD = 0.18) were rated significantly more attractive than those classified as 'bad' (M = 2.99, SD = 0.13), $t(6) = 16.75$, $p < .001$, $d = 11.84$.

Figure 2

Final set of 16 faces used in Experiment 2.



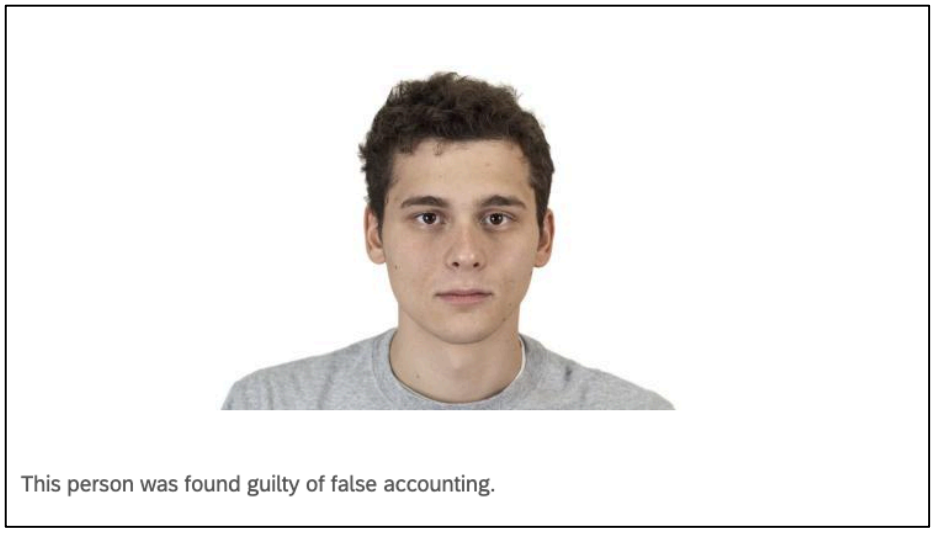
Note. The top left shows 'good' female faces (+1.5 *SD*), the top right shows 'good' male faces (+1.5 *SD*), the bottom left shows 'bad' female faces (-1.5 *SD*), and the bottom right shows 'bad' male faces (-1.5 *SD*). Chicago Face Database images from left to right, first row: WF022, WF220, WM029 & WM024. Second row: WF209, WF203, WM213 & WM253. Third row: WF019, WF210, WM232 & WM220. Fourth row: WF029, WF225, WM035 & WM243

Procedure

Participants were informed that the research aimed to explore their initial judgements regarding a variety of crimes and the individuals who committed them. Participants responded to brief vignettes, each describing a short crime[5] committed by the defendant for example, *"This person was found guilty of (crime: child abduction)"* which was accompanied by a pre-tested image. Each participant was presented with 16 (of 64 total) short crime vignettes, four with a defendant's image rated as 'good', four rated as 'bad' and eight foil images (all of which had an even split of male and female images). The vignettes were presented in a randomised order and unique stimuli set (of 16 total sets; Appendix E) for each participant. Figure 3 shows an example vignette that was presented to the participants.

Figure 3

An example of the brief vignette and defendant image.



[5] The crimes were randomly selected from the series of crime classifications defined in the Table of Offences that were available via the Crown Prosecution Website (https://www.cps.gov.uk/sites/default/files/documents/legal_guidance/annex-1b-table-of-offences-scheme-c-class-order.pdf)

Participants responded to a single item about how deserving the defendant was of punishment; “To what extent does this person deserve to be harshly punished for what they did?” scaled from 1 = “Not at all deserving” to 9 = “Extremely deserving”. Next, participants indicated how harsh the punishment should be for the defendant using a single item, “How harsh should their punishment be?” scaled from 1 = “Minimum punishment allowed for the offence” to 9 = “Maximum allowed for the offence”. Participants rated the deservingness and severity of punishment for all 16 vignettes of their allocated stimuli set before responding to the 7-item GJWBS (Lipkus, 1991; e.g., *“*I feel that rewards and punishments are fairly given”) which was scaled from 0 = “Strongly disagree” to 6 = “Strongly agree”, the measure had good internal reliability ($\alpha = 0.82$) and were averaged to form the measure “BJW”. On completion, participants were debriefed.

Results

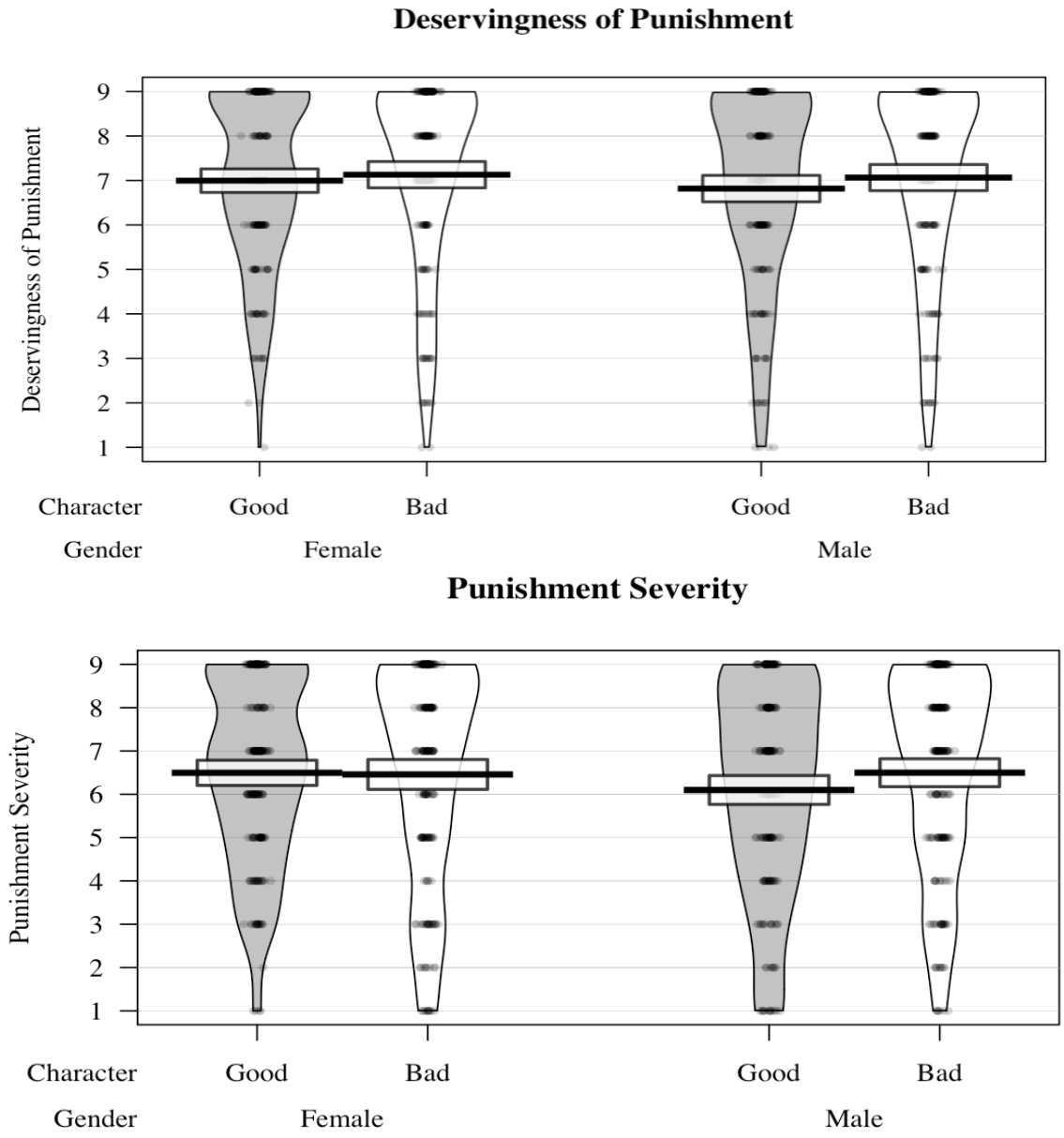
Two separate linear mixed-effects models were fitted to examine the deservingness of punishment and punishment severity ratings, with both the character and gender of the defendant simultaneously included as predictors. The models incorporated fixed effects of defendant character and gender, random intercepts for participants and crime types, and random slopes for the effect of target type by participant and crime type. These were implemented using the lme4 package (Bates et al., 2015, Version 1.1-33) in R (R Core Team, 2021, Version 4.2.2). P-values were calculated using Satterthwaite approximations via the lmerTest package (Kuznetsova et al., 2017, Version 3.1-3), and 95% percentile bootstrap confidence intervals (CIs) were reported based on 2,000 resamples. Both models were subsequently replicated, exploring the fixed effects of the defendant’s character and just-world beliefs on the deservingness of punishment and punishment severity, whilst maintaining consistency in all random effects and slopes.

The first model (top panel in Figure 4) revealed no significant effect of the defendant's character (b = 0.12, SE = 0.24, 95% CI [-0.35, 0.58], t(111.93) = 0.50, p = .62) or gender (b = -0.18, SE = 0.24, 95% CI [-0.64, 0.29], t(111.55) = 0.74, p = .46) on deservingness of punishment ratings. There was also no significant interaction (b = 0.12, SE = 0.34, 95% CI [-0.54, 0.77], t(111.79) = 0.35, p = .73). The second model (bottom panel in Figure 4) showed no significant effect of the defendant's character (b = -0.06, SE = 0.30, 95% CI [-0.65, 0.53], t(109.46) = 0.20, p = .84) or gender (b = 0.39, SE = 0.30, 95% CI [-0.98, 0.20], t(109.22) = 1.29, p = .20) on punishment severity. Similarly, there was no significant interaction (b = 0.45, SE = 0.43, 95% CI [-0.39, 1.28], t(109.41) = 1.05, p = .30).

The repeated models revealed no significant effect of participants' BJW on the deservingness of punishment rating (b = 0.08, SE = 0.14, 95% CI [-0.20, 0.36], t(98.92) = 0.54, p = .59). However, a significant effect of BJW on punishment severity was observed (b = 0.32, SE = 0.15, 95% CI [0.02, 0.61], t(96.20) = 2.08, p = .04), indicating that as just-world beliefs increased, so did punishment severity.

Figure 4

Pirate plots showing the spread of deservingness of punishment (Model 1: top panel) and punishment severity (Model 2: bottom panel) ratings.



Note: Raw data, descriptive, and inferential statistics (using the "yarrr" package in R; Phillips, 2017, Version 0.1.5) of the effects of defendant type (i.e., character and gender), on deservingness of punishment and punishment severity ratings. Box plots of the means within each condition are depicted (and their 95% confidence intervals).

Discussion

It was hypothesised that if participants perceived the pre-tested images as representing individuals with ‘good’ or ‘bad’ character, they would exhibit bias by punishing the ‘bad’ characters more severely, regardless of the crime. However, the results did not support these predictions. There was no effect of the manipulation; neither the implicit ‘character’ or the gender of the defendant, influenced the defendants deservingness of punishment or the recommended punishment severity towards the defendant. The findings indicated that when the defendant’s ‘character’ was operationalised implicitly through pre-tested images (which were also highly attractive/good or unattractive/bad), it had no effect on punishment or deservingness of punishment. Consequently, these results do not support the widely reported attractive leniency bias stemming from the “beauty is good” phenomenon, which suggests that physically attractive individuals are often treated more leniently (Dion et al., 1972; Westfall et al., 2019). Instead, the current findings add to those of Dahl-Monroe (2017), who found no evidence for the attractive leniency bias phenomenon based on crime severity. Theit study concluded that the physical attractiveness of the defendant did not influence the perceived severity of the crime committed. In contrast to the results from Experiment 2 whereby participants did not recommend harsher punishment or deem less attractive (/‘bad’) defendants more deserving of punishment than the more physically attractive defendants (/‘good’).

General Discussion

The chapter began by exploring whether the attractiveness of the defendants influenced how deserving they were of punishment and how harshly they should be punished in Experiment 1. Following this, Experiment 2 refined the method used in Experiment 1 by exploring whether people could be judged as having more of a ‘good’ or ‘bad’ character by

their appearance alone and whether this influenced punishment. More specifically, addressing if the defendant's appearance made them more deserving of punishment or to be punished more severely irrespective of the crime committed. Neither the results from Experiment 1 nor 2 provided any evidence for the effect of the defendant's appearance in terms of physical attractiveness on punishment. These results will be discussed in turn.

Experiment 1 manipulated the physical attractiveness of the defendants, and it was predicted that the defendants who were less physically attractive would deserve more punishment. In turn, the less physically attractive defendants would be given harsher punishment than the physically attractive defendants. The results did not provide evidence for these predictions and failed to support much of the existing research that supports the attractive leniency bias with more physically attractive defendants receiving more lenient sentences (Abel & Watters, 2005; Thorndike, 1920). The results add to those of Dahl-Monroe (2017) which initially predicted that there would be a difference in the crime severity reported dependant on the physical attractiveness of the defendant. The results indicated that the crime severity reported did not differ significantly irrespective of the physical attractiveness of the defendant. The results from Experiment 1 do not pertain to enough evidence to support the reversed attractive leniency effect whereby attractive defendants were guiltier and deserved harsher punishment as they were held to a higher standard (Swami et al., 2017). In contrast to Swami et al (2017) this could be because, the crimes used in the research by Swami et al. (2017) which were either severe or minor transgressions, all the crimes in Experiment 1 were based around mugging which did not differ. Speculative reasons for this could be due to the differences in crimes which have obvious victims compared to those which are victimless. The crimes with victims could lead to the downplaying of the victims suffering or the enhanced need to punish on their behalf in contrast to victim-less

crimes which could also lead to less punishment as they are less threatening with the absence of a victim.

Finally, contrary to much of the existing individual differences in BJW research, the results from Experiment 1 did not find BJW to be predictive of the defendant's deservingness of punishment or the punishment severity (Hafer & Rubel, 2015). Furthermore, the results from Experiment 1 suggest that punishment severity and deservingness of punishment do not differ because of the defendant's physical attractiveness.

Experiment 2 built upon Experiment 1's focus on the effect of attractiveness on punishment by exploring how a defendant's appearance via pre-tested images that were construed as being a person with a 'good' or 'bad' character influenced punishment. The study began by pre-testing a range of images from the Chicago Face Database (Ma et al., 2020), which used images based on their existing attractiveness, trustworthiness, threateningness, and dominance ratings and sought to explore if these faces were perceived as having a 'good' or 'bad' character. The images were refined and classified as either being a person with a 'good' or 'bad' character; however, against my prediction, the full analysis suggested that these images did not affect the participants perceptions of deservingness of punishment or punishment severity. In sum the results indicated that the basis of character via the defendant's appearance did not effect how deserving they were of punishment nor how severely they should be punished. Like the results from Experiment 1, these experiments did not provide evidence for the attractive leniency bias phenomenon. In addition, Experiment 2 finds no evidence that deservingness and punishment severity occur due to the inferences made about the defendants' character.

Building on Experiment 1, the design of Experiment 2 allowed for the effect of the defendants gender also to be explored. Contrary to predictions based on existing research suggesting females typically receive more lenient punishments (Ahola et al., 2009; Beaver et al., 2019; Devine & Caughlin, 2014; Mazzella & Feingold, 1994), this experiment found no evidence that defendant gender predicted leniency in punishment severity or lesser deservingness of punishment. Akin to Experiment 1's results, the exploration of individual differences in BJW in Experiment 2 also failed to predict punishment severity or deservingness. Akin to Experiment 1's results, the exploration of individual differences in BJW in Experiment 2 showed no evidence for differences in deservingness of punishment ratings. In contrast to Experiment 1, there was a significant effect of BJW on punishment severity ratings, such that as just-world beliefs increased, as did punishment severity. These results provide theoretical support for JMT in relation to punishment severity. It supports existing research by Levy and Reuven (2017) whereby the staff in juvenile care centres with higher BJW were associated with and more likely to endorse more punitive disciplinary techniques. In addition to evidence from mock-jury paradigm research, higher BJW was associated with greater guilt attributions and harsher punishment severity (Freeman, 2006). In contrast to this, although previous research found that a person's deservingness was influenced by BJW (for a review see Hafer & Rubel, 2015), the present experiments found no evidence that BJW influenced deservingness of punishment.

Although these results do not align with the widely reported support for the attractive leniency bias, they may correspond with the decreasing effect sizes of defendant attractiveness reported in meta-analyses since the 1990s. Mazzella and Feingold (1994) reported small effect sizes of $d = 0.12$ for the influence of defendant attractiveness on punishment severity and $d = 0.19$ on defendant guilt. In contrast, Devine and Caughlin (2014) found a more recent and non-significant effect size of $d = -0.04$ for defendant attractiveness

on guilt judgments. These findings could underscore the impact of increased awareness about "attractive criminals," such as Ted Bundy, through crime documentaries. These documentaries may highlight the importance of not basing guilt and punishment solely on physical attractiveness, suggesting that beauty is not always synonymous with being "good" contrary to the attractive leniency bias.

Limitations and Future Directions

The experiments throughout this chapter are not without limitations. One limitation from Experiment 1 was that one of the 'attractive' images did not meet the same selection criteria as the others, whereby the other attractive images used had pre-rated attractiveness ratings that were 1.5 *SD* above the mean attractiveness score. Notably, removing the image that did not meet the selection criteria did not significantly impact the results and was included in the full analyses. Another is that although Experiment 2 accounted for the variability of punishment over crimes, there was still no effect of a person's 'good' or 'bad' character on how deserving the person was of punishment or the recommended punishment severity towards them.

The findings suggest that the physical attractiveness, gender, and the implicit expression of a defendant's character as 'good' or 'bad' via pre-tested images did not effect how deserving of punishment or how harshly a defendant should be punished. Contrary to the implicit inferences that can be made about a person by their appearance, in the context of a courtroom, jurors receive large sums of information about defendants, which have been associated with differences in sentence severity and guilt attributions. Future research should consider whether other observable extra-legal attributes including the socio-economic status of defendants can influence punishment.

Summary

To summarise, this chapter examined the effects a defendant's physical attractiveness, gender, and implicit character could have on how deserving a defendant was of punishment and how harshly they should be punished. The results from Experiments 1 and 2 did not support the highly reported attractive leniency bias. Experiment 2 also indicated that irrespective of the pre-rated 'character' of the images, they did not influence how deserving the defendant was of punishment or the severity of their punishment.

Chapter 3: Exploring the Influence of Extra-Legal Attributes on Punishment

Chapter 2 suggested that there was no difference in how deserving of punishment or how harshly a defendant should be punished based on their physical attractiveness, gender or implicit character. Thus, the results cast doubt upon the heavily reported support for the attractive leniency bias phenomena (Dion et al., 1972). The experiments reported in Chapter 2 mostly drew attention to the influence that a defendants attractiveness played in punishment outcomes, however other observable extra-legal attributes about a person have also been associated with differences in perceptions of guilt and punishment outcomes. Meta-analyses from mock-jury paradigm research have suggested that in addition to a person's physical attractiveness and gender, other attributes, including their socioeconomic status (SES) and race, can also influence guilt attributions and punishment severity (Devine & Caughlin, 2014; Mazzella & Feingold, 1994). This chapter builds on the work which focused on the role of physical attractiveness in Chapter 2 by exploring how additional extra-legal attributes, including the character, SES and gender of the defendant or the victim, influence punishment outcomes. Each of these attributes will be discussed in turn.

In addition to the influence of a defendant's or victim's perceived physical attractiveness and gender on punishment outcomes, evidence suggests that their SES can also play a significant role in determining punishment severity. A person's SES can be inferred from various factors, including a person's occupation and tone of voice (Berg et al., 2017; Freeman, 2006). Early research indicated that individuals perceived as 'typical offenders' were often associated with both lower SES and lower attractiveness, resulting in harsher punishments (Hoffman, 1981). More recent meta-analyses by Devine and Caughlin (2014) have revealed modest effect sizes regarding the impact of a defendant's SES on punishment severity. These analyses, derived from mock-jury paradigm research, suggest that individuals

of higher SES tend to receive more lenient punishments, thus participants favouring those with higher socioeconomic standing (Devine & Caughlin, 2014). Similar findings were observed in a study involving Brazilian District Judges, where less wealthy perpetrators were assigned harsher punishments compared to their wealthier counterparts (da Silva & Oliveria Lima, 2016). However, it is worth noting that earlier meta-analyses conducted by Mazzella and Feingold (1994) did not find a significant effect of the victim's SES on guilt determinations or punishment severity.

Recent research underscores the significant impact of a target's character on justice-related judgments and responses. The character of a person has been seen to motivate the responsiveness to injustice in line with the motivation to maintain deservingness via restorative justice methods that help observers uphold their belief in a just-world (BJW) (Callan et al., 2013a; Cheung & Lagnado, 2023; Harvey & Callan, 2014). For instance, Cheung and Lagnado (2023) found that individuals perceived as having a 'bad' character—those who were rude to elderly shoppers and had prior convictions—were judged more harshly and deemed more guilty than those with a 'good' character who assisted the elderly and had no prior convictions. Additionally, research based on just-world theory manipulated a victim's likeability in accident scenarios with varying responsibility levels. Results showed that derogation was highest for unlikeable victims with low responsibility, while blame peaked for unlikeable victims with high responsibility. Conversely, likeable victims with low responsibility received greater compensation for their suffering (Haynes & Olson, 2006).

Research on the influence of a victim's character has yielded intriguing insights into how people interpret and respond to suffering. Harvey and Callan (2014) found that participants used different reasoning strategies depending on the victim's perceived moral worth. For 'good' victims, such as a respectable swim coach, ultimate justice reasoning was

more prevalent. In contrast, for 'bad' victims, like a swim coach described as a paedophile, immanent justice reasoning was more common. This because good victims are undeserving of misfortune so therefore deserving of ultimate justice in contrast to bad victims may have their misfortune deemed as being caused by some implausible link (immanent justice reasoning), thus they deserved their misfortune. This suggests that a victim's character significantly affects perceptions of deservingness. Further studies by Harvey et al. (2016) demonstrated that people actively maintain perceptions of deservingness based on a person's character (e.g., preferring to read that after "Jenny…jumped into the river and saved the puppy from drowning" that "she received the news that she had won a new car in a sweepstake" compared to reading that "Jenny's husband was in a terrible car accident"). Participants were more likely to select outcomes they believed a 'good' person deserved, even if it required additional effort. They also avoided outcomes deemed undeserved, indicating a strong commitment to ensuring individuals receive appropriate consequences for their actions. These findings build upon earlier work by Callan et al. (2013a), which showed that participants anticipated deserved outcomes for targets based on their character, even before the actual outcome was revealed. This proactive commitment to deservingness could potentially extend to punishment decisions for wrongdoers. Defendants tend to receive harsher punishments if they are male, of low SES, or physically unattractive. Conversely, punishments are often more severe when the victim is an attractive female. These findings highlight how combinations of extra-legal attributes can lead to more punitive outcomes in the criminal justice system. Taken together suggesting that the character of a person can influence a participant's responsiveness to them.

Collectively, the discussed research suggests that extra-legal attributes of both victims and defendants can influence punishment severity. This chapter builds upon the extra-legal attributes discussed in Chapter 1 and the introduction of Chapter 2, making certain

assumptions based on the reviewed research. In the subsequent four experiments (Experiments 1a, 1b, 2, and 3), the definitions of "favourable" and "unfavourable" attributes are established as follows: a person with "favourable" attributes is characterised as physically attractive, female, having high SES, and possessing a 'good' character. Conversely, a person with "unfavourable" attributes is defined as physically unattractive, male, having low SES, and possessing a 'bad' character.

Current Research

Past research has suggested that the attribution of guilt and the determination of punishment severity for defendants may be more complex and conditional than initially thought (Devine & Caughlin, 2014; Mazzella & Feingold, 1994). This complexity may arise from the interplay of various extra-legal attributes when presented in combination, or when information about both the victim and the defendant is provided. Building on the findings from Chapter 2, this chapter predicts that punishment severity will increase under two specific conditions: first, when victims possess favourable attributes; second, when defendants possess unfavourable attributes. Just-world beliefs are also explored as a potential moderator of the effects. The investigation of extra-legal attributes' influence on punishment deservingness is conducted in two stages. Experiments 1a and 1b examine how the extra-legal attributes of defendants and victims, respectively, affect the perceived deservingness of punishment and its relation to punishment severity. Following this, Experiment 2 explores how punishment differs when participants receive reports that include all four attributes (favourable or unfavourable) about a target (victim or defendant). This approach allows for a comprehensive analysis of how these factors contribute to punishment judgements. Finally, Experiment 3 incorporates information about the extra-legal attributes of both the victim and

defendant simultaneously, presented in various combinations, to examine how these factors collectively influence punishment decisions.

Experiment 1a (Defendant Attributes) & 1b (Victim Attributes)

Experiments 1a and 1b investigated how physical attractiveness, character, SES, and gender influence punishment deservingness and severity. Experiment 1a focused on these attributes in defendants, while Experiment 1b examined the same attributes in victims to understand their impact on the motivation to punish the defendant on the victim's behalf. In both experiments, each attribute was divided into two opposing levels (e.g., attractive vs unattractive). The four attributes were manipulated in isolation and orthogonally to avoid confounding effects. To prevent participants from anticipating the Experiments aims, all trials used neutrally attractive images of the target (images with an attractiveness score close to the mean attractiveness rating), consistent with those used in the attractiveness manipulation. It is important to note that while the experiments avoided gendered pronouns, all neutral images depicted males. This unavoidable aspect means that gender may have influenced responses across all trials, even those not primarily exploring gender effects (e.g., character, SES and attractiveness).

Thus, participants responded to four scenarios, each which only gave information about the defendants (1a) or victims (1b) attractiveness, gender, SES or character. This allowed for each of the attributes to be explored in isolation (i.e., differences between attractive and unattractive targets) but not in combination with other attributes on punishment severity. This design allowed for the research to explore four attributes within the same sample which was cost effective and efficient. Taken together, it was predicted that the deservingness of punishment and the severity of punishment would be greatest when the

defendant was either physically unattractive, had a bad character, had low SES, or was male. In contrast, the opposite was predicted based on the victim's attributes. Thus, it was predicted that the deservingness of punishment and the severity of punishment would be greatest towards the defendant when the victim was either physically attractive, had a good character, had high SES, or was female.

Method

Experiment 1a (Defendant Attributes)

Participants

Participants were recruited using Prolific (www.prolific.com) and the University of Essex's undergraduate sampling pool; they received either monetary reimbursement (£7ph) or course credits (0.25) for their participation. Seven participants were excluded for failing ≥ 50% of the embedded attention checks. The final sample comprised 205 participants (78.50% female, M_{age} = 22.80, SD_{age} = 5.06). I sought to recruit at least 200 participants, which, according to a sensitivity power analysis, would enable the detection of an effect of d = 0.40 or above at $\alpha < .05$ at 80% power.

Materials and Procedure

Participants were recruited to participate in an online survey investigating how crimes are perceived. They were randomly assigned to read four (of eight total) short scenarios. All the scenarios presented a crime committed by the defendant. However, the crimes were not crossed between the attributes, only within. Considering this, the content of all the scenarios was kept relatively consistent to minimise differences. All the scenarios included a similar crime severity, the type of crime committed (assault), and the extent to which the victim was

injured (in hospital in a stable condition) was consistent. Participants saw one scenario which manipulated the defendant's physical attractiveness, followed by a scenario involving a defendant described as having a 'good' or 'bad' character, another with a low or a high SES, and finally, a scenario with a male or female defendant. For example, both levels of the physical attractiveness manipulation (physically attractive vs. unattractive defendants) saw the following scenario, but the participants saw this only once alongside the image of either the physically attractive or the physically unattractive defendant (Figure 5):

> *"Anthony Leo was arrested shortly after 3 pm Saturday afternoon in association with the assault of a member of the public outside of their home in Ipswich. The victim was rushed to hospital and treated for a fractured jaw and a broken nose".*

Figure 5

Example of Images used as stimuli.

Note. The physically attractive Image (left panel) and physically unattractive image (right panel) used in Experiment 1a. Stimuli were selected from version 2.5 of the Chicago Face Database (Ma et al., 2020), these two were used for the physical attractiveness condition. The image on the left was the attractive defendant (WM029: $M = 4.586$) and the right image was

used for the unattractive defendant (WM206: $M = 1.806$). These were selected for having mean scores, which were at least 2 *SD* from the overall mean attractiveness scores of the white males in the database.

Each scenario presented the crime committed by the defendant and emphasised one extra-legal attribute about the defendant (e.g., their SES, character, physical attractiveness or gender). The scenario was also accompanied by a photograph of the defendant from the Chicago Face Database (Version 2.5) (Ma et al., 2020) (Figure 5: see Appendix C). The images selected from the Chicago Face Database are based on the pre-rated physical attractiveness ratings. The faces used for SES and character were the same between the levels of the manipulation (i.e., the 'good'/'bad' and the high SES/low SES faces were the same) however for the gender trials there was one face for the male trial and on for the female trial, similarly to the attractive and unattractive trials which also had different images. The ratings from the database asked the 1,087 raters to rate the physical attractiveness of the images relative to the physical attractiveness of an average white male/female (scaled from 1 = "Not at all" to 7 = "Extremely"). The physically attractive and unattractive images were selected for being +/- 2 *SD* away from the mean attractiveness rating of the white male and female images ($M = 3.203$, $SD = 0.677$). For consistency throughout the remaining conditions, the remaining scenarios also included a male image from the Chicago Face Database, but these images were less than ½ *SD* away from the mean attractiveness score. All images used can be seen in Appendix B.

The participants began the experiment by completing the 7-item Global-Just-World-Beliefs-Scale (GJWBS) (e.g., "I feel that people get what they deserve") (Lipkus, 1991). The scale had good internal reliability ($\alpha = 0.82$), and the items were averaged to form the measure "BJW". Participants completed the GJWBS before seeing the first (of four)

scenarios and completing the following scales for each scenario. Next, participants answered a series of questions about the scenario. The first two assessed the defendant's perceived deservingness of punishment scaled from 1 = "Strongly Disagree" to 7 = "Strongly Agree. The participants then rated two items that measured how harshly the defendant should be punished via a fine, or prison sentence, scaled from 1 = "Minimum for the offence" to 7 = "Maximum for the offence". Both scales had a good internal reliability (α's = 0.84 and 0.87, respectively) and were averaged to form the measures "Deservingness of Punishment" and "Punishment Severity". Finally, participants indicated how much they believed that the unknown victim of the crime suffered on a scale from 1 = "Minimal amount of suffering" to 7 = "Maximum amount of suffering". Perceived victim suffering was included as an exploratory variable throughout Chapter 3 and are reported in Appendix H.

Experiment 1b (Victim Attributes)

Participants

Participants were recruited online via Prolific (www.prolific.com) and the University of Essex's undergraduate sampling pool. The participants received either monetary reimbursement (£7ph) or course credits (0.25) for their participation. Eleven participants were excluded from the final analysis for failing ≥ 50% of the attention checks. The final sample consisted of 208 participants (53.84% female, M_{age} = 24.29, SD_{age} = 7.14). I sought to recruit at least 200 participants, which, according to a sensitivity power analysis, would enable the detection of an effect of d = 0.40 or above at $\alpha < .05$ at 80% power.

Materials and Procedure

This study uses the same design as Experiment 1a; however, the scenarios imply that the manipulated attributes are those of the victim of a crime instead of the defendant, and the scenarios were amended to reflect that the crime happened to the victim instead of by the defendant. Similarly to Experiment 1a the scenarios were accompanied by images from the Chicago Face Database (version 2.5) (Ma et al., 2020). The images used throughout the study were different; however, they used the same selection criteria from Experiment 1a (Appendix B).

Again, the participants completed the 7-item GJWBS which had a good internal consistency ($\alpha = 0.83$) and were averaged to form the "BJW" measure. In contrast to Experiment 1a, this experiment also included an additional scale which was made up of two items which asked participants to indicate how unjust and unfair they found the crime to be for the victim; the items had good internal consistency $\alpha = 0.84$, and the items were averaged to form the measure "Perceived Injustice". Additionally, the "Deservingness of Punishment" and "Punishment Severity" items from Experiment 1a were adapted to better suit the study focus from the victim's perspective, for example, "It is important that the assailant is caught and punished accordingly" and "If this person is found guilty, what would be a suitable prison sentence?"[6]. The scales had good and excellent internal consistency, respectively (α's = 0.85 and 0.90).

[6] All items and scales used throughout the thesis can be found here: https://osf.io/q4uef/?view_only=310a0bebe06449ee925b27e6ce86d690

Attention checks were embedded throughout both experiments, with one following each vignette. During the attention checks, the participants were required to select the correct answer of the three given choices (e.g., Experiment 1a: “Where did the crime occur?” “Ipswich”/ “Colchester” / “Newmarket” and Experiment 1b: “Where was David when he was attacked? “The gym” / “The greengrocers” / “A restaurant”). In addition, there was a random attention check further in the survey, which asked the participants to select number four. Seven participants from Experiment 1a and eleven participants from Experiment 1b were removed before the analysis. These exclusions indicated that the participant either failed ≥ 50% of the attention checks or provided an incomplete survey response.

Manipulation checks followed each vignette, which asked participants to indicate how attractive/masculine/wealthy or how good a person they perceived the defendant to be. For attractiveness, the participants rated how attractive the target was from 1 = “Extremely unattractive” to 7 = “Extremely Attractive”. The target’s character was rated in line with how much of a good person they were perceived to be, from 1 = “Not at all a good person” to 7 = “An extremely good person”. The SES was measured by how wealthy the target was perceived to be from 1 = “Not at all wealthy” to 7 = “Extremely wealthy”. Finally, the target’s gender was measured in terms of femineity from 1 = “Extremely Masculine” to 7 = “Extremely feminine”.

Results

Experiment 1a (Defendant Attributes)

Manipulation Checks

Four independent t-tests were conducted to explore the differences, thus the effectiveness of the manipulation (attractiveness: attractive/unattractive, character:

'good'/'bad', SES: high SES/ low SES and gender male/female). Firstly, the physically attractive defendant (M = 3.89, SD = 1.23) was rated as being more attractive than the unattractive defendant (M = 2.04, SD = 1.02), t(195.26) = 11.72, p <.001, d = 1.64. Whilst the defendant with a 'good' character (M = 2.80, SD = 1.45) was rated as more 'good' than the defendant with a 'bad' character (M = 2.06, SD = 1.12), t(191.27) = 4.08, p <.001, d = 0.57. The defendant in the high SES vignette (M = 5.41, SD = 0.92) was rated as being wealthier than the low SES defendant (M = 3.35, SD =1.21, t(186.55) = 13.72, p <.001, d = 1.92. Finally, the male defendant (M = 4.30, SD = 1.25) was rated as more masculine than the female defendant (M = 3.31, SD = 1.46), t(198.99) = 5.24, p < .001, d = 0.73.

Due to the uncrossed scenarios over the attributes, meaningful results can only be inferred within the attribute pairings (i.e., we can compare within attractiveness: attractive vs unattractive, but we cannot compare between the attributes, thus 'bad' character trial cannot be compared with attractive trial. Thus, the following analyses will only report the differences between the attribute pairs from the post-hoc comparisons.

Main effects of the defendant's extra-legal attributes on injustice, deservingness and punishment severity

The defendant with a 'bad' character (M = 6.00, SD = 1.07) was rated as being more deserving of punishment than the defendant with a 'good' character (M = 5.39, SD = 1.07), t(199.08) = 3.77, p < .001, d = 0.53. There was no difference in the deservingness of punishment within any of the other attributes. There was not a significant difference in the rated deservingness of punishment due to the physical attractiveness (p = .606), SES (p = .094) or gender (p = .54) of the defendant (See Appendix G). Punishment severity was significantly greater towards the defendant with a 'bad' character (M = 5.72, SD = 1.20) than

the defendant with a 'good' character (M = 4.69, SD = 1.37), t(199.93) = 5.70, p < .001, d = 0.80. However, there was no difference in the punishment severity within the physical attractiveness (p = .53), the SES (p = .334) or the gender (p = .368) of the defendant.

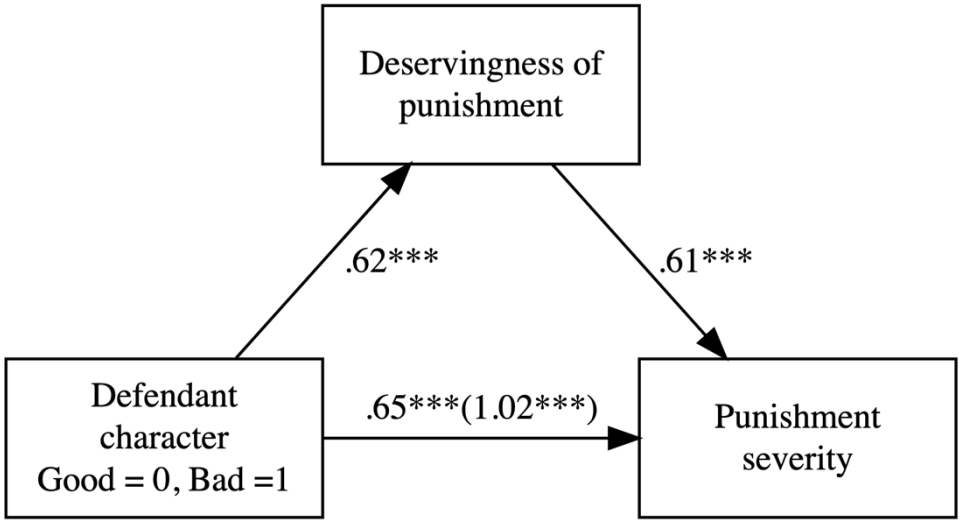
Mediation analysis of punishment severity by deservingness of punishment

Following these results of the manipulated attributes, the only significant differences in the deservingness of punishment and punishment severity come because of the defendant's character. For this reason, the mediation analyses only explored the defendant's character, and it was predicted that the 'bad' defendant would be punished more strongly and that their deservingness of punishment would mediate it. The simple mediation was conducted using the PROCESS model 4 (Hayes, 2017) in R (version 4.2.2 – R Core Team, 2023) and explored whether the character of the defendant (coded as 'good' = 0 and 'bad' = 1) was associated with punishment severity, and if the relationship was mediated by how deserving the defendant was of punishment. The bootstrapping analysis (5,000 resamples) revealed that the defendant's deservingness of punishment mediated the effect of the defendant's character on punishment severity (indirect effect = 0.37, SE = 0.13, 95% CI [0.16, 0.65] (see Figure 6). The results suggested that 'bad' defendants deserved punishment and, in turn, were punished more severely[7].

[7] The indirect effect was not moderated by BJW (b = -0.08, SE = 0.16, 95% CI's [-0.24, 0.39], t (201) = 0.47, p = .640).

Figure 6

The mediation model predicting punishment severity based on the defendant's character and how deserving the defendant was of punishment.



Indirect effect, $b = 0.37$, $SE = 0.13$, 95% CI [0.16, 0.65]

Note. Simple mediation model predicting punishment severity based on the character of the defendant and the defendant's deservingness of punishment. The defendant with a 'good' character was coded as 0 and the defendant with a 'bad' character was coded as 1. Values show the unstandardised path coefficients. *** p <.001

Overall Correlations by BJW

A series of correlations was conducted using the aggregated scores from the trials to explore the possible associations of individual differences in BJW with the outcome measures. There was not a significant association between BJW and the deservingness of punishment across the attributes $r(203) = 0.11$, $p = .115$, or the average punishment severity across the defendant attributes $r(203) = 0.08$, $p = .229$.

Experiment 1b (Victim Attributes)

Manipulation Checks

Firstly, the attractive victim (M = 4.62, SD = 1.18) was rated as more attractive than the unattractive victim (M = 2.68, SD = 1.11), t(205.09) = 12.42, p < .001, d = 1.68. The victim that was described as having a 'good' character (M = 5.40, SD = 1.07) was rated as being more of a good person than the victim with the 'bad' character (M = 3.96, SD = 1.54), t(185.81) = 7.83, p < .001, d = 1.08. The victim who was described as having a high SES (M = 5.60, SD = 0.94) was rated as being wealthier than the victim with a low SES (M = 3.5, SD = 1.08), t(200.09) = 14.95, p < .001, d = 2.08. Finally, the male victim (M = 4.94, SD = 1.12) was rated as being more masculine than the female victim (M = 2.59, SD = 1.12), t(205.93) = 15.07, p < .001, d = 2.09. Similarly to Experiment 1a, meaningful comparisons can only be made within the victim attribute pairs due to the uncrossed nature of the scenarios with attributes. Thus, the following analyses will only report the differences within the attribute pairs.

Main effects of the victims' extra-legal attributes on deservingness and punishment

The amount of injustice reported within the attribute levels differed significantly based on the victim's character. There was a greater amount of injustice reported when the victim had a 'good' character (M = 6.25, SD = 1.11) compared to when the victim had a 'bad' character (M = 4.77, SD = 1.66), t(181.83) = 7.54, p <.001, d = 1.04. However, the results suggested no significant difference in the injustice reported within any of the other attribute levels. Thus, there was no difference in the perception of injustice based on the physical attractiveness (p = .898), the SES (p = .227) or the gender of the victim (p = .217) (See Appendix G).

The amount the unknown defendant deserved to be punished only significantly differed within the manipulation of the victim's character. The deservingness of punishment was greatest when the victim was described as having a 'good' character (M = 5.98, SD = 0.99) compared to the victim who was described as having a 'bad' character (M = 5.20, SD = 1.52), $t(179.60) = 4.42$, $p < .001$, $d = 0.61$. There was no difference in the deservingness of punishment ratings within any of the other attribute pairs. The deservingness of punishment did not differ because of the victim's physical attractiveness (p = .913), SES (p = .558), or gender (p = .115) (see Appendix G). Finally, there was no significant difference in punishment severity within any attribute pair. Thus, the punishment severity that a known defendant should receive was not influenced by the physical attractiveness (p = .539), character (p = .104), SES (p = .75), or gender (p = .48) of the victim (see Appendix G).

Overall Correlations by BJW

A series of correlations were conducted to explore the possible associations of individual differences in BJW on the outcome measures. There was a weak positive association between BJW and the average punishment severity across the victim attributes r (206) = 0.14, p = .049. There was no association between BJW and the unknown defendant's average deservingness of punishment across the victim attributes r (206) = 0.04, p =.613, or the average perceived injustice felt for the victim across the attributes r (206) = 0.05, p =.501.

Moderation analyses for both Experiment 1a and 1b were conducted using model 1 of the PROCESS Macro (Hayes, 2017) to explore whether the perception of the faces influenced the punishment severity. Six separate moderation models were conducted using the manipulation checks for the gender, attractiveness and SES across Experiments 1a and 1b

with the outcome variable of recommended punishment severity. No significant interactions were found (all *p*'s > .05).

Discussion

In summary, the results from Experiments 1a and 1b did not fully align with the initial predictions. For Experiment 1a, it was hypothesised that punishment severity would be harshest towards defendants who were physically unattractive, male, had low SES, or possessed a bad character. However, the findings only supported harsher punishment for defendants with a bad character compared to those with a good character. The relationship between the defendant's bad character and punishment severity was significantly mediated by how deserving of punishment the defendant was perceived to be. No significant effects were observed for the other defendant attributes, moderation analyses reinforced the idea that the variability of the images did not cause the non-significant results in either Experiment 1a or 1b. Experiment 1b predicted that punishment severity would be greatest on behalf of victims who were physically attractive, female, had high SES, or possessed a good character. The results partially supported this, showing that defendants were rated as more deserving of punishment when the victim had a 'good' (vs 'bad') character. However, this did not translate into significantly harsher punishment recommendations. Contrary to predictions, there were no significant differences in deservingness of punishment, perceived injustice, or punishment severity ratings based on the victim's physical attractiveness, SES, or gender. Notably, with the exception of the positive association between BJW and punishment severity in response to victim-based trials (Experiment 1b), BJW was not significantly associated with any other punishment outcome in Experiments 1a or 1b.

Experiment 2

Despite significant manipulation checks in Experiments 1a and 1b, the limited information provided in the scenarios may have contributed to some unexpected results. Previous research suggests that the effects of extra-legal attributes on punishment decisions may be conditional, with combinations of attributes playing a crucial role in motivating punishment measures for victims or against defendants (Ahola et al., 2009; Beaver et al., 2019; Devine & Caughlin, 2014; Mazzella & Feingold, 1994). To explore this further, Experiment 2 will investigate the impact of purposively constructed profiles of victims and defendants that incorporate multiple attributes classified as 'favourable' or 'unfavourable' simultaneously.

Method

Participants

Participants were recruited online via Prolific (www.prolific.com) and received monetary reimbursement of £7ph. Following the exclusion of twenty-seven participants for failing ≥ 50% of the embedded checks in the survey. The final sample consisted of 123 participants (86.20% female, M_{age} = 38.4, SD_{age} = 16.00). The experiment used a within-subjects design and the participants completed four orthogonally manipulated crime reports. I sought to recruit at least 102 participants which according to a sensitivity power analysis would be able to detect an effect of d = 0.40 or above at $\alpha < .05$ with 80% power.

Materials and procedure

The experiment manipulated the favourability of the target attributes (i.e. a favourable target was a physically attractive female with a high SES and a 'good' character, while an

unfavourable target was a physically unattractive male with a low SES and a ‘bad’ character) within a vignette designed to resemble a crime report (Figure 7). The reports also included information about the crime, with the target being either the victim or the defendant. Each report featured an image of the target, selected from the Chicago Face Database (Ma et al., 2020). The images were selected from the previously tested set of images from Chapter 2 Experiment 2 and were selected as being highly (un)attractive females/males. The crime reports were thus identified hereafter as either ‘Favourable Victim’ (FV), ‘Unfavourable Victim’ (UFV), ‘Favourable Defendant’ (FD), or ‘Unfavourable Defendant’ (UFD).

Participants were assigned to read four (of eight total) crime reports. The duplication of crime reports was due to the within-subjects nature of the design, where, to avoid repetitiveness across all four reports, the second version of each report was slightly modified and paired with the opposite version. For example, the crime in the first UFV report was mirrored in the first FV report, so participants who read the first UFV report were assigned to read the second FV report to prevent repetition. Consequently, the crimes were only mirrored across the favourability of the target type. They were not mirrored across the target type (victim to defendant) and should be interpreted cautiously. However, the level of harm/suffering experienced by the victim (or the unknown victim in the defendant-based reports) remained consistent (i.e. they were all seriously injured and recovering in hospital). These considerations allowed for the effect of the victim’s (or defendant’s) favourability in response to a crime with consistent victim suffering to be explored within the same experiment, making it more cost-effective.

Participants began by completing GJWBS (Lipkus, 1991) which was scaled from 0 = “Strongly Disagree” to 6 = “Strongly Agree”. The items had good internal reliability (α = 0.87) and were subsequently averaged to form the “BJW” measure. Across reports, I

manipulated whether the participants learned about attributes of the victim, or the defendant, and the favourability of these.

Attractiveness and gender

The crime reports each included a photograph of the victim (or defendant), which was selected from the Chicago Face Database (Ma et al., 2020)[8]. Based on its attractiveness rating (the faces were either highly attractive or unattractive), the photograph also expressed the sex of the victim (or defendant; male or female).

Socioeconomic status

The report also included information about the occupation of the victim (or defendant) to allow for their SES to be inferred (high or low SES). With the high SES victim (or defendant) being described as a Lawyer for example, and the low SES victim (or defendant) being described as unemployed.

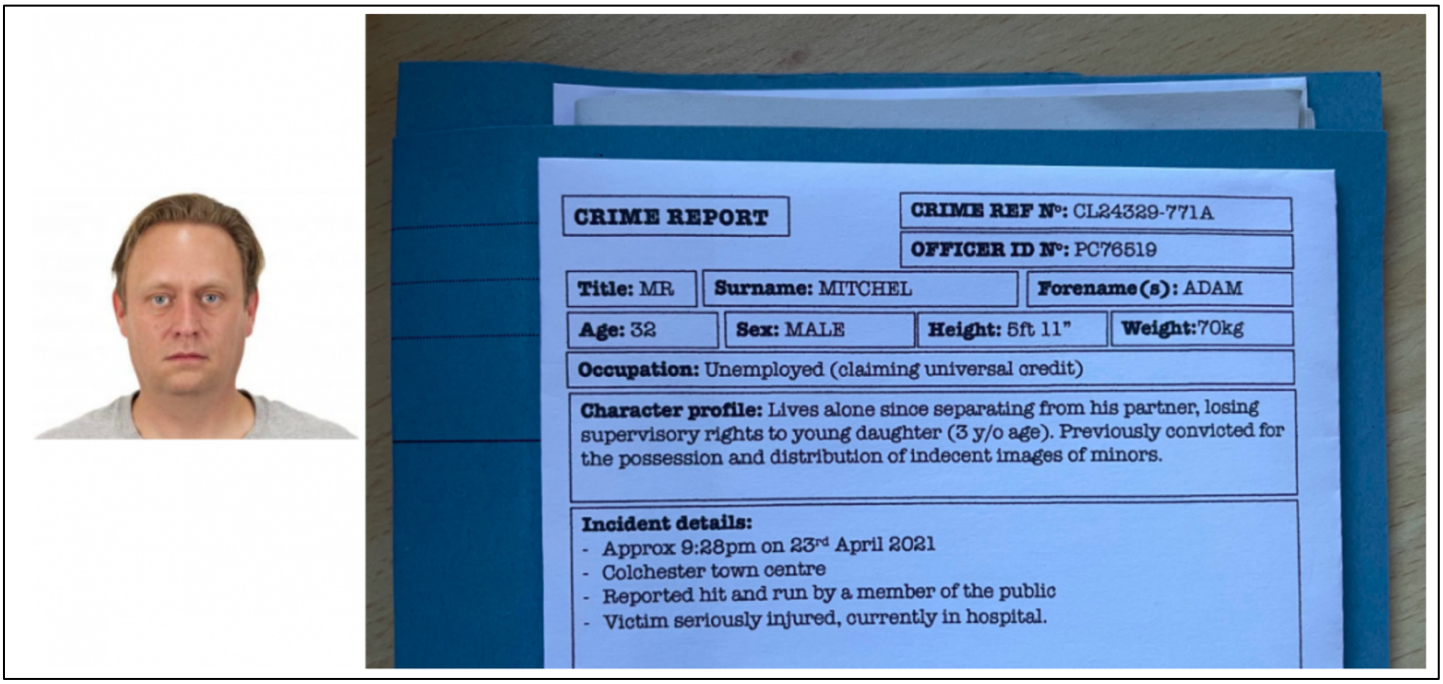
Character

It also included details about their character with a 'good' character being expressed as a person who frequently volunteers, compared to a 'bad' character being a person with previous convictions (for example see Figure 7). In total, the participants responded to one version of each four report types.

[8] The attractive images were selected for having ratings at least 1SD (SD = 0.679) above the mean (M = 3.203) attractiveness rating of the White Males and White Females from Version 2.5 of the Chicago Face Database. The unattractive images were selected for being at least 1SD below the mean attractiveness rating. One of the unattractive images was only 0.5 SD below the mean and should be interpreted with this in mind.

Figure 7

Example of crime report scenario.



Note. The crime report shows an unattractive male defendant with a low SES and a bad character (UFD).

The items in the perceived injustice, deservingness of punishment and punishment severity scales replicated those used in Experiment 1b. The scales had excellent internal reliability (αs = 0.97, 0.97 and 0.87, respectively) and were averaged to form the "Perceived Injustice", "Deservingness of Punishment", and "Punishment Severity" measures. Participants also answered the single "Victim Suffering" item for exploratory purposes (reported in Appendix G).

Attention checks were embedded in the survey to ensure that the participants were paying sufficient attention to the report's content. Participants that failed $\geq$ 50% of the attention checks were removed before the final analysis. The attributes were manipulated in

the same way as previous studies; therefore, there were no manipulation checks throughout the survey.

Results

Main effects of victim/defendant favourability on injustice, deservingness of punishment and recommended punishment severity

We conducted separate repeated measures Analysis-of-Variance (ANOVAs), testing the effects of the target (whether a crime report included information about either the victim or defendants' attributes), favourability (whether the target had favourable vs. unfavourable attributes), and their interaction on the deservingness of punishment, injustice, and punishment severity.

Injustice

For injustice, there was a significant main effect of favourability $F(1,122) = 35.72$, $p < .001$, $\eta^2_p = 0.23$. Such that there was significantly more injustice reported when the report described either a victim or defendant with favourable ($M = 6.37$, $SD = 0.78$) compared to unfavourable attributes ($M = 5.83$, $SD = 1.11$). There was not a significant main effect of who the target was $F(1,122) = 0.05$, $p = .817$, $\eta^2_p = 0.00$. Such that there was not a significant difference in the amount of injustice reported, irrespective of whether the report described the attributes of the victim ($M = 6.09$, $SE = 0.89$) or attributes of the defendant ($M = 6.11$, $SE = 1.00$). There was a significant interaction between the target type and the favourability of their attributes $F(1,122) = 7.49$, $p = .007$, $\eta^2_p = 0.06$ (see Figure 8). Follow-up tests using pairwise comparisons indicated that injustice was significantly greater in response to the crime report whereby the victim had favourable ($M = 6.47$, $SD = 0.88$) compared to when the

victim had unfavourable attributes (M = 5.72, SD = 1.41), $t(122) = 5.47$, p <.001, d = 0.49. There was significantly more injustice reported when the crime report described a defendant with favourable (M = 6.28, SD = 1.04) compared to when the defendant had unfavourable attributes (M = 5.95, SD = 1.30), $t(122)$= 3.40, p = .001, d = 0.31.

Deservingness of Punishment

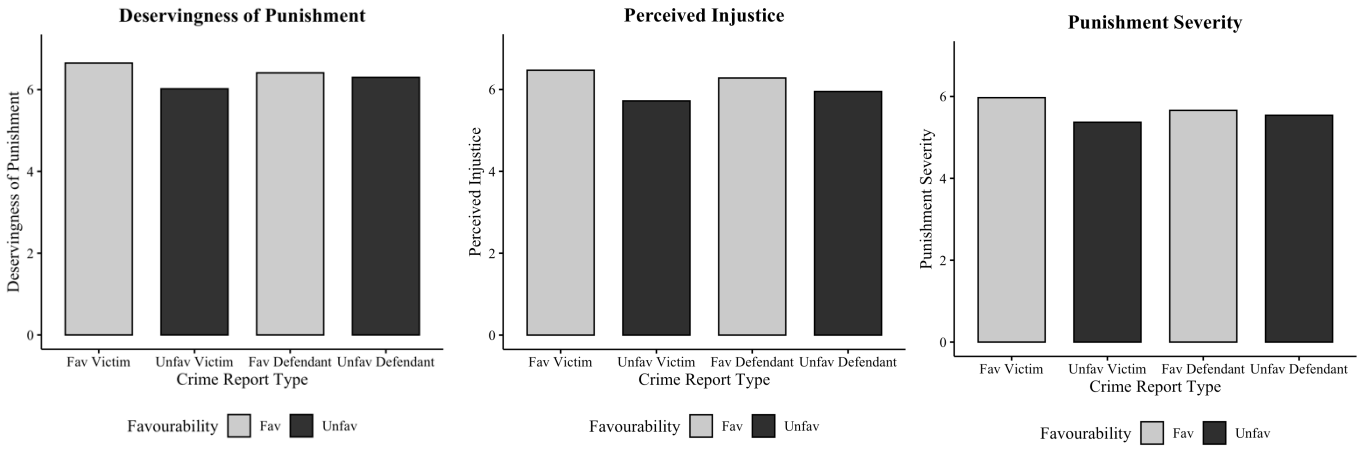
For deservingness, there was a significant main effect of favourability $F(1,122)$ = 32.61, p < .001, η^2_p = 0.21 such that when either the victim or defendant had favourable attributes (M = 6.53, SE = 0.66), the defendant was more deserving of punishment compared to when either the victim or defendant had unfavourable attributes (M = 6.16, SE = 1.00). There was not a significant main effect of the target $F(1,122) = 0.06$, p = .714, η^2_p = 0.00, such that there was no difference in how deserving the defendant was of punishment irrespective of whether the report described the attributes of the victim (M = 6.33, SE = 0.78) or the defendant (M = 6.34, SE = 0.89). There was a significant interaction between the target type and the favourability of their attributes on the defendant's deservingness of punishment $F(1,122) = 21.06$, p < .001, η^2_p = 0.15 (Figure 8). Follow-up tests using pairwise comparisons indicated that the defendant's deservingness of punishment was significantly greater when the victim had favourable (M = 6.65, SD = 0.59) compared to unfavourable attributes (M = 6.02, SD = 1.23), $t(122) = 6.27$, p <.001, d = 0.57. There was not a significant difference in the defendant's deservingness of punishment irrespective of whether the defendant had favourable (M = 6.41, SD =0.92) or unfavourable attributes (M = 6.30, SD = 0.98), $t(122)$ = 1.59, p = .115, d = 0.14.

Punishment Severity

For punishment severity, there was a significant main effect of favourability, $F(1,122) = 19.54$, $p < .001$, $\eta^2_p = 0.14$, with greater punishment severity being allocated when either the victim or defendant had favourable ($M = 5.82$, $SE = 1.11$) compared to unfavourable attributes ($M = 5.45$, $SD = 1.33$). There was not a significant main effect of the target on punishment severity $F(1,122) = 0.75$, $p = .387$, $\eta^2_p = 0.01$. Such that there was not a significant difference in the amount of punishment severity allocated to the defendant, irrespective of whether the report described the attributes of the victim ($M = 5.67$, $SE = 1.22$) or attributes of the defendant ($M = 5.60$, $SE = 0.11$). However, there was a significant interaction $F(1,122) = 12.63$, $p = .001$, $\eta^2_p = 0.09$ (see Figure 8). Follow-up tests using pairwise comparisons indicated that punishment severity towards the defendant was significantly harsher when the victim had favourable ($M = 5.97$, $SD = 1.15$) compared to unfavourable attributes ($M = 5.37$, $SD = 1.49$), $t(122) = 5.17$, $p < .001$, $d = 0.47$. There was not a significant difference between the punishment severity towards the defendant when the defendant had favourable ($M = 5.66$, $SD = 1.30$) compared to unfavourable attributes ($M = 5.54$, $SD = 1.41$), $t(122) = 1.34$, $p = .138$, $d = 0.12$.

Figure 8

Bar graphs showing the main effects of the target type and attribute favourability on Deservingness of Punishment, Perceived Injustice and Punishment Severity.



Mediation analyses of punishment severity by perceived injustice and deservingness of punishment

The interaction suggested that the punishment severity only differed significantly between the favourability of the victims and not between the attributes of the defendants, thus the full mediation analysis only explored the victim-based reports. It was predicted that favourable victims would arouse more injustice and report that the unknown defendant was more deserving of punishment and that punishment severity would be harsher.

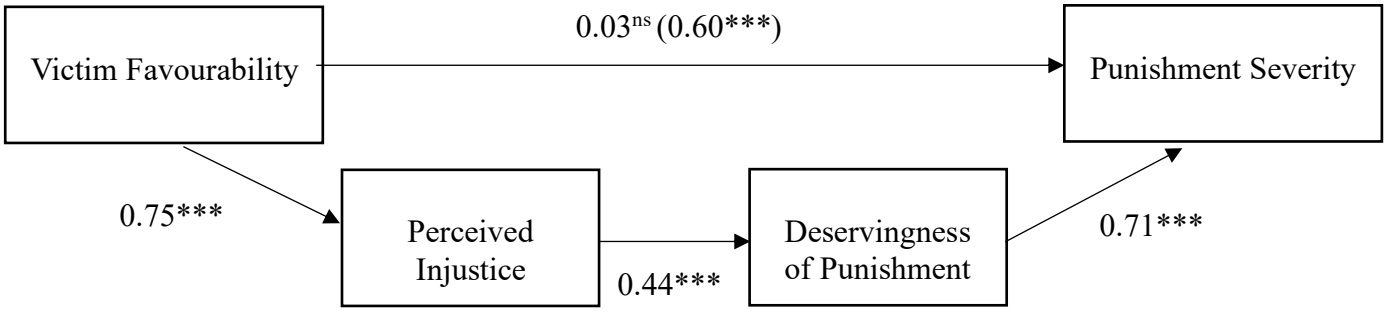
The serial mediation was conducted using the MEMORE Model 1 (Montoya & Hayes, 2017), which tested whether punishment severity was influenced by the favourability of the victim (favourable vs unfavourable), and if this relationship was mediated by the perception of injustice and the defendant's deservingness to be punished. The bootstrapping analysis revealed that the perceived injustice and deservingness of punishment mediated the effect of victim favourability on punishment severity for the unknown defendant (indirect

effect = 0.24, *SE* = 0.09, 95% CI [0.09, 0.82] see Figure 9). The results suggested that favourable victims evoked more perceived injustice, which increased the unknown defendant's deservingness of punishment and, in turn, led to harsher punishment severity. The results indicated that independently the perception of injustice (indirect effect = 0.12, *SE* = 0.09, 95% CI's [0.04, 0.36]) and deservingness of punishment (indirect effect = 0.21, *SE* = 0.08, 95% CI's [0.05, 0.36]) mediated the effect of victim favourability on punishment severity (Figure 9).

Further exploration indicated that the participant's just-world beliefs did not moderate punishment severity. A moderation was run using model 2 of the MEMORE MACRO (Montoya & Hayes, 2017) with victim favourability (favourable-unfavourable) as the predictor, punishment severity as the outcome, and BJW as the moderator. The overall moderation difference between favourable victims and unfavourable victims suggested that there was a negative non-significant interaction of victim favourability and BJW scores on punishment severity $b = 0.09$, $SE = 0.11$, $t(121) = 0.80$, $p = .426$, 95% CI [-0.33, 0.13]. The results suggest that the participant's just-world beliefs did not impact the punishment severity of the unknown defendants from reports with favourable and unfavourable victims.

Figure 9

The model predicts punishment severity based on the victim's favourability by perceived injustice and the perpetrator's deservingness of punishment.



Indirect effect: $b = 0.24$, $SE = 0.09$, 95% CI [0.10, 0.82]

Note. The serial mediation model predicts the punishment severity by perceived injustice and deservingness of punishment. Values show the unstandardised difference scores of path coefficients from MEMORE Model 1. Difference scores between the Victim Favourability (Favourable Victim-Unfavourable Victim). ***p <.001

Discussion

The results from Experiment 2 did not fully support the predictions. It was predicted that punishment severity would be harshest when the crime report had a victim described as having favourable attributes, or a defendant with unfavourable attributes. The results indicated that punishment severity was harsher when a crime report described a victim as having favourable compared to unfavourable attributes. The perception of injustice and deservingness of punishment positively mediated the effect. Thus, a victim who was described in the crime report as having favourable attributes (i.e., they were a physically attractive female with a high SES and a good character) created more injustice, leading to a greater deservingness of punishment towards the defendant and, in turn, lead to harsher punishment severity for the unknown defendant. In contrast, there was not a significant effect of the favourability of the defendant's attributes on punishment severity, deservingness of punishment or injustice. The results also indicated that individual differences in BJW did not moderate punishment severity.

Experiment 3

Experiments 1a and 1b revealed that only the target's character independently influenced punishment decisions. Building on these findings, Experiment 2 demonstrated a significant difference in desired punishment severity based on the favourability of a victims attributes. Specifically, punishment was harsher when the victim possessed favourable compared to unfavourable attributes. Although there was no significant main effect of target type (victim or defendant) on punishment severity, a significant interaction emerged. This interaction indicated that punishment severity was greatest when a victim had favourable attributes compared to unfavourable attributes. Given these results, Experiment 3 was designed to explore how punishment severity is influenced when observers are presented

with information about both the victim's and the defendant's attributes simultaneously in a short crime report. Based on Experiment 2's findings, it was anticipated that crime reports featuring victims with favourable attributes would lead to harsher punishment for defendants. However, the same effect was not observed for defendants with favourable attributes. Experiment 3 aims to address a limitation of Experiment 2, where participants only learned about either the victim's or the defendant's attributes in isolation. This new experiment will investigate whether the effect of one parties' attributes might depend on the others attributes. For instance, people may be inclined to punish a defendant less severely, but only when the victim has unfavourable attributes compared to favourable ones.

The presence of both parties' attributes in a scenario could potentially have a countervailing influence on punishment decisions. The favourability of the victim's attributes might enhance the desire to punish (leading to more severe punishments), while the defendant's attributes could reduce this desire (resulting in less severe punishments). These opposing effects might cancel each other out, or they may only become apparent when the parties have contrasting attributes (i.e., incongruent attributes). Experiment 3 was designed to test this hypothesis by manipulating both parties' attributes simultaneously. The study aimed to determine whether the effect of manipulating one parties' attributes depended on the attributes of the other. Specifically, it examined whether punishment is harshest when a victim has favourable attributes and the defendant has unfavourable attributes, and whether punishment is less severe when the victim has unfavourable attributes and the defendant has favourable ones. Additionally, the experiment explored if the effect of the defendant's attributes differs when the victim has favourable versus unfavourable attributes, and whether the effect on punishment is larger when the attributes are opposing/incongruent (vs. the same/congruent). The primary prediction was that defendants would receive harsher punishments when they have unfavourable attributes, particularly when they are part of an

incongruent pairing (i.e., when the victim in the report had favourable attributes). This experiment aims to provide a more nuanced understanding of how the interplay between victim and defendant attributes influences punishment decisions in complex, realistic scenarios.

Method

Participants

Participants were recruited online via Prolific (www.prolific.com) and received monetary reimbursement of £7ph and eleven participants were excluded before the analysis for failing ≥ 50% of the attention checks. The final sample consisted of 121 participants (77.90% females; M_{age} = 33.70 years, SD_{age} = 12.00). I sought to recruit at least 102 participants which according to a sensitivity power analysis would enable the detection of an effect of d = 0.40 at $\alpha < .05$, with a power of 80%. The experiment used a within-subjects design and the participants completed four orthogonally manipulated scenarios.

Materials and procedure

Again, the participants began by completing the 7-item GJWBS scale (Lipkus, 1991) before being randomly assigned to read four (of eight total) crime reports, each presenting the attributes of the victim and defendant. The victims' and defendants' profiles that classified them as having favourable or unfavourable attributes mirrored those from Experiment 2. This time the attributes of the targets were collapsed into dual profiles, which presented both targets at once where the victim and the defendant had attributes that were either congruent (both having favourable or unfavourable attributes), or incongruent (where the victim or the defendant had favourable, whilst the other had unfavourable attributes). Similar to

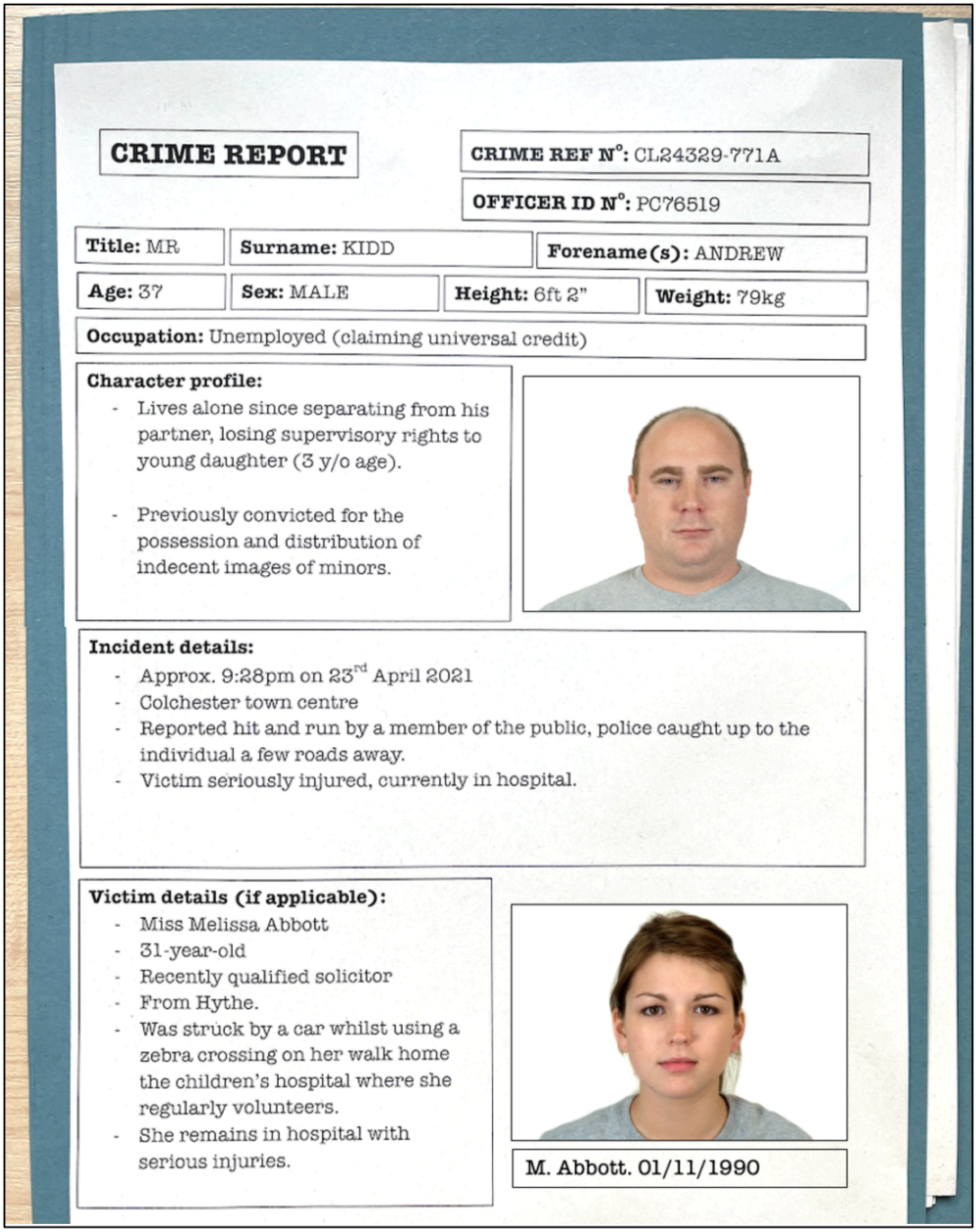
Experiment 2, all attributes were manipulated within the crime report details, whilst the attractiveness was done using image[9] from the Chicago Face database (Ma et al., 2020) (See Figure 10 and Appendix F).

The perceived injustice, deservingness of punishment, and punishment severity scale measures replicated those used in Experiment 2. All scales had a good-to-excellent internal consistency (α's = 0.93, 0.92, and 0.88 respectively) and were collapsed to form the measures "Perceived Injustice", "Deservingness of Punishment" and "Punishment Severity". Again, for exploratory purposes the participants rated the perceived suffering of the victim (see Appendix H), after which, the participants were thanked and debriefed. Participants who failed ≥ 50% of the embedded attention checks were removed prior to the analysis.

[9] The attractive images were selected for having ratings at least 1SD (*SD* = 0.679) above the mean (*M* = 3.203) attractiveness rating of the White Males and White Females from Version 2.5 of the Chicago Face Database. The unattractive images were selected for being at least 1SD below the mean attractiveness rating.

Figure 10

Crime report example used for stimuli.



Note. The crime report shows an example of an incongruent pairing where there was an unattractive male defendant with a low SES and a bad character and a victim who was physically attractive female with a good character and a high SES.

Results

Main effects of favourability and target type

Separate factorial ANOVAs were conducted testing the effects of the victim favourability (whether a crime report involved a victim with favourable or unfavourable attributes), and the congruency of the attributes that the pair had (whether the victim and defendant either had the same (congruent) or different (incongruent) favourability of their attributes and their interaction on the perception of injustice, deservingness of punishment and punishment severity.

Injustice

For injustice, there was a significant main effect of the victim's favourability on the perception of injustice, $F(1,120) = 50.98$, $p < .001$, $\eta^2_p = 0.30$, with more injustice being reported when the crime report included a victim with favourable ($M = 6.32$, $SD = 0.66$), compared to unfavourable attributes ($M = 5.84$, $SD = 0.88$) irrespective of the defendants attributes. Furthermore, there was not a significant main effect of the defendants' attributes on the perception of injustice. With no differences in the perceived injustice ratings, $F(1,120) = 0.02$, $p = .90$, $\eta^2_p = 0.10$, when the defendant had favourable ($M = 6.08$, $SD = 0.88$) or unfavourable attributes ($M = 6.07$, $SD = 0.77$) irrespective of the victims' attributes. There was a significant interaction between the victim and defendant's attributes on perceived injustice.

Follow-up tests using pairwise comparisons indicated that there was significantly more injustice when a victim who had favourable attributes was paired with a defendant with unfavourable attributes ($M = 6.44$, $SD = 0.67$) compared to when the victim with the favourable attributes were paired with a defendant who also had favourable attributes ($M =$

6.19, *SD* = 0.92), *t*(1,120) = 3.18, *p* = .002, *d* = 0.29. The comparison with the greatest difference suggested that there was significantly more injustice perceived when the victim had favourable and defendant had unfavourable attributes (*M* = 6.44, *SD* = 0.67) compared to when the victim had unfavourable and defendant had favourable attributes (*M* = 5.97, *SD* = 0.90), *t*(120) = 6.12, *p* < .001, *d* = 0.56 (Figure 11).

Deservingness of Punishment

There was a significant main effect of victim favourability on the defendant's deservingness of punishment ratings, *F*(1,120) = 28.80, *p* < .001, η^2_p = 0.19, when the victim had favourable attributes (*M* = 6.40, *SD* = 0.66) the defendant was more deserving of punishment than when the victim had unfavourable attributes (*M* = 6.10, *SD* = 0.77), irrespective of the defendants attributes. There was not a significant main effect of the defendants attributes on deservingness of punishment *F*(1,120) = 1.785, *p* = .183, η^2_p = 0.02. Thus there was no difference in how deserving the defendant was of punishment when they had favourable (*M* = 6.21, *SD* = 0.77) or unfavourable attributes (*M* = 6.29, *SD* = 0.66), irrespective of the victims attributes. There was a significant interaction of the victim and defendant attributes on the deservingness of punishment *F*(1,120) = 4.86, *p* = .029, η^2_p = 0.04.

Follow-up tests using pairwise comparisons indicated that the defendant with unfavourable attributes were significantly more deserving of punishment when they were paired with a victim with favourable attributes (*M* = 6.49, *SD* = 0.68) compared to a defendant with favourable sttributes when theyh were paired with a victim who also had favourable attributes (*M* = 6.30, *SD* = 0.84), *t*(120) = -2.88, *p* = .005, *d* = 0.26. The comparison with the greatest difference suggested that the perceived deservingness of punishment was greatest when the victim had favourable and defendant had unfavourable attributes (*M* = 6.49, *SD* = 0.68) compared to when the victim had unfavourable and

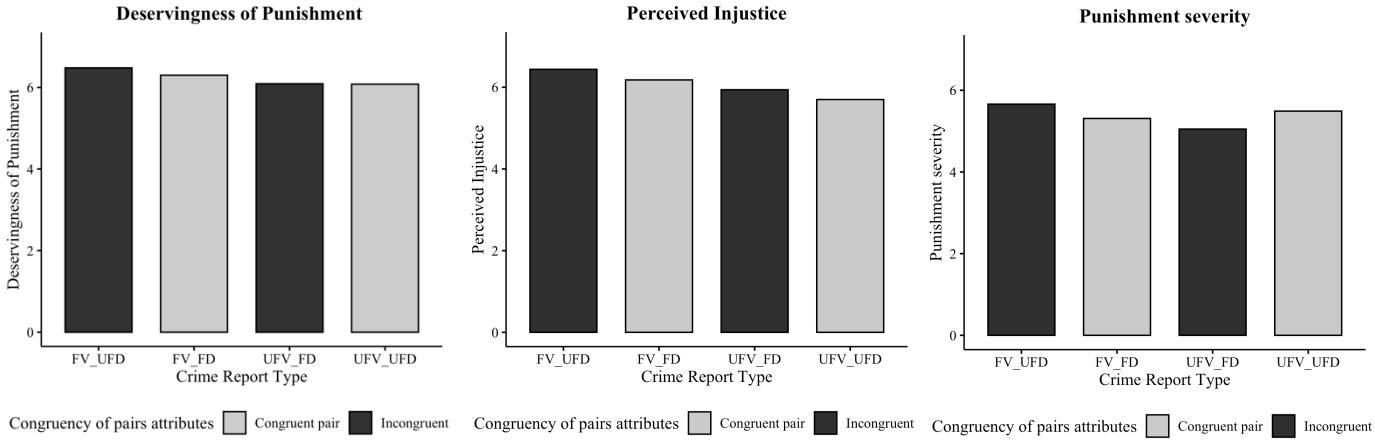
defendant had favourable attributes (M = 6.12, SD = 0.88), t(120) = 5.39, p < .001, d = 0.49 (Figure 11).

Punishment Severity

For punishment severity, there was a significant main effect of the favourability of the victims' attributes on punishment severity, F(1,120) = 6.00, p = .016, η^2_p = 0.05. Punishment severity was greater when the victim had favourable (M = 5.50, SD = 1.10), compared to unfavourable attributes (M = 5.31, SD = 1.13). There was a significant main effect of the favourability of the defendants attributes on recommended punishment severity F(1,120) = 36.523, p < .001, η^2_p = 0.23. With the harshest punishment recommendations towards the defendant with unfavourable attributes (M = 5.26, SD = 1.09) compared to defendants with favourable attributes (M = 5.18, SD = 1.12). There was not a significant interaction of the favourability of the victim and defendants attributes on recommended punishment severity F(1,120) =0.239, p = .626, η^2_p = 0.00.

Figure 11

Bar graph showing the interaction of the favourability of attributes target type on punishment severity*



Mediation analyses of punishment severity by perceived injustice and deservingness of punishment

Two serial mediation models were conducted using MEMORE Model 1 (Montoya & Hayes, 2017). The first model explored whether manipulating the defendant's attributes (favourable vs. unfavourable) impacted punishment via the direct pathway when the victim had favourable attributes. Additionally, if the relationship was mediated by the perception of injustice and/ or the defendant's deservingness of punishment. The bootstrapped analysis revealed that the perceived injustice and deservingness of punishment did not mediate the effect of the defendants' attributes on punishment severity when the victim had favourable attributes (indirect effect = 0.05, *SE* = 0.04, 95% CI [-0.00, 0.13], top panel of Figure 12). However, the results indicated that independently the perception of injustice for the favourable victim (indirect effect = 0.11, *SE* = 0.06, 95% CI [0.02, 0.24]) did mediate punishment severity, resulting in harsher punishment severity when the defendant had unfavourable attributes. However independently the defendant's deservingness of punishment did not mediate punishment severity irrespective of the favourability of their attributes (indirect effect = 0.02, *SE* = -0.04, 95% CI [-0.02, 0.08].

The second model explored whether manipulating the defendant's attributes (favourable vs. unfavourable) when the victim had unfavourable attributes. Additionally, if this relationship was mediated by the perception of injustice and how deserving the defendant was of being punished. The bootstrapping analysis revealed that when a victim had unfavourable attributes and the defendant had unfavourable (vs. favourable) attributes, the participants perceived more injustice and the defendant was more deserving of punishment, in turn the defendant received harsher punishment (indirect effect = -0.04, *SE* = 0.09, 95% CI's [-0.09, -0.01]; See bottom panel of Figure 12. However, the model contains a

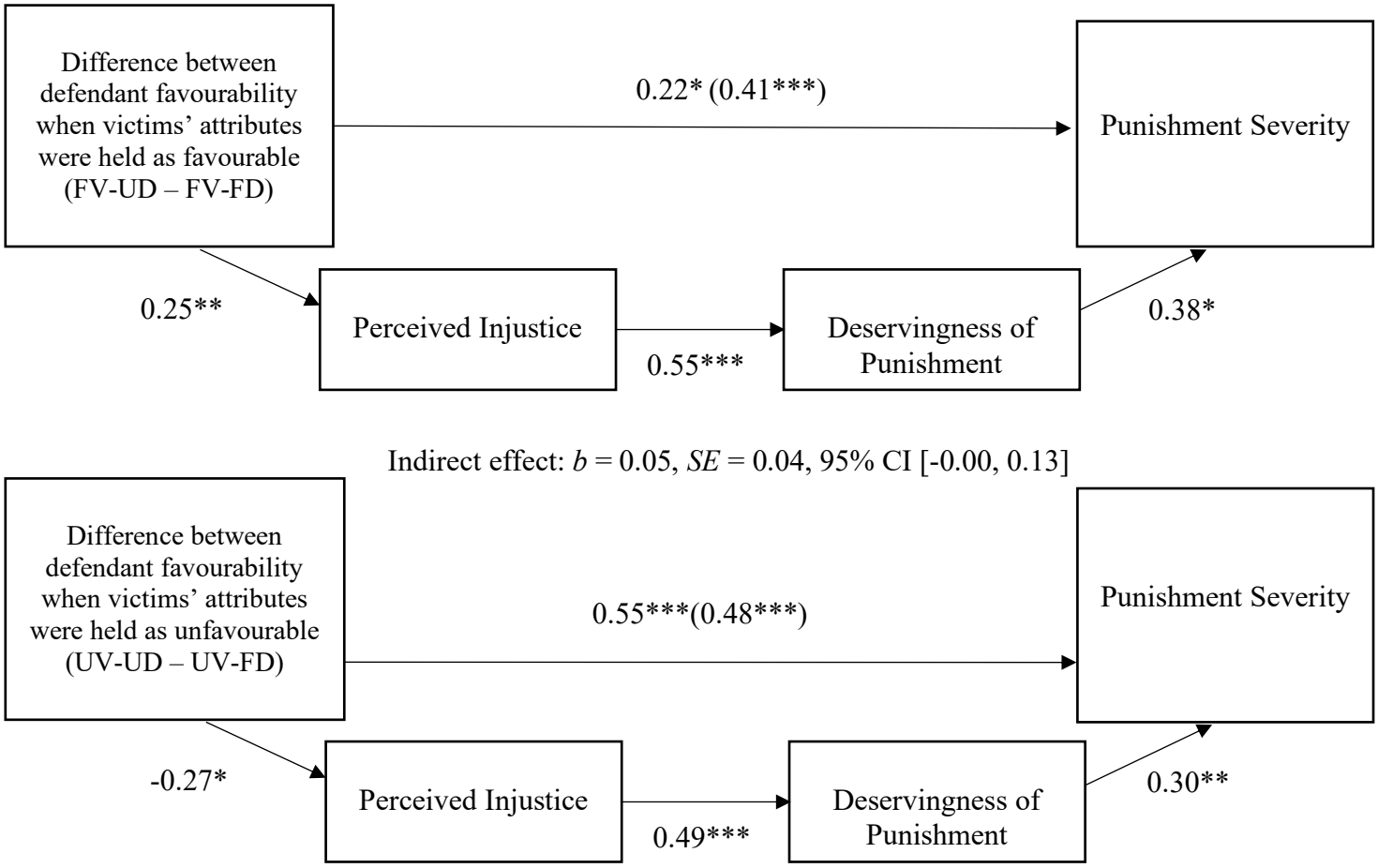
suppression effect whereby the direct effect $b = 0.55$, $SE = 0.09$, $t(118) = 6.18$, $p < .001$, 95% CI [0.37, 0.72] was positive and inflated compared to the total effect $b = 0.48$, $SE = 0.10$, $t(120) = 4.90$, $p < .001$, 95% CI [0.28, 0.67]. The directions of the direct (positive; 0.55) and indirect effect (negative; -0.04) are also inconsistent.

Moderation analyses by BJW

Two moderation analyses were conducted using Model 2 of MEMORE (Montoya & Hayes, 2017) to explore whether BJW moderates the relationship between the congruency of the parties' attributes when the victim had favourable (Model 1) and unfavourable (Model 2) attributes. The first moderation model indicated that BJW did not moderate the relationship between the defendants' attributes (favourable vs. unfavourable) on recommended punishment severity when the victim had favourable attributes ($b = 0.00$, $SE = 0.10$, $t(119) = 0.03$, $p = .980$, 95% CI [-0.20, 0.21]). The second moderation identified that BJW did not significantly moderate the relationship between the between the defendants' attributes (favourable vs. unfavourable) on recommended punishment severity when the victim had unfavourable attributes ($b = -0.13$, $SE = 0.10$, $t(119) = 1.37$, $p = .175$, 95% CI [-0.33, 0.60]).

Figure 12

Effects of the defendant's attributes on punishment severity via perceived injustice and deservingness of punishment when the victim had favourable (top panel) or unfavourable attributes (bottom panel)



Note. The serial mediation models predict the severity of punishment by perceived injustice and deservingness. Values show the unstandardised difference scores of path coefficients from MEMORE Model 1. Model 1 (top panel) shows the difference scores based on the defendant's attributes, whilst the victim had favourable attributes (FV_UFD – FV-FD). Model 2 (bottom panel) shows difference scores based on the defendants' attributes when the victim had unfavourable attributes. * $p < .05$, ** $p < .01$, *** $p < .001$

Discussion

The results suggest that the combination of the victims and defendants can influence the perception of injustice, how deserving the defendant was of punishment and at times how severe the recommended punishment was for the defendant. When victims has favourable attributes there was a victim enhancement effect whereby injustice, deservingness of punishment and recommended punishment severity were greater when they were paired with a defendant who had unfavourable (vs. favourable) attributes. The overall pattern of results illude that effect of either party could at times depend on the attributes of the other, and that these effects on punishment can potentially "cancel out" when the parties possess opposing attributes. More specifically, the findings suggested that when defendants exhibited unfavourable (vs. favourable) attributes, there was a greater sense of injustice felt towards the favourable (vs. unfavourable) victim and the defendant's punishment was harsher. Yet the serial mediation model (Model 1) identified that although there was more injustice perceived, that the defendant was not deemed more deserving of punishment when the victim possessed favourable attributes. Although Model 2 then focused on responses to defendants when a victim had unfavourable attributes. The results indicated that defendants with unfavourable attributes, evoked a stronger sense of injustice for the victim and the defendants, were considered more deserving of punishment. As a result, these defendants were punished more harshly compared to those with favourable attributes. However, it is worth noting that the model contained a suppression effect meaning that the mediator variables could be explaining more of the variance than the predictor variable, which could have caused the direct effect to be larger than the total effect. This could suggest that the inflation of the direct effect (compared to the total effect) might indicate that the perception of injustice and the defendant's deservingness of punishment could be more explanatory or predictive of

punishment severity than the defendant's attributes when the victim was portrayed as having unfavourable attributes.

General Discussion

Across the four experiments, this chapter examined whether extra-legal factors of defendants (Experiment 1a) or victims (Experiment 1b) influenced punishment severity. Experiment 2 then explored how combining these attributes into favourable and unfavourable profiles within crime reports affected punishment severity. Experiment 3 examined the influence of the opposing parties' attributes when they were the same (congruent) or different (incongruent) on punishment decisions. Throughout all experiments, individual differences in just-world beliefs were also assessed. The findings partially supported the predictions, and each experiment's contribution are discussed in turn.

The findings from Experiment 1a demonstrated that only the defendant's character showed to lead to harsher punishment, which was mediated by how deserving of punishment the 'bad' defendant was. Thus the results only partially supported the hypothesis that the favourability of victims and defendants attributes would influence punishment severity . In contrast, the results from Experiment 1b, which focused on victims, demonstrated that although the victim with a 'good' (vs. 'bad') character did make the defendant more deserving of punishment, it did not influence the severity of punishment allocated to them. Additionally, there were no differences in the punishment severity ratings based on the physical attractiveness, SES or the gender of the victim. The results from Experiment 1a supported the existing research by Cheung and Lagnado (2023), whereby a defendant with a 'bad' character was punished more severely. In addition to supporting earlier research by Harvey et al. (2016) and Callan et al. (2013a), whereby people are motivated to see what

people get and what they deserve, which provides support in line with JMT. However, the non-significant results from Experiments 1a and 1b did not support the existing, albeit small, effects seen in the research whereby defendants who were physically less attractive, male or had a low SES were punished more severely (Devine & Caughlin, 2014; Mazzella & Feingold, 1994).

Experiment 2 then explored how punishment differs when participants receive reports that include all four attributes (favourable or unfavourable) about a target, whether it be a victim or defendant. The results revealed a significant difference in perceived injustice, deservingness of punishment, and punishment severity based on the favourability of the target's attributes. However, it is important to note that the target alone (whether victim or defendant) did not independently influence these factors. Overall, the findings indicated that the favourability of the victim's attributes played a crucial role. More favourable victim attributes evoking a stronger sense of injustice, which in turn increased the defendant's perceived deservingness of punishment and led to harsher punishment. Contrary to initial predictions, the attributes of the defendant did not yield any significant differences. This unexpected outcome could be interpreted in two ways: punishment severity did not significantly differ as a result of the favourability of the defendants attributes alone, or because the motivation to punish on behalf of the victim was suppressed when there was no information available about them. These findings highlight the complex nature of punishment decision-making and the potential risks of relying solely on attribute-based judgements. To address these issues and gain further insights, Experiment 3 was designed to explore these factors in greater depth by incorporating more comprehensive case information.

Experiment 3 expanded on the findings of Experiment 2 by exploring whether the effect of a target's attributes might depend on the attributes of another person involved in the

case. Furthermore, Experiment 3 aimed to investigate whether the favourability of attributes in paired combinations could potentially "cancel each other out" when they were congruent (the same) or enhance punishment when the parties attributes were incongruent (different). The results indicated that more injustice was felt for the victim and that the defendant was in turn was punished more harshly when the victim had favourable (vs. unfavourable) attributes. However in contrast to the results from Experiment 2 the defendants deservingness of punishment did not lead to an increase on punishment severity irrespective of the defendants attributes. The pattern was similar when the victim had unfavourable attributes however the model contained a suppression effect. Thus, it could be speculated that when a victim had unfavourable attributes that irrespective of the defendant's attributes/ congruency that injustice and deservingness of punishment are more predictive of the punishment than the defendant's attributes themselves.. The findings could suggest that the mere knowledge of a person committing a crime might be sufficient to deem them deserving of punishment. This aligns with the results from Experiment 2, which indicated that the defendant's attributes were not as predictive of punishment as those of the victim. This phenomenon could be attributed to the threat that a suffering victim poses to the concept of a just-world, regardless of the favourability of their attributes. Thus BJW theory heavily concerns itself with the victim, their suffering and the injustice experienced, rather than about the defendant.

These findings contribute to the existing literature in several ways, initially by examining the influence that the collapsing down of attributes into 'favourable' and 'unfavourable' classes had on punishment severity was relatively novel. To date, a substantial body of research has explored the impact of extra-legal attributes on guilt and punishment judgements. However, much of this research has focused on singular attributes, such as attractiveness or SES (Abel & Watters, 2005; Freeman, 2006). The results of these studies have generally yielded relatively small and inconsistent effects, often manifesting only under

specific conditions. For instance, some studies have found that women tend to receive more lenient punishments for theft offences (Ahola et al., 2009). Similarly, research into the attractiveness leniency bias phenomena suggests that attractive females are sometimes treated more leniently in legal contexts (Beaver et al., 2019; Dion et al., 1972; Mazzella & Feingold, 1994).

Limitations and future directions

The research presents some limitations that warrant consideration. In Experiments 1a/b and 2, the attributes were consolidated into broad 'favourable' and 'unfavourable' categories, with all four focal attributes aligned in the same direction. While providing a general overview, this approach does not allow for the determination of whether any single attribute within these categories carries more weight than others in influencing punishment severity. Furthermore, the results from Experiment 3 are unable to definitively establish whether it is the favourability of the victim or the defendant that primarily drives perceptions of injustice, deservingness of punishment, and subsequent increases in punishment severity when considering the two incongruent pairs.

Another limitation that should be considered is whether some of the crimes were more stereotypical of some individuals than others. For example, are some people punished more leniently because the crime does not stereotypically "match" what is expected of them, and are some people punished more severely because they stereotypically "match" the crime committed. In tandem with this is the idea is that the manipulations have used previous convictions to construe a persons' 'bad' character which in a court room setting would no longer be considered as a strictly extra-legal factor about either target. These limitations highlight the need for more nuanced research that can disentangle the relative impact of

individual attributes and provide a clearer understanding of how specific characteristics of victims and defendants interact to shape judicial decision-making processes.

Summary

In summary, the results suggest that punishment severity was greater under a few conditions, firstly when the defendant was described as having a 'bad' (vs. 'good') character. Secondly when the victim possessed favourable (compared to unfavourable) attributes, more injustice and a greater deservingness of punishment for the unknown defendant was evoked. Thirdly, these effects were replicated with the inclusion of the defendant's information simultaneously being presented with more severe punishment being assigned when the victim was 'favourable' (vs. 'unfavourable') and the defendant was 'unfavourable' (vs. 'favourable'). These results highlighted the biases that can allude the defendant as a result of the victim's extra-legal attributes. Indicating that although punishment is a rational reaction to injustice, that similar to non-rational reactions to injustice that it can also be biased. The following studies begin to explore the shortcomings of punishment and how individuals who are directly impacted by miscarriages of justice are responded to.

Chapter 4: Responding to Miscarriage of Justice Victims

This thesis has investigated how individual extra-legal attributes influence perceptions of a defendant's deservingness of punishment and the severity of punishment. Chapter 2 examined the impact of a defendant's physical appearance on punishment decisions. The findings revealed no significant effect of appearance on punishment severity, challenging previous research findings about attractiveness bias in legal settings. In Chapter 3, the focus shifted to the influence of extra-legal attributes on punishment decisions. The results demonstrated that only the defendant's character significantly affected punishment outcomes. Notably, harsher punishments were imposed in two scenarios: when the case involved information about a victim with favourable attributes alone, and when both parties' attributes were known, whereby a victim had favourable attributes and the defendant had unfavourable attributes. The current chapter takes a different approach by examining how questioning the effectiveness of punishment, particularly in cases of wrongful convictions, affects the perception of certain attributes, such as character and behaviour. This shift in focus allows for a more comprehensive understanding of how doubts about the criminal justice system's efficiency might alter perceptions of exonerees and influence judgements about them.

In recent years, public interest in Miscarriage of Justice (MCJ) cases has been amplified by the availability of documentaries on streaming platforms. These documentaries have drawn attention to unfair practices by the police and shortcomings in the criminal justice system which can result in wrongful convictions, for example, the highly publicised Amanda

Knox case via the Netflix Documentary "Amanda Knox"[10] (Innocence Project, 2024). These documentaries present information that is widely accessible through databases, including the online National Registry of Exonerations. This comprehensive database indicates that since 1989, over 3,464 convictions have been successfully overturned (The National Registry of Exonerations, 2024). Many of these exonerations have been achieved with assistance from organisations such as the Innocence Project, which collaborates with wrongfully convicted individuals to overturn their convictions and secure their release from prison (Innocence Project, 2024). Not only does this threaten the legitimacy of the criminal justice system and its practices, but it also suggests that for every wrongfully convicted innocent person, there is likely a dangerous individual who is still amongst the public and further reinforcing the systematic failings (Norris et al., 2019; Wakslak et al., 2007).

In light of this, an important distinction to make is that convictions can be overturned because there is no longer sufficient evidence to suggest that the convicted offender was the true culprit, thus meaning that the conviction was 'unsafe'. In contrast to those which are overturned due to new evidence that suggests that another person is the true offender, leading to the overturning of the original conviction and the dismissal of the wrongfully accused based on factual evidence (Risinger, 2004; Risinger & Risinger, 2013; Roberts & Weathered, 2008). Either could threaten the public's faith in the justice system and evoke reactions to a wrongfully convicted person which may mirror those seen towards 'prototypical victims' (Dawtry et al., 2020; Hafer & Rubel, 2015; Harvey et al., 2016). This chapter, therefore, begins to explore whether the reactions that have been thoroughly examined in response to

[10] Amanda Knox was wrongfully convicted in 2009 of the murder of her roommate Meredith Kercher, she was sentenced to 26 years in prison and was acquitted in 2015.

the suffering of 'prototypical victims' can also be observed in relation to individuals who have been wrongfully convicted by the criminal justice system, such as exonerees. These reactions also include (or extend to) derogation and blame[11] (Callan et al., 2006; Dawtry et al., 2020; Harvey et al., 2016; Lerner & Simmons, 1966; Lerner, 1980).

Previous research from JMT has explored responses to 'innocent victims' / 'prototypical victims' in the more traditional sense (e.g., an award-winning teacher or a person who jumped in a river to save a drowning puppy when they face undeserved misfortune; Harvey et al., 2016). However, the research to date that has explored reactions to exonerees has heavily focused on public perceptions of the reintegration of exonerees into their local area (Clow & Leach, 2015; Privitelli et al., 2023). Such research suggests that even after an exoneree has had their conviction overturned they can then face further stigmatisation and have their innocence questioned by the public following their release (Clow & Leach, 2015). These reactions to exonerees resonate with just-world reactions seen towards victims who have suffered (Lerner and Simmons, 1966). Research supporting just-world theory suggests that the deservingness of a victim's outcomes can motivate observers to devalue, blame, or distance themselves from the victim, as we have a desire to believe that the world is a just and fair place where people get what they deserve and that they deserve what they get (Lerner, 2003; Lerner and Simmons, 1966). What is known about public responses to exonerees will be explored further in turn.

Research suggests that throughout their reintegration into society, exonerees can have their innocence questioned and face stigmatisation (Clow & Leech, 2015). Exonerees who

[11] Throughout this chapter the wrongfully convicted targets will be referred to as "exonerees".

falsely confessed to a crime are perceived to be more guilty of the original crime compared to exonerees who were misidentified by an eyewitness or implicated by a jailhouse "snitch" (Clow & Leach, 2015). Perceptions of 'false confessors' have also included them being seen as being less intelligent and being more likely to have a mental health condition, this leads them to confess to a crime falsely they did not commit to begin with (Chojnacki et al., 2008). Consequently, public attitudes towards exonerees are complex. For example, research indicates that people are often reluctant to support services aimed at reintegrating exonerees into society and are uncomfortable with them living in their local area (Clow & Leach, 2015; Privitelli et al., 2023). However, qualitative studies reveal that the public generally supports compensating wrongfully convicted individuals and believe that they should receive public apologies (Clow et al., 2011). These measures are considered necessary to affirm the exoneree's innocence and restore faith in the criminal justice system (Clow et al., 2011). This reaction is similar to how people respond normatively when asked about victims, often providing socially desirable answers. For example, by saying that we should compensate an unjustly treated person but rejecting them when we are confronted with them (Dawtry et al., 2018).

In contrast to the reactions to prototypical victims that has typically been examined in just-world research, who experience personal injustices, exonerees are uniquely victimised by the criminal justice system itself. This systemic victimisation presents a distinct challenge to perceptions of justice and fairness (Van Der Toorn & Jost, 2014). The presence of MCJ cases can suggest to the public that at times the criminal justice system itself does not work as effectively as it should. During these times System Justification Theory (SJT) suggests that people are motivated to defend and bolster social, political, and economic systems to justify the status quo especially when there is evidence that threatens the legitimacy of the system by suggesting that there is a failure (Jost et al., 2004). Research suggests that the presentation of

procedural injustice can threaten the legitimacy of the criminal justice system, whilst the utilisation of system justification in the presence of unjust events can reduce or buffer the impact that the injustice should have on the system (Wakslak et al., 2007). The justifying of a system when being presented with its shortcomings may lead exonerees to face secondary victimisation following their release, in a similar way that prototypical victims can face secondary victimisation (Correia et al., 2001; Kay et al., 2005). This could suggest that people may prioritise the integrity of the criminal justice system over the perception of the exonerees suffering (or innocence). Therefore, believing that the criminal justice system was correct and the exoneree may not have been innocent at all. This secondary victimisation could involve derogating the character of the exoneree, blaming them for their misfortune or having their innocence downplayed because of the threat that the exoneree being perceived as a victim poses to BJW. Suggesting that there could be two motivations which could lead to the exonerees facing secondary victimisation.

In summary, existing research that has focused on just-world reactions to the victimisation of 'prototypical' victims has suggested that when a person is seen as undeserving of their suffering, the predictability of the world in line with justice becomes threatened, and this injustice evokes both rational (when available) and non-rational reactions to it (see Hafer & Rubel, 2015). Such that in Lerner and Simmons (1966) seminal work when a victim's suffering was seen to persist or when we are unsure if they will be compensated for their misfortune, the victim were rejected and devalued. Contextually relevant parallels in terms of reactions to exonerees as opposed to prototypical victims include how exonerees at times have their innocence questioned and face stigmatisation (Clow & Leach, 2015). Rejecting their innocence, or stigmatising the exoneree, could be similar to how we protect and maintain our commitment to just-world beliefs and to the system, by shifting the fault to the exoneree and not the system itself. Taken together, this chapter attempted to examine if

just-world reactions that are typically associated with protecting justice when a prototypical victim faces an undeserved misfortune, also applies to exonerees who have faced wrongful convictions. It was predicted that exonerees would face more derogation and blame when the MCJ was more (longer-term wrongful imprisonment) vs less severe (short-term wrongful detainment). Perceptions of the effectiveness of the criminal justice system was explored as a moderator variable of the effects.

Current Research

In line with the results from Lerner and Simmons (1966), when suffering was prolonged, or the participants were unable to or unsure if they would be compensated, there was more injustice, and the target was devalued and rejected more. The current research included a manipulation that attempted to evoke a similar idea in a scenario whereby suffering and in turn injustice varied for the exoneree based on how severe the MCJ was. It was predicted that the exoneree would be seen as having experienced less suffering in the low severity MCJ scenario when they were wrongfully detained compared to the high MCJ severity scenario whereby they were wrongfully imprisoned. Thus, it was predicted that exonerees would face more derogation and blame when the MCJ case was more vs less severe.

This chapter also explores individuals' faith in the criminal justice system. This aspect is particularly intriguing when considering MCJ cases, as such cases inherently suggest a failing within the criminal justice system. In line with SJT, when people have a higher faith in the criminal justice system, they could be more motivated to defend it and possibly utilise derogation and blame from just-world theory to further defend their beliefs in its effectiveness (Dawtry et al., 2019). This was explored using the Attitudes-Towards-the-

Criminal-Legal-System scale (ATCLS) as a moderator variable for the derogation and blame outcomes (Martin & Cohn, 2004). Research by Cohn and Modecki (2007) sought to assess whether the two scaled (the attitudinal scale (ATCLS) and individual differences in belief-in-the-just-world (BJW)) were correlated. This research identified a medium positive association between attitudes towards the criminal justice system [12]and just-world beliefs. Therefore, individual differences in BJW and faith in the criminal justice system were both predicted to moderate the effects of the MCJ severity manipulation on blame and derogation towards exonerees. The perceived innocence of the exoneree was also measured as an exploratory variable.

This chapter explored if the severity of the MCJ case resulted in the derogation of the exoneree's character and the blaming of the exoneree's behaviour and if these reactions were mediated by how unjust the MCJ was for the exoneree. Individual differences in faith in the criminal justice system were measured as a moderator variable to explore if the participant's attitudes towards the criminal justice system influenced the derogation and blaming of the exoneree, the exploratory analysis of the perceived innocence of the exoneree was explored in a similar way (Experiment 1). Experiment 2 replicated and built on Experiment 1 by addressing the confounding variable of the exonerees factual innocence that was observed in Experiment 1. As a result of the moderating effects of the participants perceptions of the criminal justice system as measured using the ATCLS (Martin & Cohn, 2004). Then Experiment 3 attempted to prime the participant's beliefs in the effectiveness of the criminal

[12] Criminal Legal System and Criminal Justice System will be used interchangeably.

justice system to explore if the priming influenced the derogation and blaming of the exoneree.

Experiment 1

In Experiment 1, I explored just-world responses to an exoneree(/detainee) by manipulating the severity of two MCJ cases. The MCJ cases ranged from a low severity case, wherein an individual was wrongfully detained for 96 hours and released with compensation, to a high severity case wherein a person was wrongfully detained for 25 years and released without compensation. It was predicted that MCJ severity would effect the derogation and blame measures towards the exoneree which would be positively mediated by how unjust the MCJ was seen to be. Thus, when the MCJ was more severe there would be more injustice reported which, would lead to more derogation or blame towards the exoneree. The perceived innocence of the exonoree/detainee was recorded as an exploratory variable, in addition to the inclusion of the individual differences in faith in the criminal justice system using the ATCLS scale (Martin & Cohn, 2004) which was explored as a moderator variable.

Method

Participants

Participants were recruited online via Prolific (www.prolific.com). and received monetary reimbursement of ~£7ph for their participation. Following the exclusion of thirty-three participants who failed ≥ 50% of the attention checks that were embedded throughout the survey or did not provide complete responses, the final sample consisted of $N = 226$ (69.91% female), $M_{age} = 39.8$ years, $SD_{age} = 14.13$. I sought to recruit at least 200 participants, which, according to a sensitivity power analysis, which enabled the detection of

an effect of $d = 0.40$ or above at $\alpha < .05$ with 80% power. In practice, we recruited an additional batch of participants 30 following the exclusion of 20 participants for failing the attention checks throughout the survey.

Materials and procedure

The experiment used a between-subjects design and the participants were randomly assigned to one (of two) vignettes which presented the MCJ case of either low- or a high-severity. The low-severity MCJ case presented a person who faced a short-term wrongful detainment where they were held in a police station for 96 hours and following their release another person had been arrested in association with the crime. In comparison to the high-severity MCJ case where the person was wrongfully imprisoned for 25 years and the case remained unresolved following their release from prison (Appendix B).

Participants completed two items which assessed the injustice perceived by the observer (e.g., "What happened to Daniel was unjust/ unfair"). These items were scaled from 1 = "Strongly Disagree" to 7 = "Strongly Agree". The items had an excellent internal consistency ($\alpha = 0.92$) and were averaged to form the "Perceived Injustice" measure. Next, participants completed two relative character derogation items which were adapted from Dawtry et al., (2018) (e.g., "How negative-to-positive/ unfavourable-to-favourable would you evaluate Daniel as a person compared to how negative-to-positive/ unfavourable-to-favourable you would evaluate yourself as a person?"). These items were scaled from 0 = "Very negative/ unfavourable compared to me" to 10 = "Very positive/ favourable compared to me". The items were reverse scored with higher scores indicating more character derogation towards the exoneree/detainee. The two items had an acceptable internal consistency ($\alpha = 0.77$) and were collapsed to form the "Character derogation" measure.

Participants then completed two blame items, “I believe that Daniel was responsible for what happened to him”, and “I believe that what happened to Daniel was due to his lifestyle” scaled from 1 = “Strongly Disagree” to 7 = “Strongly Agree”. The two blame items had an acceptable internal consistency ($\alpha = 0.71$) and were averaged to form the “Blame” measure.

Exploratory analysis examined participants’ views on the exoneree’s innocence using a single-item measure: “I believe that Daniel was innocent of the crime.” Responses were recorded on a 7-point Likert scale ranging from 1 = “Strongly Disagree” to 7 “Strongly Agree”. Lastly, the participants completed the 24-item ATCLS scale (Martin & Cohn, 2004) which assessed participants attitudes towards the criminal justice system (e.g., “Juries often base their decisions on prejudices instead of facts”) and twelve of these items were reverse scored (Appendix I). The questions were scaled from 1 = “Strongly Disagree” to 7 = “Strongly Agree” and overall the scale had good internal reliability ($\alpha = 0.81$) resulting in the items being averaged to form the “ATCLS” measure. Higher ATCLS scores suggest that the participants had more positive perceptions of the effectiveness of the criminal justice system. Participants were then debriefed. Manipulation checks were embedded in the survey following each scenario which asked participants to rate the overall injustice of what happened to the exoneree. It was anticipated that there would be more injustice perceived following the high-severity MCJ case where the exoneree faced long-term wrongful imprisonment and did not receive compensation following their exoneration compared to the individual who was wrongfully detained in the low-MCJ severity case.

Results

Main effects of MCJ severity

An independent t-test was conducted to confirm the validity of the manipulation. There was significantly more perceived injustice reported following the high-severity MCJ case, wherein the exoneree was wrongfully imprisoned for 25 years and released without compensation (M = 5.46, SD = 1.30), compared to the low-severity MCJ case, wherein the detainee was wrongfully detained for 96 hours and released with compensation (M = 5.08, SD = 1.38), $t(219.19) = 2.09$, p =.038, d = 0.28. Intercorrelations were run between the measures and are reported in Table 2.

Table 2

Table of Correlational Coefficients of all measures

	Derogation	Blame	Innocence	Injustice
Blame	.45***			
Innocence	-.44***	-.52***		
Injustice	-.23***	-.45***	.42***	
ATCLS	-.03	-.02	-.01	-.04

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Three independent t-tests were conducted to explore the differences in character derogation, behavioural blaming, and the perceived innocence of the target between the high and low-severity MCJ cases. It was predicted that there would be more derogation and blame towards the exoneree in the high (vs. low) severity MCJ case. The exoneree in the high-severity MCJ case (M = 6.09, SD = 1.52) was derogated more compared to the detainee in the

low-severity MCJ case (M = 5.56, SD = 0.98), t(201.48) = 3.16, p = .002, d = 0.41. However, there was no difference between the blaming of the exoneree/detainee in the high-severity MCJ case (M = 2.98, SD = 1.27) and the low-severity MCJ case (M = 2.79, SD = 1.09), t(223.02) = 1.17, p = .245, d = 0.15. The exoneree in the low severity MCJ case (M =5.47, SD = 0.96) was perceived as being significantly more innocent than the exoneree in the high severity MCJ case (M = 4.71, SD = 1.23), t(218.90) = 5.21, p < .001, d = 0.69.

Mediation analyses of character derogation and perceived innocence by injustice

To examine whether injustice mediated the effect of severity manipulation on derogation and innocence, two simple mediation analyses were conducted. These analyses used PROCESS model 4 (Hayes, 2017) in R (version 4.2.2; R Core Team, 2023), employing bootstrapping with 5,000 resamples.

The first mediation model indicated a significant and negative indirect effect, b =-0.10, SE = 0.05, 95% CI [-0.21, -0.01] of injustice on the relationship between MCJ severity and derogation. Both injustice and derogation were lower when the MCJ was less (vs. more) severe., however, the model contained a suppression effect whereby the direct effect (b = 0.63, SE = 0.17, t(223) = 3.75, p < .001, 95% CI [0.30, 0.96] is positive and inflated compared to the total effect (b = 0.53, SE = 0.17, t(223) = 3.10, p < .01, 95% CI [0.19, 0.87]). See Figure 13 for the mediation models. This suggests that without the inclusion of the mediator as the MCJ severity increases, as does derogation, yet the inclusion of the mediator suggests the opposite. The inflation of the direct effect can also suggest that the mediator, injustice, may explain more of the variance than the predictor variable, in this case, MCJ severity, does. Thus, these results must be interpreted cautiously.

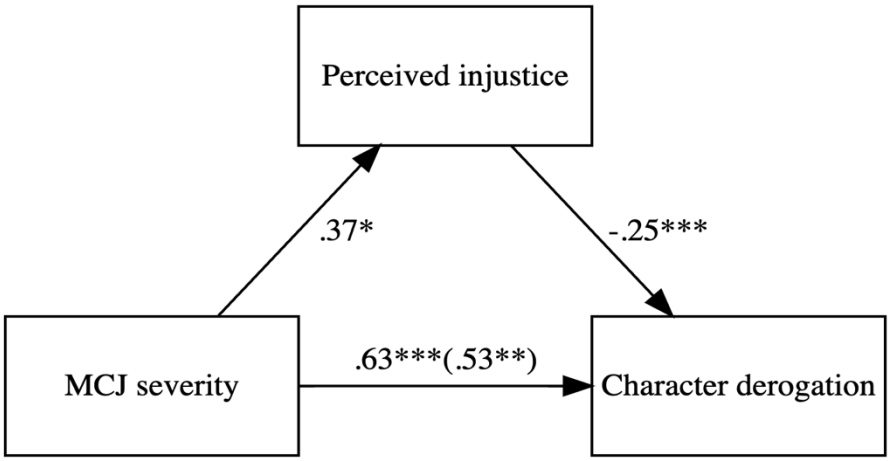
The second model revealed a significant and positive indirect effect (b = 0.15, SE = 0.07, 95% CI [0.01, 0.30]) of injustice on the relationship between MCJ severity and the perception of innocence. Both injustice and the perception of innocence increased as the MCJ severity was more (vs. less) severe. However, similar to the derogation model, this model also contains a suppression effect whereby the direct effect (b = -0.91, SE = 0.13, t(223) = 7.05, p < .001, 95% CI [-1.17, -0.66]) was inflated beyond the total effect (b = -0.76, SE = 0.15, t(223) = 5.15, p < .001, 95% CI [-1.05, -0.47], again suggesting that the mediator could explain more of the variance than the predictor variable does (Figure 13). Thus, both models should be interpreted cautiously.

Moderation analyses by ATCLS

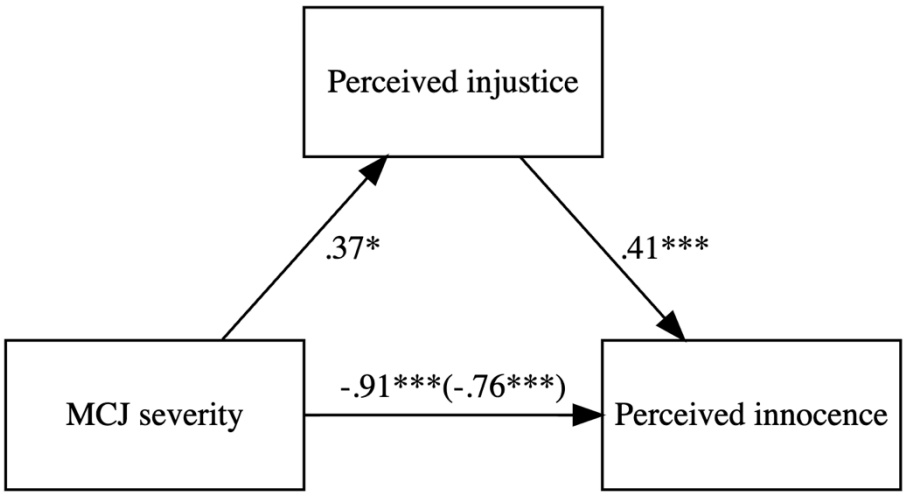
Three separate moderation analyses were conducted using Model 1 of PROCESS (Hayes, 2017) in R (version 4.2.2; R Core Team, 2021) to explore potential significant interactions between ATCLS scores and derogation, blame, and the perceived innocence of the target. The moderation analyses revealed that there was not a significant interaction of ATCLS scores on the relationship between MCJ severity and derogation (b = -0.13, SE = 0.29, t(222) = 0.44, p = .664, 95% CI [-0.71, 0.45]), or blame (b = -0.08, SE = 0.27, t(222) = 0.30, p = .762, 95% CI [-0.61, 0.45]), or the perceived innocence of the target (b = -0.06, SE = 0.05, t(222) = 0.25, p = .805, 95% CI [-0.56, 0.44]).

Figure 13

Mediation Models of the Relationship Between MCJ Severity, Perceived Injustice, and Character Derogation (top panel) / Perceived Innocence (bottom panel)



Indirect effect, b = -.10, SE = 0.05, 95% CI [-0.21, -0.01]



Indirect effect, b = 0.15, SE = 0.72, 95% CI [0.01, 0.30]

Note: Simple mediation models predicting character derogation (top panel) and the perceived innocence of the target (bottom panel) based on the MCJ severity and perceived injustice. Low-severity MCJ was coded as 1 and high-severity MCJ was coded as 2. Values show the unstandardised path coefficients. * p < .05, **p < .01, ***p <.001.

Discussion

To summarise, the results indicated that the target who was wrongfully imprisoned for 25 years faced more derogation and was perceived to be less innocent, compared to the target who was wrongfully detained in a police station for 96 hours. The results indicated that considering this, there was no difference in the amount that either target was blamed for their imprisonment or detainment. As expected, in line with the research from victims, there was significantly more injustice reported when the MCJ was more (vs. less) severe. In this case, when the target was wrongfully imprisoned for 25 years compared to being wrongfully detained for 96 hours. In both reported models (Figure 13) the direct and indirect effects showed to have effects in opposite directions. Additionally, the inflation of the direct effect compared to the total effect in both models (Figure 13) further suggest that there was a suppression effect within the models. Indicating that when the model accounted for the injustice of the MCJ, there was a negative effect on derogation and a positive effect on the innocence of the exoneree.

Notable limitations of the experiment is the presence of a potential confounding variable as a result of the inconsistent resolution status across the cases presented. This inconsistency may have influenced the results and should be considered when interpreting the findings. Such that the unresolved status of the high-severity MCJ case with no further suspects arrested contrasts with the low-severity MCJ case where another person had been arrested for the crime. The difference could have introduced a potential confound in the high severity condition as the lack of a new suspect might have suggested the exonerees' guilt, leading to increased derogation towards them. In contrast, the arrest in the low-severity condition may have reduced such suspicions. To address this potential confound the next step was to replicate the experiment using scenarios which eliminate these discrepancies.

Additionally, it is worth noting that the vital information about Daniels exoneration and other information required for the task were towards the end of the vignette. In the future it would be worthwhile placing this information towards the beginning of the vignettes to avoid participants potentially skimming over or not reading the vital information for the task. It could also contribute to the number of exclusions made prior to the additional batch of participants being recruited.

Experiment 2

The results from Experiment 1 suggested that although MCJ severity affected the derogation and perceived innocence of the exoneree, the presence of a confounding variable could have influenced the main effects of MCJ severity and, in turn, may have contributed to the suppression effects that were present in the mediation models. Experiment 2 replicated Experiment 1 by revising the vignettes used to address the confounding variable, whilst all remaining measures used were consistent with those from Experiment 1.

Method

Participants

Participants were recruited online via Prolific (www.prolific.com) and received monetary reimbursement of ~£7ph for their participation. Following the exclusion of thirty-four participants who failed ≥ 50% of the attention checks embedded throughout the survey or did not provide complete responses, the final sample consisted of $N = 206$ (65.05% female), $M_{age} = 39.95$ years, $SD_{age} = 14.01$. Similar to Experiment 1, I sought to recruit at least 200 participants, which, according to a sensitivity power analysis, enabled the detection of an effect of $d = 0.40$ or above at $\alpha < .05$ with 80% power.

Materials and procedure

The experiment used a between-subjects design and the procedure replicated from Experiment 1, with the two differences being the revisions to the MCJ cases used to address the confounding variable by removing the resolution status of the reopened case to make them consistent. In addition to the insertion of quotes from the exoneree or their family members to make the vignettes more impactful (see Appendix B). Again, the participants responded to items that assessed the perceived injustice, how blameworthy the individual was for their detaining/ imprisonment and rated their character. All the scales had an acceptable to excellent internal consistency and were averaged to form the "Perceived injustice", "Behavioural blame", and "Character derogation" α's = 0.97, 0.72, 0.93, respectively. Individual differences in their perceptions of the effectiveness of the criminal justice system were explored again using the ATCLS. The items had good internal consistency ($\alpha = 0.80$) and were collapsed to form the ATCLS measure. Two attention checks and single manipulation checks were embedded in the survey following each scenario, which asked participants to rate the overall injustice that had happened to the exoneree.

Results

Main effects of MCJ severity

An independent t-test was conducted to confirm the validity of the manipulation. There was significantly more injustice perceived in the high-severity MCJ case, where the individual was wrongfully imprisoned for 25 years ($M = 5.04$, $SD = 1.54$), compared to the low-severity MCJ case, where the individual was wrongfully detained for 96 hours ($M = 4.48$, $SD = 1.59$), $t(229.96) = 2.70$, $p = .007$, $d = 0.35$. Intercorrelations were conducted on all outcome variables (see Table 3).

Table 3

Table of Correlational Coefficients of all measures

	Derogation	Blame	Innocence	Injustice
Blame	.52***			
Innocence	-.54***	-.64***		
Injustice	-.53***	-.55***	.64***	
ATCLS	-.04	.02	.17**	.04

Note: ** $p < .01$, ***$p < .001$

Three independent t-tests explored the differences in derogation, blame and perceived innocence between the high- and low-severity MCJ cases. It was predicted that there would be more derogation and blame towards the exoneree in the high (vs. low) severity MCJ case, whilst innocence was explored as an exploratory variable. The exoneree in the high-severity MCJ ($M = 6.38$, $SD = 1.48$) was derogated more compared to the detainee in the low-severity MCJ ($M = 5.91$, $SD = 1.29$), $t(225.02) = 2.59$, $p = .010$, $d = 0.34$. There was arguably a marginally significant difference in the blame being placed on the exoneree, with more blame towards the exoneree in the high-severity MCJ case ($M = 3.56$, $SD = 1.43$) compared to the low-severity MCJ case ($M = 3.24$, $SD = 1.19$), $t(220.92) = 1.83$, $p = .068$, $d = 0.24$. Finally, there was not a significant difference in the perceived innocence of the exoneree in the high-severity case ($M = 4.19$, $SD = 1.44$) and the low-severity case ($M = 4.46$, $SD = 1.30$) $t(226.72) = 1.50$, $p = .134$, $d = 0.20$.

Mediation analyses of character derogation and perceived innocence by injustice

Three simple mediations were conducted using PROCESS model 4 (Hayes, 2017) in R (version 4.2.2; R Core Team, 2021). These explored whether the MCJ severity (coded low-severity = 1 and high-severity = 2) was associated with derogation/blame/perceived

innocence and whether the perception of injustice mediated the relationship. Both models used a bootstrapping analysis with 5,000 resamples. The first mediation model indicated a non-significant and negative indirect effect, b = -0.21, SE = 0.12, 95% CI [-0.44, 0.02] of injustice on the relationship between MCJ severity and derogation. Both injustice and derogation were lower when the MCJ was less (vs. more) severe; however, the model contained a suppression effect whereby the direct effect, b = 0.66, SE = 0.16, t(203) = 4.19, p < .001, 95% CI's [0.35, 0.98], is positive and inflated compared to the total effect b = 0.46, SE = 0.19, t(203) = 2.35, p < .05, 95% CI [0.07, 0.84].

The second mediation model showed MCJ severity to have a positive and marginally significant total effect on blame towards the exoneree b = 0.35, SE = 0.18, t(203) = 1.92, p = .06, 95% CI [-0.01, 0.71]. However, this effect was not mediated by injustice b = -0.20, SE = 0.11, 95% CI [-0.42, 0.01].

The final mediation model indicated a positive and non-significant indirect effect b = 0.24 SE = 0.12, 95% CI [-0.02, 0.48] of injustice on the relationship between MCJ severity and the perceived innocence of the target. Injustice was lower when the MCJ was less (vs. more) severe, whilst the perceived innocence of the target was less when the MCJ was more (vs. less) severe. However, the model contains a suppression effect whereby the direct effect b = -0.67, SE = 0.14, t(203) = 4.70, p < .001, 95% CI's [-0.95, -0.39], is negative and inflated compared to the total effect that was marginally significant b = -0.44, SE = 0.19, t(203) = 2.28, p = .024, 95% CI's [-0.81, -0.06].

Moderation Analyses by ATCLS.

Character derogation, blame and perceived innocence were explored using three simple moderation analyses using model 1 of PROCESS (Hayes, 2017) in R (version 4.2.2; R

Core Team, 2021). The model used the MCJ severity (coded low-severity = 1 and high-severity = 2) as the predictor variable and the participant's ATCLS scores as the moderator variable. There was no effect of ATCLS on character derogation b = 0.34, SE = 0.34, t(201)= 1.02, p = .311, 95% CI [-0.32, 1.01], or blame b = 0.27, SE = 0.32, t(201) = 0.86, p =.393, 95% CI [-0.35, 0.90]. There was a significant interaction between MCJ severity and ATCLS scores on the perceived innocence of the exoneree/detainee b = -0.88, SE = 0.32, t(201)= 2.71, p = .007, 95% CI [-1.52, -0.24]. Simple slopes indicated that when ATCLS scores were high, there was a significant negative effect with the perceived innocence of the exoneree/detainee b = -0.94, SE = 0.26, t(201) = 3.57, p < .001, 95% CI [-1.46, -0.42]. Conversely, for low ATCLS scorers, simple slopes analysis revealed no significant effect on the perceived innocence of the exoneree/detainee (b = 0.07, SE = 0.26, t(201) = 0.28, p = .784, 95% CI [-0.45, 0.59]). The results suggest that those with high ATCLS scores rates the detainee as more innocent than the exoneree, while those with low ATCLS scores perceived the detainee and exoneree as equally innocent (Figure 14).

Figure 14

*Interaction plot of ATCLS scores * perceived innocence*

Note. This is an interaction plot depicting the relationship between the severity level of MCJ (Low vs. High) and perceived innocence, moderated by ATCLS (-1*SD* and +1*SD*).

Discussion

Following the amendments to the scenarios in Experiment 1, which ensured that neither case mentioned whether a suspect had been arrested (resolved/ unresolved), the results indicated that the individual who faced long-term wrongful imprisonment was still derogated more than the individual who was wrongfully detained for 96 hours. Unlike in Experiment 1, where there was not a marginal difference in blame attribution between the high and low-severity MCJ cases. Experiment 2 could suggest that the removal of resolution status of the case influenced the blameworthiness of an exoneree compared to in Experiment 1. However, further research would need to be carried out to investigate this with greater certainty. Additionally, unlike the results from Experiment 1, the perceived innocence of the

exoneree did not significantly differ between the high and low severity MCJ manipulation following the removal of the resolution status of the case. This suggests that the differences in the resolution status between the high severity MCJ vignette where there was ambiguity over who the true perpetrator was (unresolved) compared to the successful identification of another suspect in the low severity MCJ (resolved) likely influenced the perceived innocence of the detainee/exoneree observed in Experiment 1 whereby the exoneree was rated as being less innocent.

Although the difference between the MCJ severity manipulation and the derogation and blame towards the exoneree was at least marginally significant, the severity of the MCJ had a significant and positive total and direct effect on derogation and blame. This suggests that higher severity in the MCJ led to increased derogation and blame. However, both models had a negative indirect effect on perceived injustice, which was non-significant. This suppression effect could underpin a truer picture of these reactions to exonerees. While it is socially desirable to react to a victim (in this case an exoneree) in a favourable way by acknowledging that they had faced an injustice and not devaluing them more or blaming them (indirect effect) (see Dawtry et al., 2018). When the model did not include injustice, the exonerees were derogated and blamed more (direct effect).

The results indicated that there was also a significant moderated effect of MCJ severity on the perceived innocence of the exoneree by the ATCLS beliefs of the individual. The interaction in Figure 14 suggests that when a participant had more positive attitudes towards the criminal justice system (high ATCLS scores) that they perceived the detainee in the low severity vignette to be more innocent than the exoneree in the high severity vignette. Additionally that when a participant had less favourable attitudes towards the criminal justice system (low ATCLS scores) that there was no difference in the perceived innocence of the

detainee and exoneree. Indicating that those with more positive attitudes might be more sensitive to the severity of a MCJ when judging the target's innocence. Thus it could be speculated that perceiving the exoneree as less innocent reinforces the practices and the effectiveness of the criminal justice system by bolstering the system to maintain the belief that the system works as intended (De Keersmaecker & Roets, 2020; Jost et al., 2004). The threat to both the system's effectiveness and the observer's faith in the criminal justice system could result in downplaying the exoneree's innocence to minimise the threat this evidence poses to both the system's objective effectiveness, and the observer's subjective attitudes towards the system. This will be explored more directly in Experiment 3, by attempting to prime the participants with information that suggests that the criminal justice system is/is not effective. Thus exploring how priming participants influenced how they respond to the MCJ exonerees from the high severity MCJ scenario from Experiment 2.

Experiment 3

Experiments 1 and 2 results indicated that exonerees were derogated and blamed more when they faced a more (vs. less) severe MCJ. My findings support existing research whereby people rationalise threats to the status quo of the system by derogating and blaming those who the system has victimised (Kay et al., 2005). Removing the resolution status in Experiment 2 scenarios led to non-significant differences in the perceived innocence, but the suppression effect in the mediation models remained. This indicates that the motivations to derogate and blame the exoneree are more complex than initially thought. Additionally, an individual's faith in the criminal justice system moderated perceptions of the exoneree's innocence. Specifically, those with greater faith in the criminal justice system perceived the exoneree as less (vs. more) innocent.

The subsequent experiment aimed to go beyond directly manipulating the injustice of the MCJ by examining how the perceived legitimacy of the criminal justice system itself influences responses to exonerees. In Experiment 3, participants were first presented with a prime emphasising either the effectiveness or ineffectiveness of the criminal justice system. Following this, they were asked to rate the character and blameworthiness of the exoneree from the high-severity scenario used in Experiment 2. In contrast to the earlier experiments in this chapter which examined whether individuals with varying levels of confidence in the criminal justice system react differently to a greater versus lesser injustice caused by it., this experiment directly threatens the legitimacy of the criminal justice system to explore defensive responses towards the exonerees.

Method

Participants

Participants were recruited online via Prolific (www.prolific.com) and received monetary reimbursement of £7ph for their participation. Following the exclusion of thirty-seven participants who failed ≥ 50% of the attention checks that were embedded throughout the survey or did not provide complete responses, the final sample consisted of $N = 228$ (69.3% female), $M_{age} = 37.36$ years, $SD_{age} = 12.12$). I sought to recruit at least 200 participants, which, according to a sensitivity power analysis, enabled for the detection of an effect of $d = 0.40$ or above at $\alpha < .05$ with 80% power.

Materials and Procedure

The participants were randomly assigned to read one (of two) primes that suggested that the criminal justice system was either effective or ineffective at upholding justice. The

primes were created by selecting five items from the ATCLS (Martin & Cohn, 2004) and turning them into a review statement, which suggested that the criminal justice system was (or was not) effective. For example, the effective prime included statements such as "The review suggests that *"our current system of punishment is effective at preventing crimes*" and that the police force *"are trained so well, that there is less crime than there could be"* ", compared to the ineffective statements such as "The review suggests that *"our current system of punishment is ineffective at preventing crimes"* and that the police force *"are trained so poorly, that there is more crime than there could be"* (see Appendix B).

Next, participants saw the high-severity MCJ case from Experiment 2 which described a miscarriage of justice whereby Ashley Johnson was wrongfully imprisoned for 25 years and his lawyers had been unsuccessful in securing compensation for his imprisonment (see Appendix B). The perceived injustice, derogation, and blame measures replicated those used in Experiments 1 and 2; the measures had excellent to acceptable internal consistency (as = 0.95, 0.91 and 0.78, respectively) and were merged to form the measures "Perceived injustice", "Derogation" and "Blame". The perceived innocence of the exoneree was also measured using a single item from Experiments 1 and 2.

Participants answered two attention checks that followed the MCJ case. The first asked the participants if the prime they saw presented information suggesting the criminal justice system was ineffective or effective; all participants successfully answered the first attention check. The second asked participants to indicate whether Ashley received compensation following his release.

Results

Main effect of the effectiveness prime

Four independent *t*-tests were conducted to explore the effect of the prime that suggested that the criminal justice system was either effective or not effective on perceived injustice, derogation, blame, and perceived innocence of the exoneree in response to the high severity MCJ scenario from Experiment 2. There was no difference in the perceived injustice of the MCJ faced by the exoneree after the effective (M = 5.13, SD = 1.53), or the ineffective criminal justice system prime (M = 5.35, SD = 1.44) $t(222.39) = 1.10$, $p = .272$, $d = 0.15$. There was no difference in the derogation of the exoneree following the effective (M = 6.36, SD = 1.55), or the ineffective prime (M = 6.56, SD = 1.68) $t(223.15) = 0.96$, $p = .341$, $d = 0.13$. Blame also showed to have no difference between effective (M = 3.63, SD = 1.39) and the ineffective prime (M = 3.58, SD = 1.36) $t(220.39) = 0.29$, $p = .774$, $d = 0.04$. Finally, there was not a significant difference in the perceived innocence of the exoneree between the effective (M = 4.28, SD = 1.33), or ineffective prime (M = 4.21, SD = 1.41) $t(214.14) = 0.398$, $p = .691$, $d = 0.05$. Intercorrelations were conducted on all outcome variables (see Table 4).

Table 4

Table of Correlational Coefficients of all measures

	Derogation	Blame	Innocence
Blame	.53***		
Innocence	-59***	-.61***	
Injustice	-.58***	-.47***	.69***

Note: ***p <.001

Discussion

The results did not support the predictions that there would be increased derogation and blame towards the exoneree following the ineffective prime compared to the effective prime. There was no difference in the exoneree's derogation, blame, perceived injustice, or innocence between the two primes. Consequently, these findings did not corroborate the significant moderation of the exoneree's perceived innocence by ATCLS scores observed in Experiment 2. Although the primes were correctly identified by all participants and were created using a selection of statements from the ATCLS scale (Martin & Cohn, 2004) items, they did not influence any of the outcome measures.

General Discussion

Over three experiments, it was investigated whether exonerees from a MCJ case that varied in severity would also face derogation and blame like 'prototypical victims' (Experiments 1 and 2). Additionally, exploring if priming participants with information about the criminal justice system's effectiveness also influences responses to exonerees (Experiment 3). Individual differences in faith in the criminal justice system were also explored as a moderator variable using the ATCLS across Experiments 1 and 2. The results indicated that there was a significant difference in the derogation of exonerees in both Experiments 1 and 2 and a marginally significant difference in blaming towards the exoneree (Experiment 2) who was wrongfully imprisoned for 25 years compared to the person who was wrongfully detained for 96 hours. A significant interaction was observed between participants' faith in the criminal justice system and their perception of the exoneree's

innocence. Specifically, individuals with greater faith in the criminal justice system were more likely to rate the exoneree as less (vs. more) innocent.

Following the results from Experiments 1 and 2, which manipulated the injustice of the MCJ case and explored how this motivated reactions to defend the just world or bolster the criminal justice system's effectiveness via derogation and blame. Experiment 3 attempted to manipulate how effective the criminal justice system was and how this threat to the effectiveness of the system influenced derogation, blame and perceived innocence.

Experiments 1 and 2 manipulated injustice and partially align with existing just-world theory research, which examines responses to the victimisation of 'proto-typical victims' such as derogation and blame (Hafer & Rubel, 2015; Lerner & Simmons, 1966). These reactions could be dually motivated; that is, the devaluing and blaming of the exoneree allow for the just-world to be defended whilst simultaneously defending the legitimacy of the criminal justice system. Supporting earlier work by Kay et al. (2005) that devaluing victims of misfortune (or enhancing victims of good misfortune) both defends and reinforces the system whilst maintaining the system justifying beliefs from just world theory whereby "people get what they deserve and deserve what they get" (Lerner, 1980). It could be inferred that the suffering of an exoneree motivates non-rational reactions to their victimisation as they also threaten the just world in addition to the legitimacy of the criminal justice system. This supports SJT theory, whereby the situational/contextual factors of the scenarios (i.e., the MCJ severity) motivated the derogation and blame towards exonerees to defend and bolster aspects of the status quo in the criminal justice system (see Van Der Toorn & Jost, 2014). This may suggest that by derogating and blaming the exoneree for their wrongful imprisonment also acts to bolster the effectiveness of the criminal justice system by shifting the responsibility back to the exoneree instead of the system. This was further supported by

the moderation analyses, which suggested that those with a higher faith in the criminal justice system downplayed the innocence of the exoneree who faced a more severe MCJ (i.e., longer-term wrongful imprisonment). Thus, this bolstered the justice system's effectiveness by suggesting that the exoneree may not have been innocent and, therefore, the system was not ineffective.

While Experiment 3 did not provide support for just-world theory or SJT. The results indicated that priming the participants with information about the criminal justice system's effectiveness did not lead to any significant differences in the exoneree's derogation, blame, or perceived innocence. This suggests that being primed with information about the criminal justice system's effectiveness did not motivate non-rational reactions to the exonerees when they were wrongfully imprisoned. It could be speculated that these results may be due to the limited information about the case. Research by Clow and Leach (2015) suggested that the contributing factors which caused their wrongful conviction can lead to exonerees having their innocence doubted even further. For example, they found that exonerees who falsely confessed to a crime were rated as being less innocent than exonerees who an eyewitness misidentified.

The news report style scenario presented to participants was intentionally limited, stating only that "Ashley Johnson was arrested and charged for the murder of Ashley Campbell". This lack of detail about the circumstances leading to the arrest could have influenced participants' responses. If additional information had been provided, such as the possibility of a wrongful confession or eyewitness misidentification, participants might have been more inclined to devalue or blame Ashley Johnson. The absence of context about potential factors contributing to a wrongful conviction may have affected how participants perceived and judged the individual in question.

Limitations and Future Directions

There are a few limitations to this research using JMT to explore reactions to exonerees. One is that the short detainment experienced by the individual in the low-severity MCJ does not classify as a true MCJ as no conviction was brought upon the individual during this time. The purpose was that this chapter aimed to examine the differences which occurred between two very different cases of MCJ, based on their severity but consistent on the case facts, (i.e., neither the imprisonment nor the detainment of the individual was the result of a false confession etc to avoid further prejudice towards the exoneree; Clow & Leach, 2015).

Another limitation of the research is that the mediation models from Experiments 1 and 2 contained suppression effects which could not be interpreted with certainty. This suggested that the mediator in the models (the perceived injustice of the MCJ experienced by the exoneree) explained more of the model than the predictor variable (MCJ severity) did. Evidence for this comes from the inflation of the direct effect size which is larger than the total effect and the total effect should be equal to the sum of the indirect and the direct effect size. This could be due to the perceived injustice being increasingly similar to the MCJ severity; however, in future, it would be worthwhile exploring other mediators for such models.

Future research could use a similar research design while exploring the differences between MCJ cases, which both include wrongful imprisonment. This could be followed by expanding into more complex research designs, which could incorporate more of the reasons for a person's wrongful imprisonment, such as false confessors and coercion. Considering the suppression effects that were present throughout Experiments 1 and 2, even after the consistency of the cases resolution status was corrected, it could also be beneficial to consider

alternative outcome measures. For example, it could be worthwhile exploring how protective" strategies include ultimate justice reasoning which is similar to "Karma" whereby the observer believes that eventually the person will reap the outcome that they deserve (Converse et al., 2012; Maes, 1998). Ultimate justice reasoning could allow for cases which are highly severe, whereby a person was wrongfully imprisoned for a long duration of time to be less threatning as the observer could perceive that the exoneree would get the outcome that they deserve in the end. Alternatively, immanent justice reasoning whereby the observer attributes the persons prior misdeeds as the cause of their suffering even when there is no plausible link could also protect an observers sense of justice, shifting the blame back to the exoneree as they deserved this outcome based on their previous behaviour, even when there was no plausible link between their behaviour and their wrongful imprisonment (Callan et al., 2006; Callan et al., 2013a). It could be more appropriate and would also align with SJT, whereby a person may defend the legitimacy of the criminal justice system by casually associating someone's current fate with earlier behaviour. Alternatively, by responding to these exonerees less as they will eventually gain the outcomes that they deserve in line with ultimate justice reasoning.

Summary

In summary this chapter began to apply non-rational reactions from just world theory to wrongfully convicted individuals that are typically seen in response to a prototypical victim's undeserved suffering. From these early results it could be inferred that there is room for derogation and the downplaying of an exoneree's innocence when they fall victim to more severe MCJ cases. Some consideration could be made as to why there was derogation occurred in Experiment 1 and 2 but blame only occurred in Experiment 2. It could be that blaming was intuitively repressed when the MCJ presented some fault of the criminal justice

system, thus reducing the blameworthiness towards the exoneree. Also blaming the exoneree would be counter normative when the fault has been identified as being from the failing of the criminal justice system, thus exploring subtle blame could be a more promising avenue in future research (Hafer et al., 2019). The vignettes within this chapter kept the details surrounding the wrongful imprisonment purposively minimal, however, when faces with cases wrongful imprisonment there would be masses of evidence which would be considered prior to the exonerees release. Chapter 5 will begin exploring how motivated partipants are to read information which can support the innocence or guilt of the exoneree. Also expanding the current research beyond the single-cell experiments to gain a broader understanding of the influences of resolution status (has another person been found guilty of the original crime, or not) in addition to how severe the MCJ was in terms of the duration that the person spent wrongfully imprisoned.

Chapter 5: Motivations to Seek Guilt- and Innocence- Affirming Evidence in Miscarriage of Justice Cases.

Chapter 4 suggested that exonerees who had been wrongfully imprisoned by the criminal justice system experience subsequent derogation and the downplaying of their perceived innocence following their release. These findings corroborate existing research indicating that exonerees often face continued stigmatisation upon re-entering society after their release (Clow & Leach, 2015). Moreover, the results suggest that the specific circumstances surrounding an exonerees incarceration may influence public perceptions of their guilt, with some members of the public maintaining doubts about the exonerees innocence even after exoneration (Clow & Leach, 2015). The materials employed in Chapter 4 provided limited information about the court case preceding the incarceration and did not include details of the evidence presented by either the defence or prosecution teams that led to the conviction. The use of this evidence was to create a more realistic approach to understanding how participants react to exonerees beyond using simple vignettes as previously explored in Chapter 4. Consequently, this chapter used a selective exposure paradigm to explore how people search and evaluate evidence in cases of wrongful conviction, and whether they do so in a way that is biased in line with justice concerns.

More recent research has expanded on Lerner and Simmons (1966) seminal work whereby individuals used derogation to maintain a functional sense of justice by deeming a victim perceived as deserving of their suffering when they did not know if their suffering would persist or if they would be compensated in the end. Additional methods used to maintain a person's deservingness have included immanent justice reasoning where a victim's suffering is a result of their actions even when there is no plausible link (for a review see Callan et al., 2013b). These responses are deemed to allow the observer to passively react in a

way that enables them to maintain their perception of justice by ensuring that the victim deserved their suffering or the misfortune they faced.

More recent work suggests that people also attempt to maintain the perception of deservingness by searching for information confirming that a person gets the outcome they deserve (Callan et al., 2012; Dawtry et al., 2019; Harvey et al., 2016). The focus on selective exposure emerged alongside the rise of cognitive dissonance research, which posits that individuals are motivated to seek out information that aligns with their existing beliefs. This tendency helps reinforce the participants beliefs and allows them to avoid the discomfort associated with encountering conflicting evidence (Festinger, 1957).

The selective exposure phenomenon posits that individuals have a preference for information that confirms their existing feelings and beliefs over information that challenges them (Hart et al., 2009). This tendency is driven by a desire to avoid the negative emotions that can arise from encountering contradictory information, which may lead to cognitive dissonance (Bardin et al., 2018). A meta-analysis conducted by Hart et al. (2009) examined the reasons behind selective exposure, specifically investigating whether it stems from a need to defend one's beliefs or a desire for accuracy. Their findings revealed a nuanced picture of information processing. Whilst individuals generally demonstrated a preference for information that aligns with their existing views, the motivation to defend these views was found to be comparable in strength to the motivation for seeking accurate information.

Further evidence for the selective exposure phenomenon is found in the uptake or avoidance of anti-smoking and anti-alcohol campaigns. For example, research by Perrissol et al. (2008) examined how exposure to anti-smoking and anti-alcohol information varied depending on whether individuals consumed these products. The findings showed that

consumers of tobacco and alcohol products tended to seek out pro-smoking or pro-alcohol information to reinforce the partcipants existing behaviours. This selective exposure allowed the participants to justify the continued use of these substances. Non-consumers with negative attitudes towards smoking or drinking typically avoided information that portrayed these products favourably. The participants avoidance helped maintain the existing negative stance. Interestingly, non-consumers who lacked substantial knowledge about tobacco or alcohol actively sought out information about these products. This information-seeking behaviour enabled the participants to develop informed attitudes towards smoking and drinking. This further emphasises the complexity of selective exposure; the nature of the phenomena can vary significantly depending on the individuals existing behaviour and therefore related motivation (Callan et al., 2013a; Harvey et al., 2016).

Across seven experiments, Harvey et al. (2016) found evidence that observers were motivated to selectively expose themselves to outcomes that the hypothetical person deserved whilst actively avoiding undeserved outcomes. In Study 3, the participants read a brief scenario about a person (Chris) which inferred something about their character, before rating how deserving Chris (who either drowned a puppy in the river (bad) or saved a puppy from drowning in a river (good)) was of eight outcomes, four good (e.g., "…won a luxury cruise...") and four bad (e.g.,"…injured in a car accident…"). Next, they selected two outcomes that they wanted to read and two which they wanted to avoid. The results indicated that when Chris was 'bad' (vs. 'good'), he was rated as more deserving of bad outcomes, and participants selected bad outcomes more often than good outcomes. Studies 5 and 6 further emphasised how selective exposure to information congruent with the outcomes was driven by how deserving the person was. More specifically, even when it required more effort to do so in a shape array task requiring participants to search for the outcome that they wanted to

read, participants were willing to invest more time to find the shape that was associated with the outcome that the target deserved (Harvey et al., 2016).

Callan et al. (2013a) demonstrated that commitment to deservingness extends to anticipatory judgments based on a target's moral character, even before their outcome is known. The participants heard a description about a person's moral character and saw a screen of potential outcomes that the person could receive. The results suggested that when a person's moral character was presented to participants via audio input, the participant's responses were recorded by tracking their eye fixations on outcomes displayed on a screen. These anticipatory fixations appeared to align with what the target deserved based on their moral character. However, the results from audio-visual scenes cannot say with certainty that the behavioural and anticipatory fixations towards 'deserved' outcomes were driven by the commitment to deservingness as participants were not asked to justify their choices. Further evidence from eye-tracking research suggests that even in response to political advertisements, people are motivated by their political beliefs to avoid adverts about the opposing political party (Schmuck et al., 2020). Similarly, according to confirmation bias, people seek information that reinforces their expectations and beliefs while ignoring and distorting information that contradicts them (Mynatt et al., 1977; Peters, 2022).

The selective exposure phenomena could provide a viable framework for understanding how jurors prioritise, process and make sense of the information supplied in a courtroom. Research by Callan et al. (2013a) demonstrated that people tend to make anticipatory judgements about a persons deserved outcome based on their moral character before the true outcome was known. This could suggest that jurors may focus on information that aligns with their pre-existing beliefs about the defendant/exonerees' character. Eye-tracking studies supported the idea that individuals pay more attention to information that

supports their beliefs, whether this is in political contexts (Schmuck et al., 2020), in response to moral judgements (Callan et al., 2013a) or observing deserved outcomes (Harvey et al., 2016) the participants attended to information which supported (vs. refuted) their beliefs..

Further evidence in support of the confirmation bias (Mynatt et al., 1977; Peters, 2022) and selective exposure (Bardin et al., 2018; Hart et al., 2009) could suggest that jurors may only pay attention to evidence that confirms their expectation and risk potentially distorting or ignoring information that contradicts their views. This could be crucial in a courtroom where juror biases may lead to more weight being attributed to the information that aligned with their beliefs around deservingness and to rebalance justice. Therefore, the selective exposure phenomena could be used as a lens to explore how juror expectations and biases could influence the interpretation of evidence that ultimately shapes the outcomes of trials. Taken together, this chapter explored the effect of MCJ severity (Experiment 1) and resolution status (Experiment 2) on how participants search for innocence and guilt-affirming evidence.

Current Research

It could be speculated that the commitment to the just-world and the effectiveness of the criminal justice system that reinforces the system via SJT could motivate participants to seekn out information which affirms the guilt (vs. innocence) of a wrongfully convicted person, to protect the criminal justice system. Two experiments examined whether people sought to selectively expose themselves to different kinds of evidence depending on whether they read about a more versus less severe MCJ. Drawing on existing research (Harvey et al., 2016; Schmuck et al., 2020) on deservingness and selective exposure, we hypothesised that individuals motivated to rationalise a severe (vs. less severe) wrongful conviction as deserved

would be more likely to seek out evidence supporting the exonerees guilt rather than evidence challenging it. Consequently they would tend to focus more on evidence presented by the prosecution rather than the defence. Specifically, in Experiment 1, after reading about a (more vs. less severe) MCJ case, participants were asked to rate how much they wanted to view items of evidence that supported the case of either the defence or prosecution. In Experiment 2, we conceptually replicated this study using a visual search paradigm with eye-tracking to explore how people visually attended to defence and prosecution evidence – and whether they do so in a selective way - in (more vs. less severe or resolved vs. unresolved) MCJ cases and whether this was related to evaluations of the exoneree's character and blameworthiness.

Experiment 1

Method

Participants

Participants were recruited online via Prolific (www.prolific.com) and received monetary reimbursement of ~£7ph for their time. Following the exclusion of 13 participants for failing ≥ 50% of the attention checks or did not provide complete responses. The final sample considered of $N = 221$, 140 females, $M_{age} = 42.41$ years, $SD_{age} = 14.56$, I sought to recruit at least 200 participants, which according to a sensitivity power analysis, enabling for the detection an of effect of $d = 0.40$ or above at $\alpha < .05$ with 80% power.

Materials and procedure

The experiment used a between-subjects design, and the participants were randomly assigned to one (of two) online news articles which presented a MCJ case of either low or

high severity. The low severity MCJ news article presented information about Ashley Johnson, who had been wrongfully detained for 96 hours in a police station and was compensated £2,500 following the charges being dropped. Compared to the high-severity MCJ case where Ashley Johnson had been wrongfully imprisoned for 25 years and unsuccessful in securing compensation. Both the low and high-severity scenarios suggested that the police were actively appealing for information about the original case that remained open; the full scenarios can be seen in Appendix B.

Participants rated items on how unjust and unfair they believed the wrongful imprisonment/detainment was for the wrongfully convicted/detained person. The items had an excellent internal consistency ($\alpha = 0.93$) and were averaged to form the "perceived injustice" measure. Participants then rated how innocent they believed that Ashley was "I believe that Ashley is innocent of the crime" scaled using 1 = "Strongly Disagree" to 7 = "Strongly Agree".

Next, the participants rated how inclined they were to read 14 documents associated with the crime. Of the 14 documents (Appendix J), half were evidence from the defence attorney who advocated that the target was innocent in the original case (e.g., the Defence alibi statement – which the suspect gave to the police in favour of their innocence). The remaining documents were from the prosecution attorney, who advocated that the target was guilty in the original case (e.g., the prosecution witness statement – which was given by a witness of the crime to the police in favour of the suspect's guilt). Each of the 14 documents were rated from 1 = "Definitely do not wish to read" to 7 = "Definitely wish to read". The defence scale and the prosecution scale items had an excellent internal consistency of α's = 0.93 and 0.93, respectively; these were averaged to create the two measures "Desire to read Defence (/ Prosecution) documentation".

After this, the participants were asked to select two of the previously rated documents they wished to read fully. In this experiment, the participants did not read any of the documentation; this 'selecting phase' was to gauge their preferences only. Once the participants had 'selected' the two documents that they would like to read in full, these were removed from the list. The participants then selected two of the remaining 12 documents they would avoid reading altogether. Finally, the participants completed the 24-item ATCLS scale (Martin & Cohn, 2004) which included items that assessed the participant's feelings towards multiple areas of the criminal justice system for example, "Most of our laws are fair and just", these items had a good internal consistency ($\alpha = 0.81$). All the items in the above scales were scaled from 1 = "Strongly Disagree" to 7 = "Strongly Agree". Participants were then debriefed.

Results

To verify the manipulation, the participants rated the perceived injustice of the incident (wrongful imprisonment/ detainment). It was expected that the wrongful imprisonment would be perceived as more unjust compared to the low severity MCJ scenario where the individual was wrongfully detained for the maximum allowable time before being charged (96 hours). Similar to Chapter 4, the results revealed that there was significantly less perceived injustice reported following the low-severity MCJ case ($M = 4.70$, $SD = 1.33$) compared to the high-severity case ($M = 5.32$, SD = 1.42) $t(217.21) = 3.50$, $p < .001$, $d = 0.46$. In line with Chapter 4 the current experiment required participants to rate how innocent they believed that the exoneree/detainee was of the original crime. An independent t-test revealed that there was not a significant difference in the perceived innocence of the exoneree who faced a shorter-term wrongful detainment (low-severity MCJ) ($M = 4.44$, $SD = 1.10$) and the

exoneree who faced long-term wrongful imprisonment (high-severity MCJ) (M = 4.21, SD = 1.11) $t(218.72) = 1.53$, p =.128, d = 0.21.

Main effects of MCJ severity

Two mixed ANOVAs were conducted to explore whether the average ratings in the desire to read defence and prosecution documents differed between the low- and high-severity MCJ cases presented in the online news article scenario. For the desire to read the defence documents, there was not a significant main effect of the MCJ severity on the desire to read the defence documents $F(1,219) = 0.00$, p = .951, $\eta^2_p = 0.00$. Indicating that the desire to read defence documents following the low-severity MCJ case (M = 5.49, SD = 1.15) was not significantly different than following the high-severity MCJ case (M = 5.48, SD = 1.25). For the desire to read prosecution documents there was not a significant main effect of the MCJ severity on the desire to read the prosecution documents $F(1,219) = 0.28$, p = .600, η^2_p = 0.00. Thus, the desire to read the prosecution documents following the low-severity MCJ (M = 5.55, SD = 1.13) was not significantly different than the desire to read the prosecution documents following the high-severity MCJ case (M = 5.46, SE = 1.26).

Differences in document selection and avoidance

The number of defence and prosecution documents selected and avoided was analysed separately to determine how these numbers differed between the low and high MCJ severity conditions. The selected/ avoided documents that the participants wanted to read (or avoid) could range from 0-2. The implications and trends of the selection/ avoidance of the documents will be explored in the general discussion. The number of documents that the participants selected and avoided was fixed at two per condition, and there were an even number of defence and prosecution documents to choose from (14 in total).

Difference scores were calculated by subtracting the total number of prosecution documents from the total number of defence documents selected and avoided. Consequently, positive scores indicated a preference for selecting (or avoiding) defence documents, while negative scores suggested a preference for prosecution documents. A score of 0 indicated that participants selected an equal number of defence and prosecution documents (Table 5). Using the difference scores, we conducted separate t-tests which tested the effects of the severity (low vs high) on document selection and avoidance. The MCJ severity had no effect on document selection $t(218.99) = 1.62$, $p = .105$, $d = 0.22$, or avoidance $t(217.36) = 0.06$, $p = .952$, $d = 0.01$, (see Table 5). In terms of frequency, of the 14 documents the one that was most frequently 'selected' for further reading across both conditions was the Prosecution's CCTV evidence ($N = 81$ (18.41%)). In contrast to the document which was most frequently 'avoided' for further reading was the Defences Victim Impact Statement ($N = 102$ (23.81%)). Figure 15 visually shows the frequency of the selection/ avoidance of defence and prosecution evidence across the high and low MCJ severity conditions.

Table 5

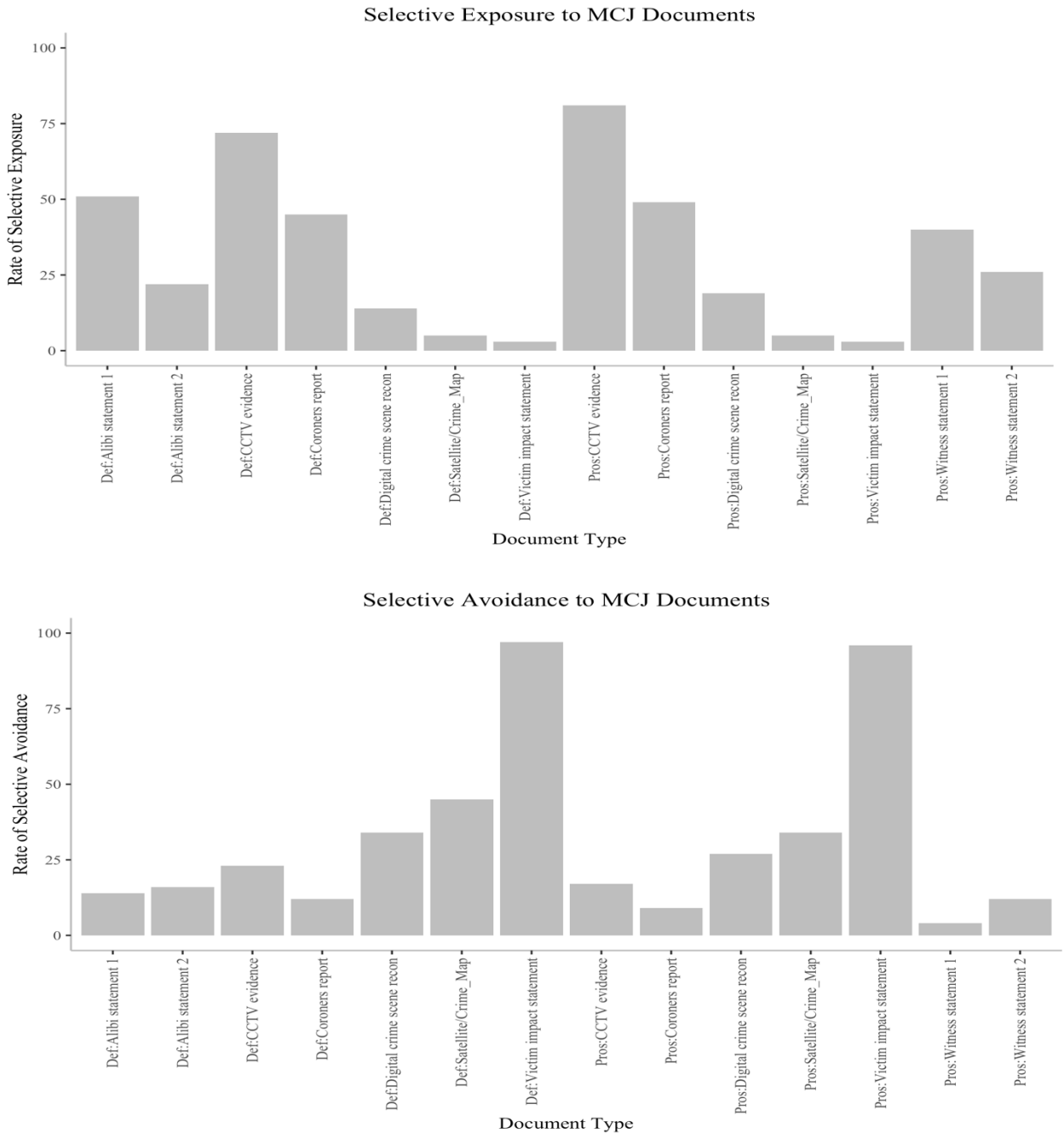
The table shows the average difference in scores for selected and avoided documents.

	Difference scores (*N* of Defence -*N* of Prosecution documents)				
		Selected		Avoided	
	N	*M*	*SD*	*M*	*SD*
Low Severity MCJ	112	0.964	1.31	-1.09	1.39
High Severity MCJ	109	1.25	1.27	-1.10	1.48

Note. Positive scores indicated a preference to select (or avoid) defence documents. Negative scores indicated a preference towards prosecution documents, and scores of 0 indicated that the participants selected one defence and one prosecution.

Figure 15

Bar graphs of the documents selected (top panel) and avoided (bottom panel)



Note. Bar graphs of the documents selected (top panel) and avoided (bottom panel) in the high and low severity MCJ cases.

Correlations of all outcome variables and moderation analyses by ATCLS

Intercorrelations were conducted on all outcome variables (see Table 6). Four simple moderation analyses were conducted using Model 1 of the PROCESS Macro (Hayes, 2017) in R (version 4.4.4; R Core Team, 2021) to explore if ATCLS scores moderated the effects of the manipulation on perceived injustice, perceived innocence, ATCLS, desire to read defence/ prosecution documents. The models used the MCJ severity (coded as low severity = 1 and high severity = 2) as the predictor variable and ATCLS scores as the moderator variable. The four bootstrapped (5,000 resamples) moderation analyses identified that ATCLS scores did not moderate the effect of the manipulation on the perception of injustice (b = 0.53, SE = 0.46, t(216) = 1.15, p =.250, 95% CI [-0.37, 1.43]), innocence (b = -0.06, SE = 0.37, t(216) = 0.17, p =.862, 95% CI [-1.15, 0.66]), the rated desire to read defence (b = 0.13, SE = 0.40, t(216) = 0.32, p =.752, 95% CI [-0.66, 0.92]) or prosecution documents (b = 0.09, SE = 0.40, , t(216) = 0.23, p =.878, 95% CI [-0.69, 0.88]).

Table 6

Table of Correlational Coefficients of all measures

			Desire to read	
	Injustice	Innocence	Defence documents	Prosecution documents
Innocence	.58***			
Desire to read defence	.00	-.07		
Desire to read prosecution	-.11	-.02	.69***	
ATCLS	-.03	-.03	-.02	-.07

Note. ***p <.001, ** p < .01, * p <.05

Discussion

To summarise, the prediction that participants would selectively expose themselves to evidence favouring the exonerees' guilt was not supported. Based on the overall frequency of the document selection and avoidance, participants appear to favour selecting the CCTV evidence from the prosecution whilst actively avoiding the victim impact statement from the defence team, irrespective of the severity of the MCJ case. However, there were no differences in the desire to read ratings towards prosecution or defence documents, irrespective of how severe the MCJ case was. Reported faith towards the criminal justice system also did not moderate any outcome measures, including innocence, perceived injustice, and desire to read prosecution or defence documents. There was a strong positive correlation between the desire to read both defence and prosecution document ratings, indicating high motivation to read both types.

However it is important to note that in this experiment the low-severity MCJ did not involve the overturning of a wrongful conviction as the individual was only wrongfully detained in a police station. This limitation is addressed next in Experiment 2 by introducing the low-severity MCJ as being a shorter term (3-5 years) wrongful imprisonment in comparison to the high-severity MCJ cases which had longer term (20-25 years) wrongful imprisonments. Experiment 2 also introduced 'resolution status' to the scenario when the cases were either unresolved (i.e., another suspect has not been convicted) or resolved (i.e., another suspect had been convicted). The resolution status could have a similar, yet additive effect to the MCJ severity of the case. Such that, if a case involves a long-term wrongful imprisonment and following their exoneration another suspect is arrested this could present two failings of the criminal justice system. The first whereby the person was wrongfully imprisoned and the second whereby the true suspect remained amongst the public having not

been charged in the original trial. Thus threatening the effectiveness of the criminal justice system which according to SJT and JMT which could motivate responses including character derogation and blame to protect the effectiveness of the criminal justice system and just-world beliefs.

Experiment 2

Experiment 2 sought to examine selective exposure from another angle by using an eye-tracking method to see if people 'look' at and for evidence differently depending on the severity of the MCJ.

This experiment aimed to build upon Experiment 1 by expanding beyond self-report measures which can suffer from participants skewing research outcomes by responding in a socially desirable way (Fischer & Fick, 1993). The reliance on self-reporting in Experiment 1 could have been problematic, as participants might have rated and selected documents in a manner that made them appear rational and unbiased towards the exoneree's suffering. Therefore, by employing an eye-tracking method, which sought to objectively measure where participants looked and how long they spent viewing defence and prosecution documents. Given the novel methodology employed, this experiment's sole prediction was that participants would be motivated to selectively expose themselves to guilt-affirming documents (i.e., prosecution documents) when the threat to justice was more significant (i.e., in cases of longer-term wrongful imprisonment or when the case was unresolved, i.e., no one else had been arrested).

Method

Participants

Participants were recruited from the undergraduate sampling pool at the University of Essex (N = 38, 57.89% female, M_{age} = 27.47 years, SD_{age} = 7.71). The participants provided survey and eye-tracking data, each completing four conditions. In total 22 of the 152 survey trial responses were excluded due to failing ≥ 50% of the attention checks, thus a final sample of survey data was 130 participants. While all four trials of visual data was excluded from 11 participants as ≥ 50% of their data being uncodable, meaning that the final sample of codable visual data was 27. Based on the within-subjects design, I sought to recruit at least 32 participants, which according to a sensitivity power analysis, enabled for an effect of d = 0.66 or above to be detected at $\alpha < .05$ with 95% power, thus the visual data was unavoidably underpowered following the decision to remove all four trials from particpants who had visual data which was unreliable and uncodable.

Materials and procedure

The experiment used a within-subjects design and the participants read four (of eight total) exoneree crime profiles. The profiles were designed to look like those from the Innocence Project website, which presented information about the MCJ cases. Each of the crime profiles had a resolved and an unresolved version. For example, the profile case of Matthew Barnes presented a man who had been wrongfully imprisoned for 25 years, the dates of the incident, his conviction and the amount of time served. It also details the crime, investigation, appeal, factors contributing to the conviction, and whether the case was (un)resolved (Figure 16, left panel). The MCJ cases were either low (short-term wrongful

imprisonment) or high severity (long-term wrongful imprisonment). Within these profiles, the participants were also provided information about the resolution status of the case, including whether another suspect had been convicted (resolved) or if the investigation was still ongoing (unresolved) (see Appendix K).

The participants completed four trials which were presented in a counterbalanced order. All participants complete one case which was a high severity case which was unresolved (longer term wrongful imprisonment, e.g., 20-25 years, where someone else had not been arrested for the original crime). The participants saw a second high severity case which was resolved (long term wrongful imprisonment where another person had been arrested for the original crime). Additionally, the participants saw a low severity unresolved case (shorter term wrongful imprisonment, e.g., 3-5 years, where another person had not been arrested for the original crime). The participants also saw a second low severity case however the resolved version whereby another person had been arrested for the original crime.

The participants were seated at a table in the laboratory. They were then instructed to read a series of MCJ case profiles from the Innocence Project database before exploring the evidence from the original case. Participants then began viewing the first MCJ case profile, and the viewing time was restricted to two minutes for all participants. After this, the participants completed a single attention check asking them to select how long the exoneree was imprisoned for and a manipulation check which asked participants to select whether another person had been held accountable for the crime. Next participants were presented with a list of fourteen documents[13] in total, half of which were defence and half were

[13] Full list of documents and their descriptions are available in Appendix J.

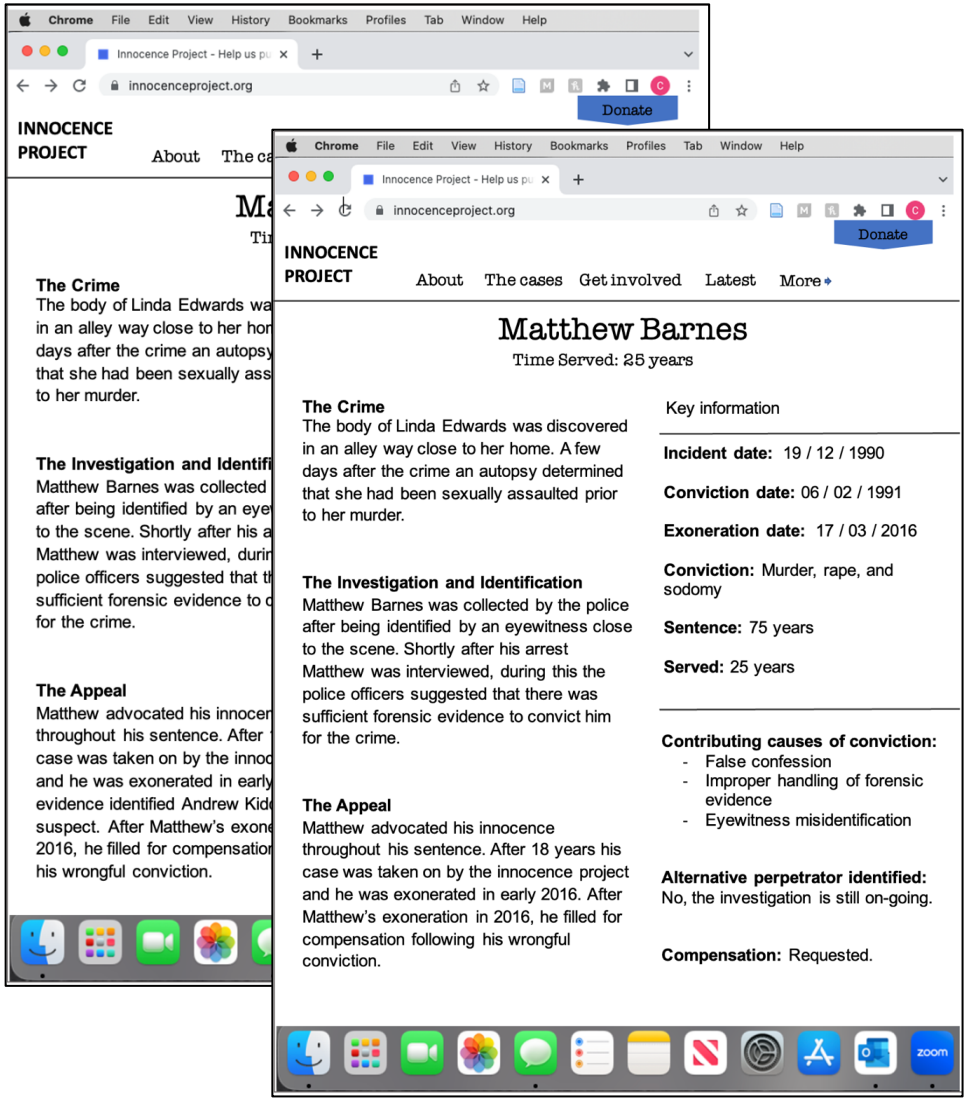
prosecution documents and were asked to indicate two which they wished to read in more detail and two that they wanted to avoid reading. The columns on the lists (i.e., defence on the left and prosecution on the right) were counterbalanced throughout the experiment (Figure 16, right panel). The remaining documents (twelve in total following the exclusion of the documents that the participant did not wish to read) were then presented to the participant on the table. The contents of each document were marked on the cover page including the possession of the document (defence or prosecution), the title of the document (e.g., Alibi Statement 1) and a brief description of the document (e.g., "The enclosed information provides the alibi statement given by the suspect to the police"). The viewing time again was limited to two minutes and the participant's eye movements were recorded throughout using the Pupil Labs Core glasses (Kassner et al., 2014; Pupil Capture version 1.11.4).

Chapter 5

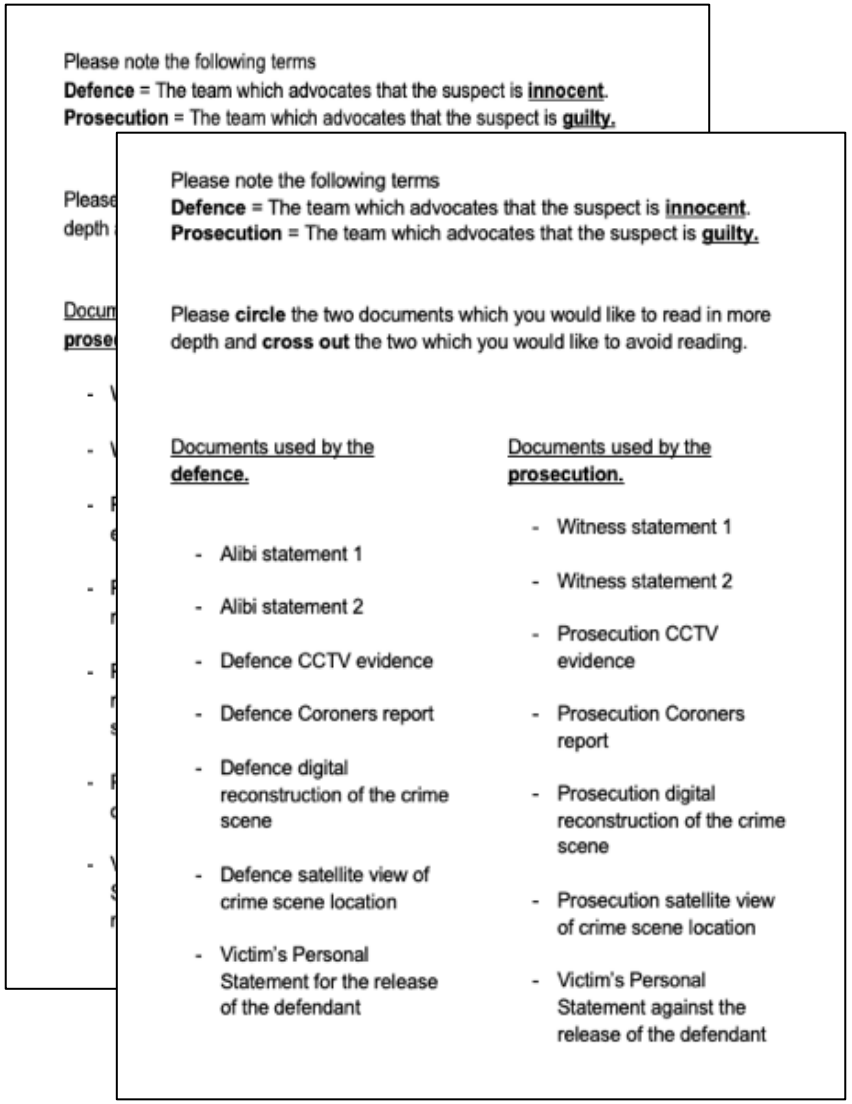
Figure 16

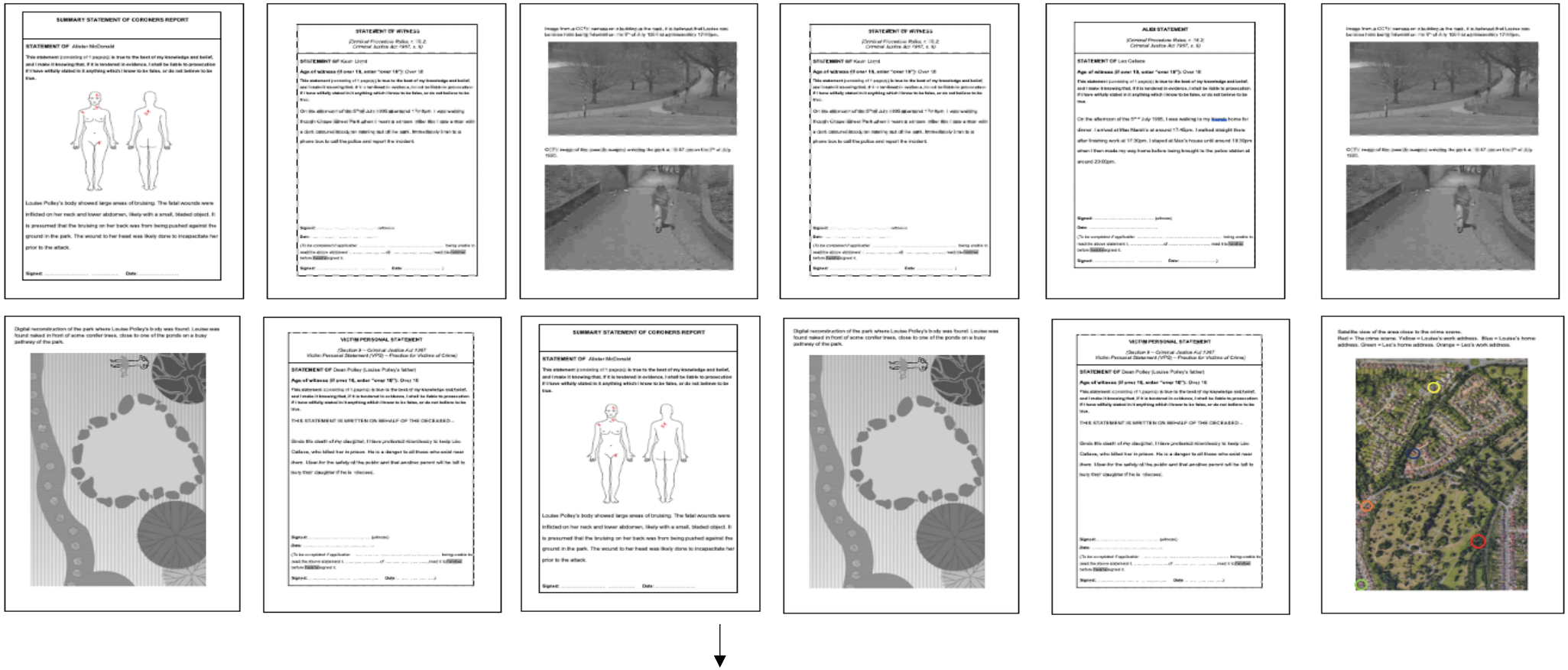
Diagram of the procedure used for the eye-tracker.

2 minutes free viewing time



Selection and avoidance phase





Note. Participants had two minutes of free viewing of the assigned crime profile before selecting 12/14 of the documents they wanted to see/ avoid before having another two minutes of free viewing of the remaining 12 documents.

Participants then completed the online survey via Qualtrics in the laboratory beginning with five derogation items from earlier research by Mikani and Rafiee (2022). The first item asked participants to rate what they thought about the exonerees character scaled from 1 = “Very Negative” to 7 = “Very Positive”, the other items asked participants to rate how likeable, conscientious, careless and how much of a good friend that they perceived the exoneree to be. Four items were adapted from Mikani and Rafiee (2022) to focus on the exonerees instead of the victims and these were used to assess how much blame was placed on the exoneree for what happened to them. The items asked participants how responsible and blameworthy the exoneree was for their wrongful imprisonment. Using two items, participants then rated how unjust and unfair they believed the wrongful imprisonment was for the exoneree. All the items in the above scales were scaled from 1 = “Strongly Disagree” to 7 = “Strongly Agree”. The scales had a good to excellent internal reliability (α = 0.81, 0.87, 0.97 respectively) and were averaged to create the Derogation, Blame and Injustice measures. Participants then indicated how much “if any” compensation the exoneree deserved to receive following their release, this was done using a sliding scale which ranged from 0-75 million pounds. Once the participants had completed all four conditions, they completed the 7-item Global-Just-World-Beliefs-Scale (GJWBS) (Lipkus, 1991) which was scaled from 0 = “Strongly Disagree” to 6 = “Strongly Agree”, the items had a good internal consistency (α = 0.89) and were averaged to form the “BJW” measure. Participants were then debriefed.

The survey included manipulation checks which asked participants to rate the overall injustice experienced by the exoneree. It was anticipated that there would be more injustice following the high-severity MCJ cases where the exoneree was wrongfully imprisoned for a long duration of time compared to the low-severity cases where the exoneree was wrongfully

imprisoned for considerably less time and that these differences would be exacerbated when the cases were also resolved, rendering them factually innocent.

Manual coding of the visual data from the eye-tracker

Each participant completed four trials which included two minutes of "free viewing" time where they got the opportunity to explore the 12 (of the 14 total) documents in any order. Due to the use of the Pupil-Labs Core glasses (Kassner et al., 2014), the removal of the two "avoid" documents and the randomised ordering of the documents presented on the table ahead of the participants the trials were all manually coded as a result. The videos were played back using the free Pupil-Player software (version 3.5.7). Each time the participant's gaze moved onto a different document the video was stopped and the time, the document and the nature of the fixation were recorded. All the videos were coded by the primary researcher using a frame rate of 30 frames per second while the fixations were detected at ≥ 50 confidence. The confidence level in the fixations meant that only fixations which were accurate at 50% confidence were detected and later coded. Thus, the manual coding file included a visual action/ attention (e.g., defence scanning and prosecution focused) and a document number (e.g., 1 = defence alibi statement 1 and 10 = prosecution CCTV evidence). The full coding list and documentation numbering are provided in Appendix L.

Results

Eye-tracking data

The total duration participants spent on defence and prosecution documents was calculated by aggregating each participant's time spent scanning, selecting, and focusing on documents categorised as either defence or prosecution (See Table 7).

We conducted separate repeated measures ANOVAs to test the effects of the severity (how long the person was wrongfully imprisoned, i.e., low severity = 3-5 years and high severity = 20-25 years) and the resolution status of the case (whether another person had been convicted of the original crime or not) on the amount of time that participants spent attending to guilt (prosecution) or innocence (defence) affirming documents (Figure 17). For the innocence-affirming documents, there was not a significant main effect of MCJ severity (high vs low severity), $F(1,100) = 2.03$, $p = .158$, $\eta^2_p = 0.02$ or resolution status (resolved vs unresolved), $F(1,100) = 0.22$, $p = .640$, $\eta^2_p = 0.00$ on the amount of time spent attending to innocence affirming documents provided by the defence. For the guilt-affirming documents, there was a significant main effect of resolution status (resolved vs unresolved), $F(1,100) = 6.26$, $p = .014$, $\eta^2_p = 0.06$. Participants spent more time looking at guilt-affirming (prosecution) documents when the cases were unresolved. However, there was not a significant main effect of MCJ severity (high vs low severity), $F(1,100) = 0.44$, $p = .508$, $\eta^2_p = 0.00$ on the amount of time spent attending to the guilt-affirming documents provided by the prosecution (Figure 17). Thus the severity of the MCJ did not effect how long the participants spent looking at guilt-affirming documents.

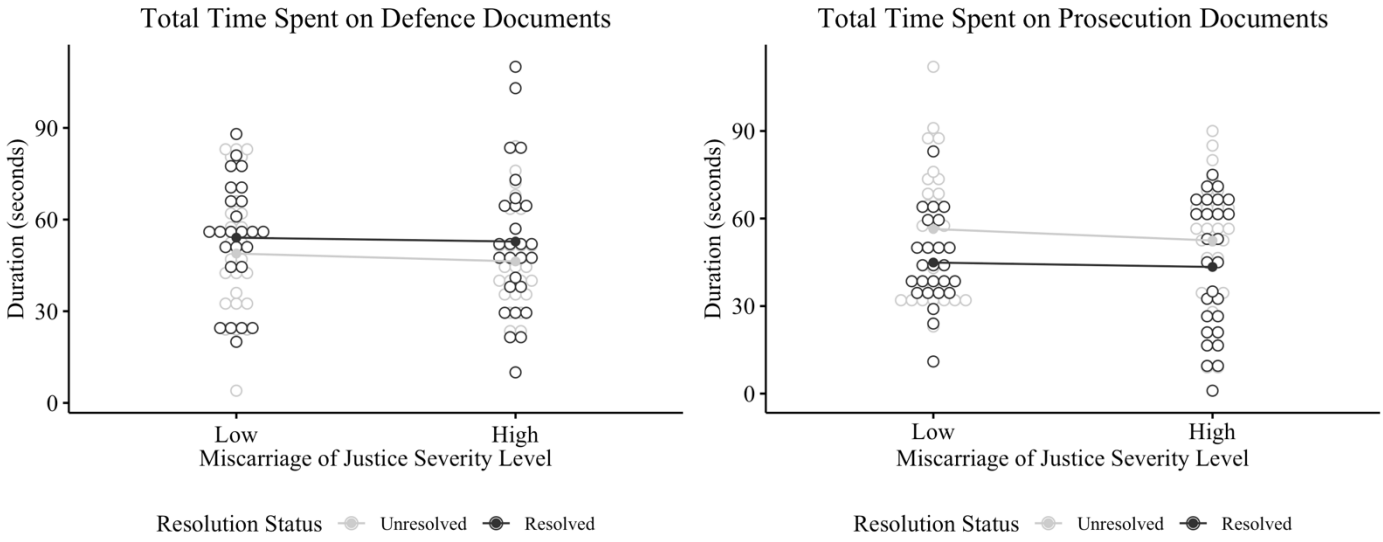
Table 7

Table of Descriptive Statistics for overall time spent exploring documents.

		Overall Time Spent (seconds)			
		Defence		Prosecution	
	N	*M*	*SD*	*M*	*SD*
Low Severity Unresolved	26	48.9	22.0	56.4	23.3
Low Severity Resolved	25	54.1	19.1	44.9	15.2
High Severity Unresolved	26	46.3	17.6	52.5	21.3
High Severity Resolved	27	52.8	24.0	43.4	22.8
		Level Means for Overall Time Spent (seconds)			
		Defence		Prosecution	
	N	*M*	*SD*	*M*	*SD*
High Severity	51	51.4	20.6	47.8	20.4
Low Severity	53	49.6	21.1	50.8	22.4
Unresolved	52	47.6	19.8	54.4	22.2
Resolved	52	53.4	21.6	44.1	19.4

Figure 17

Line-graphs of the overall time spent exploring defence and prosecution documents.



Note. The line graphs of the overall time spent exploring innocence-affirming documents provided by the defence (left panel) and the time spent exploring guilt-affirming documents provided by the prosecution (right panel).

Survey data

As the survey data was underpowered due to the experiment being primarily designed for the eye-tracking measures, only the survey measures relevant to the selective exposure paradigm are reported here. The full analyses of the survey data are reported in Appendix M.

Document Selection/ Avoidance

In terms of overall frequency, the most frequently 'selected' document across the four conditions was the Prosecutions Witness Statement ($N = 53$ (20.38%)), in contrast to the most frequently avoided document being the Defences Crime Map ($N = 39$ (15%)).

The selection / avoidance of defence and prosecution documents that the participants wanted to read (or avoid) (which could range from 0-2) were analysed between the four conditions. The implications and trends of the selected/avoided documents will be explored in the discussion. The number of documents that the participants selected and avoided was fixed at two per condition, and there were an even number of defence and prosecution documents to choose from (14 in total).

Difference scores were calculated by subtracting the total number of prosecution documents from the total number of defence documents selected and avoided. Consequently, positive scores indicated a preference for selecting (or avoiding) defence documents, while negative scores suggested a preference for prosecution documents. A score of 0 indicated that participants selected an equal number of defence and prosecution documents (Table 8).

Table 8

The table shows the average difference in scores for selected and avoided documents.

	Difference scores (*N* of Defence – *N* of Prosecution Documents)				
		Selected		Avoided	
	N	*M*	*SD*	*M*	*SD*
Low Severity Unresolved	37	0.054	0.998	-0.182	0.917
Low Severity Resolved	30	0.000	1.050	-0.667	0.980
High Severity Unresolved	30	-0.267	0.868	0	0.910
High Severity Resolved	33	0.182	0.584	-0.270	1.070

Note. The difference scores for the rate of selected and avoided documents were calculated by subtracting the number of prosecution documents that the participants wanted to read (or avoid) (which could range from 0-2) from the number of defence documents. Therefore,

positive scores indicated a preference to select (or avoid) defence documents. Negative scores indicated a preference towards prosecution documents, and scores of 0 indicated that the participants selected one defence and one prosecution.

Using the difference scores we conducted separate repeated measures ANOVAs testing the effects of the severity (how long the person was wrongfully imprisoned i.e., low severity = 3-5 years and high severity = 20-25 years) and the resolution status of the case (whether another person had been convicted of the original crime or not) on document selection and avoidance.

For the document selection measure, the ANOVA revealed no significant main effect of MCJ severity ($F(1, 126) = 0.15$, $p = .697$, $\eta^2_p = 0.00$) or resolution status ($F(1, 126) = 1.41$, $p = .237$, $\eta^2_p = 0.01$) on selective exposure to document types. Additionally, there was no significant interaction between these factors ($F(1, 126) = 0.64$, $p = .242$, $\eta^2_p = 0.01$). Similarly, for document avoidance, the ANOVA indicated no significant main effect of MCJ severity ($F(1, 126) = 0.020$, $p = .897$, $\eta^2_p = 0.01$) or resolution status ($F(1, 126) = 0.02$, $p = .902$, $\eta^2_p = 0.00$) on selective avoidance of document types, nor was there a significant interaction between these factors ($F(1, 126) = 0.66$, $p = .416$, $\eta^2_p = 0.01$). Figure 18 visually shows the frequency of the document selection and avoidance.

Manipulation Checks

The ANOVA explored the effect of MCJ severity (low vs. high) and the resolution status (resolved vs. unresolved) on responses perceptions of injustice. The ANOVA revealed that there was not a significant main effect of MCJ severity $F(1,126) = 0.00$, $p = .990$, $\eta^2_p = 0.00$, or resolution status $F(1,126) = 2.84$, $p = .094$, $\eta^2_p = 0.02$ on the perception of injustice

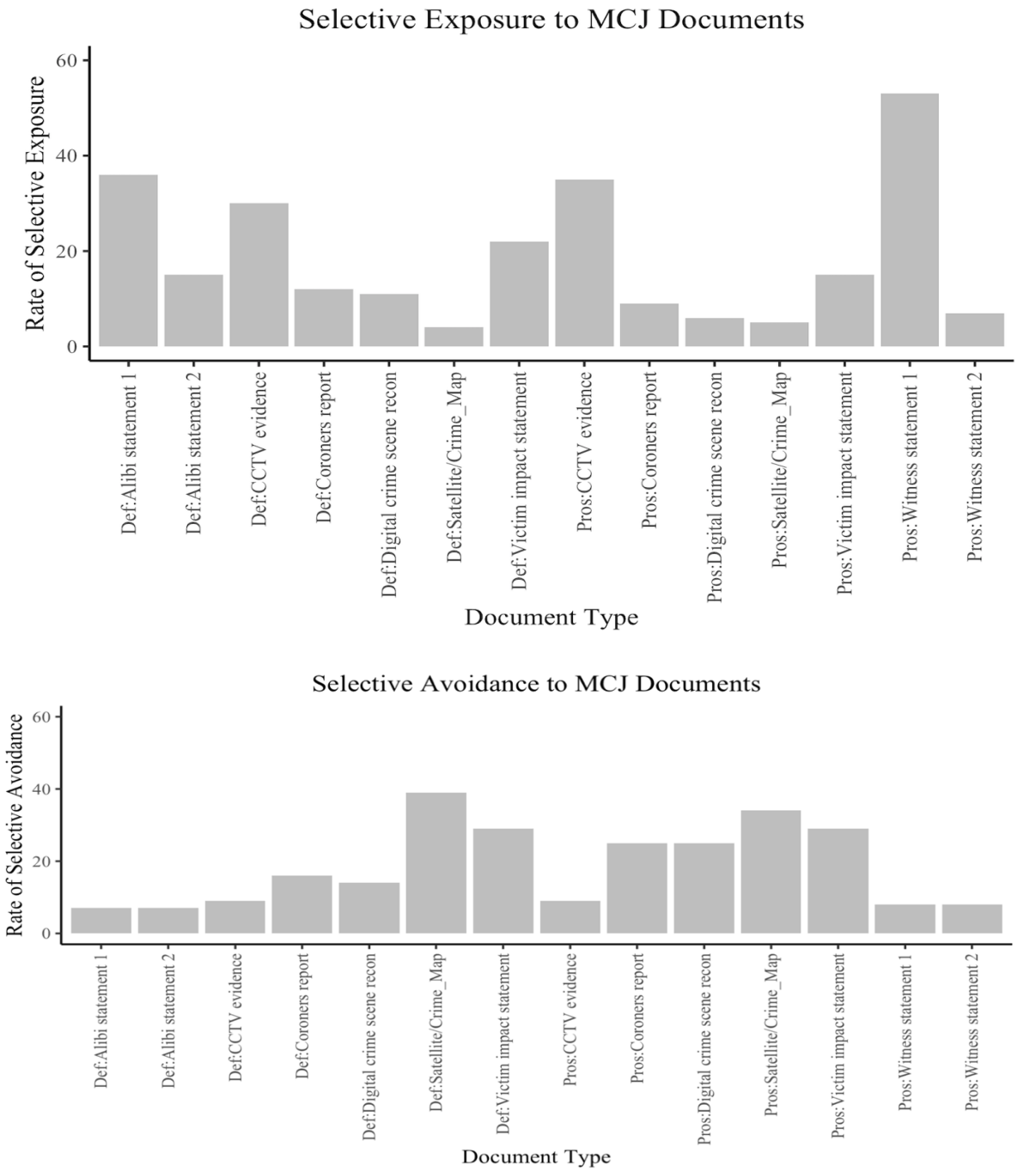
felt for the exoneree nor was there a significant interaction of MCJ and resolution status F (1, 126) = 0.53, p =.466, η^2_p = 0.00.

Self-Reported Selected Data and Visually Selected Data

The documents that the participant 'selected' in the self-report data from the survey were then explored in combination with the visual data from the eye-tracker. This allowed for the exploration of the probability of the self-reported 'selection' and the visual 'selection' being consistent. A Chi-Square test was conducted to explore if the participants visually focused on either of the two documents that they had expressed an interest in reading in the survey data. The Chi-square test for the given probability/ goodness of fit indicated that the effect (Phi) was statistically significant and small, $\chi 2$ (1, N = 100) = 5.92, p = .015; ϕ = 0.20, 95% CI [0.06, 1.00]. Indicating that participants were significantly more likely than chance to select at least one (of the two) documents that they reported wanting to read fully in the survey, although the relationship was small.

Figure 18

Bar graphs of the selected (top panel) and avoided (bottom panel) documents from the survey



Note. Bar graphs showing the selected (top panel) and avoided (bottom panel) documents by MCJ severity and the resolution status of the case.

Discussion

This experiment aimed to explore how the severity and resolution status of MCJ cases motivated the selective exposure of guilt- and innocence-affirming documents. The results from the eye-tracking data indicated that unresolved MCJ cases led participants to spend more time on the prosecution's guilt-affirming (vs. innocence affirming) documents. Suggesting that people are motivated to affirm the guilt of the exoneree. These results are consistent with justice motivations from just-world theory. By affirming the guilt of the exoneree it affirms that justice was served as someone was punished. Therefore, justice had been done for the victim and the defendant. Alternatively, the motivation to explore the guilt-affirming documents could be a result of doubt in the system. Thus, searching by exploring guilt-affirming document it allows for the participants to either figure out why the wrongful conviction occurred in the first place or to affirm that the person should have been convicted.

This novel approach enabled us to compare self-reported selective exposure with actual selective exposure based on visual attention to the documents. A Chi-square probability analysis identified that a significant proportion of the sample visually attended to at least one (of the two) document that they reported they wanted to read further in the survey data within the first two "focused" fixations that they made when free-viewing the documents. The effect was small, but nonetheless, it could suggest that the participants sometimes "do as they say" and are motivated to read the documents they 'selected' via self-report. One consideration is that the selection of these documents early in the free viewing time was done strategically to ensure they would not run out of time to read them. This also provides confidence in the results from Experiment 1 with the self-report data used. Another is that, unlike Experiment 1, the participants did not rate how much they wanted to read these documents, having included this could have given a clearer insight into the participant's

motivations for selecting these documents earlier as opposed to inferring why they select certain documents over others, or if they simply selected documents at random. Future research using a similar approach would benefit from a qualitative element whereby participants can express *why* they selected the documents. Whether the content was selected first based on its contextual importance or its congruency with their expectations or beliefs.

This experiment addressed one of the limitations from Experiment 1 by ensuring that the low and high-severity MCJ cases were true exonerations whereby a person was wrongfully convicted for the crime and not only detained. The low-severity crime profiles included a wrongful imprisonment of 3-5 years compared to the high-severity profiles of 20-25 years. The results from Experiment 1 indicated that the MCJ severity did not influence the motivation to read the defence or prosecution documents. Compared to Experiment 2 whereby both levels of MCJ severity manipulation contained a wrongful imprisonment could explain the non-significance of the manipulation check as both levels may be more unjust, irrespective of the length of time served. Additionally, due to the within-subjects nature of the experiment with two independent variables (MCJ severity and resolution status) the stimuli used to create the different levels were not directly identical (e.g., one level of the low severity manipulation was 5-year wrongful imprisonment whilst the other was 3.5 years). Considering this, the within-subjects nature of the design was well suited for the early exploration of the research by utilising the eye-tracking method and being cost effective.

Future research should consider using a between-subject design to eliminate these concerns, it should also consider the inclusion of the ATCLS scale which was used in Experiment 1 as it appears to be more contextually relevant when confronted with failings of the criminal justice system in the form of exonerations. This because the ATCLS scale encapsulates a broader scope of the criminal justice system which failed the exoneree to

begin with, thus it could be better suited for this framing of research with exonerees. The research would also likely have benefitted from using the same scales used previously in Experiment 1 and throughout Chapter 4 to address derogation and blame as opposed to the ones used by Mikani and Rafiee (2022) whereby the wording may have created a more conscious awareness of the blaming towards the exoneree which could have repressed some of the true responses regarding blame in hope to appear more socially appropriate. In the future it could be worthwhile utilising subtle blaming measures instead of explicit ones which could have led participants to respond in a socially desirable way (Hafer et al., 2019).

General Discussion

There is a lack of research that has explicitly focused on reactions to exonerees. Research by Clow and Leach (2015) suggested that exonerees at times face stigmatisation following their release from prison. When the details about a case are known, the exoneree can still be perceived as guilty, particularly if they falsely confessed to a crime compared to someone misidentified by an eyewitness (Clow & Leach, 2015). Emphasising how public perceptions of exonerated individuals can be influenced by the publicised details and narrative about the case. In Chapter 4, the details provided to the participants about the MCJ cases were intentionally kept vague. Building on this, Chapter 5 explored how the participants searched for information according to a selective exposure phenomenon depending on the severity of the MCJ. Here, the reactions toward 'prototypical victims' – including derogation and blame- were measured similarly to those in Chapter 4 towards exonerees. Chapter 5 also began to explore how 'resolution status', which was classified as whether another person had been arrested for the original crime (resolved) or not (unresolved) led to differences in the time spent exploring guilt- or innocence-affirming documentation.

The research question addressed in this chapter was, ‘How do people seek and evaluate guilt- and innocence-affirming information when the criminal justice system fails (i.e., wrongful convictions)’. Neither study supported an effect of MCJ severity on selective exposure, as measured by preferences to see evidence from the defence or prosecution. Regarding the eye-tracking findings, participants spent more time exploring guilt-affirming documents from the prosecution when the case was unresolved (vs. resolved). It could be speculated that the motivation to seek guilt-affirming documents in unresolved cases reinforced the commitment to maintaining the just world, irrespective of how severe the MCJ was. Alternatively, SJT would suggest that seeking guilt affirming documents could reduce the threat that the wrongful conviction possesses to the systems effectiveness, by suggesting that the individual was truly guilty to begin with. The results could suggest that the participants may spend more time on the guilt-affirming documents to justify the initial wrongful conviction by exploring evidence that initially found them guilty. These findings reinforce the perceived effectiveness of the criminal justice system and can help rationalise the injustice created by wrongful convictions. One possibility was that guilt-affirming documents serve to justify the absence of an alternative solution (i.e., another suspect). The fact that no other person was arrested in the original crime could suggest that the injustice extends beyond the wrongfully convicted individual to include the original victims, thereby posing an even greater threat to the criminal justice system. This highlights the relevance of findings in the seminal work by Lerner and Simmons (1966). When people could not assist the victim rationally or if were unsure that they would be compensated for their suffering, at times the victim faced derogation and rejection (Lerner & Simmons, 1966). Taken together, by exploring guilt-affirming evidence it could give the participant a greater understanding of why the individual was convicted in the first place. The guilt-affirming documents provided by the prosecution could therefore paint a clearer picture of the wrongfully convicted persons’

guilt whilst simultaneously reinforcing that the system made the right decision and remains effective.

Although the results indicated more injustice following the high severity (wrongful imprisonment) than the low severity (wrongful detainment) case, the results from Experiment 1 did not support the research question. There was no difference in the selection and avoidance of the documents by type. There was also no difference in the desire to read defence and prosecution documents based on the MCJ severity. However, the results from Experiment 2 indicated that a significant number of the participants visually attended to the documents within the first two focused fixations that they identified in the self-report. This suggested that over half of the participants in their trials attended to the information relatively early in their free viewing time. However, unlike Experiment 1, the participants did not rate their desire to read each of the documents, so the reasoning for the order in which they focused on the documents is unknown. Thus it would be beneficial to take "desire to read" measurement in future research to establish the order of prioritisation when searching through evidence and if this varies as a result of the case details (e.g., severity and resolution status).

Following Chapter 4, the research also continued exploring whether just-world reactions seen to prototypical victims were also seen towards exonerees. Experiment 2 had a power sensitivity analysis for the eye-tracking study, which meant that the survey data was drastically unpowered. Thus, the results from the survey data are seen in Appendix M. In summary, the results from the survey data in Experiment 2 suggested that the extreme reactions seen towards prototypical victims of misfortune (e.g., derogation and blame) did not translate into the same reactions to exonerees of wrongful convictions. The exploratory measure from Experiment 2 of desired compensation for the exoneree showed to favour compensation when a case was resolved (vs. unresolved). Again, there were no differences

based on the severity of the case (Appendix M). It could be speculated that the resolution status of the crime affirms the innocence of the exoneree thus they were more deserving of receiving compensation. Reiterating the earlier point, this would also have benefitted from a qualitative measure to assess the motivations for the differences in the responses. The addition of qualitative measure would allow for the disentangling of the reasons behind the order of information search and prioritisation of documents. Furthermore, this measure would be more contextually relevant on behalf of the exoneree to allow us to understand the motivation punishment to as the event contains both the need to seek justice for the original victim *and* the wrongfully imprisoned person.

Limitations and Future Directions

Experiment 1 acted as an online trial of the selective exposure paradigm, utilising the vignettes used throughout Experiments 2 and 3 in Chapter 4. Although it was beneficial because of the pre-tested nature of the vignette, it raises a few issues regarding the notion that there is a caseload of evidence towards the individual who was wrongfully detained for 96 hours as it may have subliminally suggested guilt on the detainee's behalf. The extent to which the short-term wrongful detainment truly stands alone as a wrongful conviction is difficult to assess without influencing the participants. However, this was later addressed in Experiment 2 with the low-severity MCJ being changed to being a shorter-term wrongful imprisonment (3-5 years), yet this then produced manipulation checks which were no longer significant, it was anticipated that this could be due to the nature of an exoneree and that any time spent wrongfully behind bars was highly unjust, thus even 3-5 years in comparison to 20-25 years still evoking a heightened sense of injustice . Due to the early stages of such research, it would be preferable to create and pre-test a range of vignettes which successfully advocate the desired MCJ severity and resolution status which unfortunately due to limited

funding resources was not possible during these experiments. It would also be good to begin forming scales better suited towards the similar, yet relatively unique, type of suffering that is experienced by a person who is failed by the criminal justice system as opposed to the type of suffering that is typically experienced by the transgressor.

Finally, based on the frequency of document selection and avoidance by type in Experiment 1, participants favoured selecting the CCTV evidence from the prosecution and avoided the victim impact statement from the defence attorneys. In Experiment 2, participants most frequently selected the witness statement from the prosecution and avoided the crime map from the defence. Based on the graphs (Figures 14 & 17), participants typically selected documents such as alibi/witness statements, CCTV evidence, and coroner's reports, while avoiding victim impact statements, crime maps, and digital crime scene reconstructions. The reasons for these preferences can only be speculated; however, it would be valuable for future research to explore this further, particularly to emphasize the types of evidence jurors find most important in making judgments of guilt and innocence.

Summary

In summary, this chapter began to explore how the severity and resolution status of a MCJ case faced by an exoneree influenced the types of evidence that the participants focused on, whilst continuing to explore reactions sometimes observed in response to prototypical victims from JMT research (e.g., blame and derogation; Dawtry et al., 2020). The results suggested that when cases are unresolved (vs. resolved) there was more time spent observing guilt-affirming documents from the prosecution team. Yet there was no effect of the MCJ severity on the time spent observing prosecution documents, nor was there any effect of the MCJ severity or the resolution status on the time spent observing defence documents which

reinforced the innocence of the exoneree. Taken together the results suggested that there is much left to unpack regarding how the public reacts to exonerees and how jurors prioritise and explore court-based evidence.

Chapter 6: General Discussion

This thesis divided into two sections, the first which investigated how extra-legal attributes such as physical attractiveness, gender, character, and socio-economic status (SES) influence punishment judgements and the second, whether reactions to 'prototypical victims' extend to those wronged by the criminal justice system (i.e. exonerees).

This chapter will begin by recapping the research conducted in Chapters 2 and 3, which addressed the effects of extra-legal attributes on punishment recommendations and how this relates to prior research. Next, the chapter will recap the research from Chapters 4 and 5, which addressed the effects and consequences that can be faced by individuals who are wrongfully punished, before discussing the overall practical and theoretical implications of the research. Finally, this chapter will discuss the limitations and future directions of this research.

Summary of research

The empirical research reported in Chapters 2-5 explored how justice motive theory (JMT) explains motivations behind punishment and its consequences when wrongfully applied. The key research questions addressed in the empirical chapters include: Do extra-legal attributes of targets (victims and defendants) influence punishment? (Chapters 2 & 3). Do just-world reactions towards 'prototypical victims' also apply to exonerees wronged by the criminal justice system? (Chapter 4). Finally, how do people seek and evaluate guilt- and innocence-affirming information when the criminal justice system fails (i.e., wrongful convictions)? (Chapter 5).

Chapters 2 and 3 laid the foundation by initially exploring how the appearance of defendants influenced punishment before exploring how additional extra-legal attributes, including SES, influenced punishment. The research then progressed by considering the reactions exonerees might face if they were wrongfully convicted due to these biases and how wrongful allocations of punishment occur as a result. Thus, Chapters 4 and 5 built on these findings by exploring societal responses to wrongfully convicted individuals. The research initially explored character and blame judgements in response to MCJ cases before exploring how participants searched for guilt- and innocence-affirming documents using a novel eye-tracking methodology. The results provided insights into how people wrongfully convicted by the criminal justice system can face similar reactions from the public as 'prototypical victims' when they suffer at the hands of another person.

Chapters 2 and 3

The experiments in Chapter 2 investigated whether people punish differently based on a defendant's physical appearance. Experiment 1 used pre-tested images from the Face Research Lab London Set (Debruine & Jones, 2017) to explore whether physically attractive defendants are punished more leniently compared to less physically attractive defendants in line with existing research (Ahola et al., 2009; Beaver et al., 2019). Experiment 2 then extended the focus on physical attractiveness by testing whether more global assumptions can be made about a defendant by their appearance alone. More specifically, focusing on whether the appearance of a defendant's face could lead to inferences being made about their character, which was coined 'implicit character' throughout the experiment; gender was also explored.

Findings from Chapter 2 contradicted both the initial predictions and existing research on the attractive leniency bias (Abel & Watters, 2005; Ahola et al., 2009; Beaver et al., 2019; Dion et al., 1972; Landy & Aronson, 1969; Westfall et al., 2019). Contrary to expectations, neither the defendants' physical attractiveness, gender, nor implicit character significantly influenced the severity of punishment. These findings highlighted the need for further investigation into the complexities of these factors in the judicial decision-making process whilst accounting for just-world motivators including the extent that the defendant deserved to be punished.

Chapter 3 expanded on the work of Chapter 2 by examining the influence of additional extra-legal attributes of both the defendants and victims, including SES, on punishment decisions. The research progressed through three experiments. Experiments 1a and 1b investigated the isolated effects of defendants' and victims' attributes, respectively. Following this, Experiment 2 explored the simultaneous impact of all four target attributes (defendant or victim) on punishment decisions. Finally, Experiment 3 examined how the presence of both parties' attributes affected punishment. This experiment fully crossed the attribute favourability of victims and defendants, allowing for congruent (same) or incongruent (opposing) attribute pairings. This design tested whether punishment depended on the congruency of victim and defendant attributes, exploring potential enhancement or neutralisation effects on punishment.

Building on Chapter 2's predictions, Chapter 3 hypothesised that punishment motivations would depend on the perceived deservingness of the defendant, influenced by both parties' (un)favourable attributes. It was anticipated that victims with favourable attributes would elicit stronger punishment motivations, while defendants with unfavourable (vs. favourable) attributes would receive harsher punishments. Results revealed that

defendants with a ‘bad’ (vs. ‘good’) character were deemed more deserving of punishment and consequently punished more severely (Experiment 1a). Conversely, when victims were described as having a ‘good’ character, the unknown defendant was considered more deserving of punishment, but this did not translate into harsher punishments (Experiment 1b). Notably, the defendant’s or victim’s physical attractiveness, socioeconomic status, and gender had no significant effect on punishment deservingness or severity.

Experiment 2 revealed that punishment severity increased when victims possessed favourable attributes, while defendants’ attributes had no significant effect. The results suggested that the classification of “favourable” attributes of the victim can be influential in the motivation to punish. For a defendant this could be troublesome as they could be punished more severely, or even wrongfully, as a result of these biases against them. Additionally jurors may be motivated to punish the defendant more severely on the behalf of a victim because the victim has favourable attributes. Punishment was associated with perceptions of injustice and deservingness, driven exclusively by victim attributes. Experiment 3 extended this investigation by examining the combined effects of both victims’ and defendants’ attributes. Results indicated harsher punishment when victims had favourable attributes, regardless of defendant favourability. Although attribute congruency between pairs did not significantly affect outcomes, the punishment was particularly severe when victims had favourable attributes, and defendants had unfavourable ones. Mediation analyses demonstrated that favourable victim attributes increased perceptions of injustice, leading to harsher defendant punishment. Conversely, unfavourable victim attributes exhibited a suppression effect, suggesting that perceptions of injustice and deservingness may have accounted for more variance than the victim’s attributes alone.

The findings from Chapters 2 and 3 did not support previous research on the attractive leniency bias (Abel & Watters, 2005; Ahola et al., 2009; Beaver et al., 2019; Dion et al., 1972; Landy & Aronson, 1969). In isolation, neither the physical attractiveness, SES, nor gender of victims or defendants significantly influenced punishment deservingness or severity. This lack of effect on SES contradicted existing research suggesting harsher punishments for low-SES (vs. high SES) defendants due to criminal stereotyping (Black & Gold, 2008; da Silva & Oliveria Lima, 2016; Freeman, 2006; Hoffman, 1981). Thus it could be speculated that some crimes are more stereotypical of some defendants more than others (e.g., white collar crimes being associated more with high SES (vs. low SES) and punishment recommendations could reflect this with harsher (or more lenient) punishment when the crime 'matches' the defendant. The absence of significant results might reflect unaccounted associations between social class and crime types. Chapter 3 focused on blue-collar crimes, particularly assault, while neglecting white-collar crimes typically associated with higher social classes, such as embezzlement and fraud (Benson & Simpson, 2014). Future research could benefit from including a broader range of crime scenarios to address this limitation.

Previous research indicated that defendants faced harsher punishments when crimes involved female victims, while female defendants generally received more lenient sentences compared to males for similar offences (Ahola et al., 2009; Devine & Caughlin, 2014; Mazzella & Feingold, 1994). However, this leniency towards female defendants varied across crime types. For instance, women received more lenient sentences for theft but not for drug offences or fraud (Ahola et al., 2009). Chapter 3 focused exclusively on assault scenarios, which may have limited the potential for observing gender effects. It is plausible that including a broader range of crimes, such as theft, might have revealed gender-based differences in punishment. This speculation is supported by research suggesting that female

defendants are often perceived as stealing out of necessity, unlike their male counterparts (Cromwell & Thurman, 2003).

In isolation, only the defendant's character significantly influenced punishment severity, supporting Cheun and Lagnado's (2023) findings. Defendants perceived as having a 'bad' character after a rude encounter with an elderly lady received harsher punishments compared to those with a 'good' character who assisted the elderly lady. These results align with just-world theory, where 'bad' characters face more severe punishment than 'good' ones. Notably, the relationship between the defendant's character and punishment severity was mediated by perceived deservingness of punishment. Another possible mechanism is that people maintain BJW by aiming to see the persons outcome as being deserved. By administering harsher punishments to 'bad' defendants, observers could maintain their belief in a 'just-world', ensuring that individuals received their due consequences.

Chapters 4 and 5

Chapters 4 and 5 shifted focus to examine a significant consequence of criminal justice system failures, more specifically the wrongful convictions of innocent individuals. The grounding for the research in these chapters was from just-world theory research which has heavily explored why people can, at times, react to prototypical victims in counter-normative ways. Such that when an observer witnesses undeserved misfortunes, they may respond by devaluing the victim's character or blaming their behaviour to justify the misfortune (Dawtry et al., 2020; Hafer & Rubel, 2015; Lerner, 1980; Lerner & Simmons, 1966). Prior to the experiments in Chapters 4 and 5, the existing research had primarily focused on public reactions to exonerees reintegrating into local communities, where they often face stigmatisation and doubts about their innocence (Clow et al., 2011; Clow & Leach,

2015). This thesis aimed to extend this line of inquiry by exploring new aspects of wrongful conviction perceptions and responses.

Chapter 4 addressed the second research question: whether just-world reactions observed towards prototypical victims extend to individuals wronged by the criminal justice system through wrongful convictions. It was hypothesised that more severe MCJ cases (longer-term wrongful imprisonment) would lead to greater derogation and blame compared to less severe cases (shorter-term wrongful detainment). Results from Experiments 1 and 2 indicated that individuals facing longer-term wrongful imprisonment experienced significantly more character derogation than those wrongfully detained. Experiment 2 also suggested increased blame for their own imprisonment. Additionally, the wrongfully imprisoned (vs. wrongfully detained) were perceived as less innocent of the original crime (Experiment 1). However, the mediation models in both experiments revealed a suppression effect suggesting that the mediator variable in both models predicted more of the models variance than the predictor variables as the direct effect was greater than the total effect (which should encapsule the models entire effect), thus the results required cautious interpretation. Experiment 3 attempted to use items from the Attitudes-Towards-the-Criminal-Legal-System scale (ATCLS) to measure participants' attitudes towards various aspects of the criminal justice system. The use of the ATCLS scale allowed for responses which could suggest people are justifying, protecting and bolstering the practices of the system (even when it is failing) in line with System Justification Theory (SJT; Jost et al., 2004). Primes designed to suggest system effectiveness or ineffectiveness did not significantly influence perceptions of injustice, derogation, blame, or perceived innocence of the wrongfully imprisoned or detained individuals.

Chapter 5 addressed the final research question: “Do people attend to information about MCJ cases in a way that may reinforce or affirm the guilt/innocence of the exoneree?” Two experiments examined how observers selectively exposed themselves to information based on MCJ case severity and resolution status. The first experiment, conducted online, showed no preference for defence or prosecution documents across resolution status or MCJ severity. It was speculated that the online format might have discouraged participants from thoroughly engaging with the documents and there was not the physical presence of the documents, thus they may have known that they would not need to read the documents anyway. To address this limitation, a second, in-person experiment was conducted using eye-tracking methodology alongside survey data. Results showed no significant differences in derogation and blame across the four manipulation levels whereby the cases were either highly severe, thus the exoneree spent a longer in duration of time (20-25 years) wrongfully imprisoned or, low severity where the exoneree spent less time (3-5 years) wrongfully imprisoned. Mixed with being either a resolved case, where another person had been arrested or an unresolved case where the case remains open as no-one else had been arrested for the original crime. However, exploratory analyses identified that participants were inclined to compensate those who experienced longer-term wrongful convictions more generously than those with shorter sentences. Eye-tracking data revealed that participants spent significantly more time exploring prosecution (guilt-affirming) documents when cases remained unresolved (vs. resolved). No differences were observed in document exploration time (irrespective of type, i.e., defence or prosecution) based on the severity of wrongful sentences (high-severity vs. low-severity).

The findings from Chapters 4 and 5 corroborate earlier research by Clow and Leach (2015), which identified stigmatisation of exonerated individuals post-release, particularly those who had falsely confessed. Chapter 4 demonstrated that exonerees may face derogation,

blame, and, in certain contexts, have their innocence questioned following release. Chapter 5's work suggested that participants tend to seek guilt-affirming information when a case is longer-term and the individual's factual innocence remains unproven (unresolved cases). This novel use of eye-tracking methodology could have been enhanced by including qualitative questions to allow participants to explain their information-reading order and any pre-existing interest in miscarriage of justice cases as using only quantitative measures did not allow for the reasonings for their selections to be understood, these insights would be beneficial given the early stages of this research. These results extend our understanding of public perceptions and reactions to wrongful convictions, highlighting the ongoing challenges faced by exonerees even after their release which can at times mirror those experienced by 'prototypical victims' according to JMT.

In summary, the empirical chapters revealed that the only extra-legal factor which can lead to inconsistencies in punishment judgements was the character of the person. Defendants with a 'bad' character or unfavourable attributes, particularly when paired with victims possessing favourable attributes, faced harsher punishments. This raises concerns about potential unfair treatment within the criminal justice system based on the extra-legal attributes of either target which should hold no legal weighting to court cases. Consequently, it suggested that punishment can be biased and could in turn lead to significant consequences for a person who is punished as a result (e.g., longer sentence or wrongful conviction). Chapter 4's findings indicated that individuals who experienced a more severe MCJ faced increased derogation and were perceived as more blameworthy. This aligns with Chapter 5's results, which showed that people spent more time exploring guilt-affirming evidence when cases remained unresolved, although MCJ severity did not influence this behaviour.

Practical and theoretical implications

The theoretical implications of this research will be examined in two key components: Firstly, the contributions from Chapters 2 and 3 will be explored, focusing on punishment severity as an outcome, with deservingness being explored as it can imply the value of the victim based on their extra-legal attributes. This section will discuss how the research enhances our understanding of how extra-legal attributes, which should not hold any legal weight, can influence punishment severity. Secondly, the theoretical contributions from Chapters 4 and 5 will be analysed. These chapters presented scenarios where punishment was wrongfully applied, leading to wrongful convictions. The discussion will centre on how people respond to these situations according to the justice motive, providing insights into the psychological mechanisms at play when confronted with MCJs.

As previously mentioned, the justice motive posits that a key predictor of responsiveness to injustice is the perceived deservingness of the suffering or misfortune experienced by the receiver (Lerner, 1977; 1980). Findings from Chapter 2 revealed that the defendant's physical attractiveness, gender, or implicit character did not significantly bias punishment severity. This lack of support for existing research (Black & Gold, 2008; Schwarz et al., 2020; Shechory & Zvi, 2015) may be attributed to differences in the nature of the crimes presented. While previous studies often focused on sexual assault, the current research deliberately excluded sexual components, instead concentrating on non-sexual assault scenarios as this could have motivated reactions for reasons beyond JMT including those associated with rape myth acceptance.

Chapter 3's results suggest that commitment to deservingness operates similarly for rational reactions to suffering. The mechanisms motivating observers to react to a victim's

undeserved suffering may work in reverse when considering defendants' (vs. victims') attributes. Defendants with unfavourable (vs. favourable) attributes may face enhanced punishment motivation, as they are perceived to deserve negative outcomes, reinforcing just-world theory's concept of deservingness. The findings indicate a possible additive effect of deservingness, with the greatest injustice and punishment severity occurring when a victim with favourable attributes is paired with a defendant possessing unfavourable attributes. This incongruence may "double up" the motivation to respond, as observers seek to ensure deserved outcomes for both parties: good outcomes for the favourable victim and punishment for the unfavourable defendant. By administering harsher punishments in these cases, observers may attempt to maintain their belief in a just world, simultaneously addressing justice for the victim and ensuring the defendant receives deserved punishment. These results offer an intriguing perspective on how theoretical constructs, previously explored extensively in relation to victims, may operate similarly when assessing a defendant's deservingness of punishment.

The lack of support for the attractive leniency bias in Chapters 2 and 3, contrary to earlier findings (e.g., Abel & Watters, 2005), may reflect a decreasing significance of attractiveness in legal judgments over time. This trend is evident in meta-analyses: Mazzella and Feingold (1994) found negligible effects of defendant attractiveness on sentencing (d = 0.12) and guilt attributions (d = 0.19), while Devine and Cauglin (2014) reported an even smaller, non-significant effect (d = -0.04). This diminishing influence of attractiveness could be attributed to increased public exposure to real-life crime documentaries. For instance, the widespread fascination with Ted Bundy's appearance and his ability to lure victims away in broad day light (McCabe, 2022) may have made observers more cautious about judging individuals based solely on physical attractiveness. The availability of such high-profile cases may have heightened public awareness that beauty does not always equate to innocence or

goodness, potentially leading to a more nuanced understanding of the relationship between appearance and criminal behaviour in legal judgments. Thus, biases can be corrected when people are aware and acknowledge that they have them (Hahn & Gawronski, 2019) such that it could be speculated that when people are aware of the beauty is good stereotype can be less likely to fall victim to it.

The contributions from Chapters 4 and 5 suggest that reactions to wrongfully convicted individuals mirror those observed with prototypical victims, driven by the desire to maintain deservingness and a sense of a fair, predictable world. Chapter 4's findings, while requiring cautious interpretation due to mediation analyses, indicate that individuals facing longer-term wrongful imprisonment (vs. shorter term wrongful detainment) are more likely to experience derogation and blame post-release. These results align with existing research on prototypical victims, who face increased derogation (Dawtry et al., 2020; 2018; Lerner & Simmons, 1966) and blame (Hafer & Rubel, 2015; Lerner & Miller, 1978) when subjected to greater injustice. This parallel suggests that the severity of the MCJ may influence post-incarceration perceptions of exonerees. Moreover, it implies that just-world beliefs may extend beyond prototypical victim scenarios to encompass those wronged by the criminal justice system itself.

It can be speculated that devaluing the character or attributing blame to wrongfully convicted individuals serves as a mechanism to justify their suffering, making it appear deserved. Notably, individuals with more positive (vs. negative) attitudes towards the criminal justice system tended to perceive wrongfully convicted persons as less innocent. This perception could be interpreted as a means of justifying the status quo, which, according to SJT, allows for the maintenance or even strengthening of system rigour in the face of contradictory information (Jost, 2009). The findings from Chapter 4 suggest a complex

interplay between perceptions of innocence, deservingness of suffering, and attitudes towards the criminal justice system. Wrongfully imprisoned individuals may face derogation, blame, and diminished perceived innocence. This reaction appears to serve two purposes: it reinforces the notion that the individual somehow deserved their fate, aligning with just-world beliefs, and it reflects how individuals' perceptions of the system influence their judgements of innocence. This dynamic may serve as a means of maintaining faith in the justice system's efficacy, consistent with SJT, however it is noteworthy that the results regarding blamer towards exonerees was only marginally significant.

The broader implications of these results shed light on public perceptions of released prisoners and support for their reintegration services. Previous qualitative work by Clow et al. (2011) advocated for public apologies and compensation in cases of wrongful convictions, emphasizing the exoneree's innocence and acknowledging system errors. However, in practice, exonerees often face substantial delays in receiving compensation and having their records cleared (Koehler, 2019). Further complications arise from public misunderstanding of conviction overturning, particularly the distinction between factual innocence and unsafe convictions. The observed derogation and blame towards long-term wrongfully imprisoned individuals might serve to justify the belief that prolonged imprisonment, even if undeserved, could lead to the acquisition of criminal tendencies and greater risk taking behaviours after their release (Gummerum et al., 2014). These findings highlight the complex psychological processes at play when people confront evidence of systemic failures, particularly in the context of wrongful convictions. They underscore the challenges faced (i.e., derogation) by exonerees in gaining public acceptance and support, and the potential barriers to their successful reintegration into society.

Similar to Chapter 2, Chapter 5's results offer limited theoretical contributions. However, participants spent significantly more time exploring prosecution documents in unresolved cases compared to resolved ones. This behaviour might be motivated by the additive pools of injustice created in unresolved cases. Unlike research focusing on prototypical victims where injustice primarily affects the victim, miscarriages of justice cases create multiple pools of injustice. In unresolved cases, injustice extends beyond the wrongfully convicted individual to potentially "reopen old wounds" for the original crime victim. This compounded injustice might enhance the desire to seek justice through guilt-affirming documents, particularly in unresolved cases compared to wrongful convictions. While the exact theoretical reasons cannot be confirmed, a leading explanation suggests that spending more time reading guilt-affirming information allows individuals to look for clues reinforcing the wrongful conviction. This behaviour could protect the belief in a just-world by suggesting the person was originally guilty and that they deserved the punishment they received. Alternatively, seeking guilt-affirming evidence might represent an observer's attempt to find evidence of ongoing guilt, reinforcing the idea that the exoneree should be held responsible for the lingering injustice in unresolved cases. Searching for guilt affirming evidence also tackles injustices experienced by the original victim, by revisiting the evidence which allowed them to have some sort of closure and justice initially.

Limitations and Future Directions

Limitations in the empirical chapters warrant discussion, which will be addressed chronologically from Chapters 2 through 5. The main limitation from Chapter 2 was that one of the selected images used via testing did not meet the same criteria as the others, it would also have been preferable to have used the more rigorously tested images from the Chicago Face Database (Ma et al., 2020) from the beginning of the thesis. A key limitation in Chapter

3 was the use of neutrally attractive male images alongside scenarios that did not intentionally manipulate attractiveness or gender. While this likely reduced participants' anticipation of the experiments intention regarding (un)attractive images, it may have unintentionally influenced the remaining trials. The significant effect of character on punishment severity can only be applied to males due to the exclusive use of the male neutral images, ideally, neutrally attractive female images should have been included to avoid this bias. Another consideration relates to the experimental design. Although limited financial resources justified the non-crossed attribute scenarios to maximise data collection while minimising costs, this approach had drawbacks. Despite efforts to minimise differences between scenarios (e.g., consistent crime type and victim injury severity), variations in perceived victim suffering were noted. Future research, given adequate funding, should consider a between-subjects design with fewer, pretested vignettes to address this limitation and avoid potential carry-over effects.

A significant limitation in Chapters 4 and 5 was the potential doubt cast over the factual innocence of the exonerees in most experiments, except for Experiment 2 in Chapter 5. The MCJ vignettes from Chapter 4 (Experiments 2-3) were also used in Chapter 5 (Experiment 1). The explicit evidence, referred to as "resolution status", indicating an exoneree's factual innocence (i.e., another person had been convicted of the original crime) may have influenced the results. In Experiment 2 of Chapter 5, participants spent more time reviewing guilt-affirming documents when the case was unresolved. However, in Experiment 1, where all cases were unresolved (i.e., "the investigation is still ongoing"), there was no difference in participants' desire to read either defence or prosecution documents. This suggests that the resolution status may have heightened the threat to just-world beliefs, although this remains uncertain as this could have meant that more people avoided reading documents.

Several future research directions emerged from this PhD study: Firstly, further exploration of reactions to exonerees, particularly derogation and blame, would be beneficial. Secondly, investigating how protective strategies from just-world theory, such as immanent and ultimate justice reasoning, could help make sense of exonerees' suffering. Immanent justice reasoning, which draws a causal link between a person's prior moral behaviour and their current outcome, could be a viable avenue for exploration in the context of exonerees. When faced with an exoneree's extended wrongful imprisonment, attributing their suffering to prior actions (even if implausible) could alleviate threats to both the justice system's perceived effectiveness and the injustice created by the exoneree's suffering. Alternatively, ultimate justice reasoning could be relevant when an exoneree has not received compensation. The belief that justice (i.e., compensation) will eventually be served could protect one's sense of justice, reinforced by the often prolonged real-world process of securing compensation. Such that these strategies could allow for a less explicit way for an observer to make sense of the heightened threat to the just-world and the criminal justice systems effectiveness.

Two general considerations emerge from this thesis research: Firstly, similar to the pre-rated faces provided by the Chicago Face Database (Ma et al., 2020), future research would benefit from a widely accessible bank of pre-rated vignettes which enhance the materials that are being used so they encapsulate the important aspects for wrongful conviction cases in a way which do not create additional doubts in the exonerees innocence and skew the results unknowingly. This would enhance replicability and increase confidence in the materials and scales used. Secondly, incorporating open ended qualitative questions within surveys, as demonstrated by Cheung and Lagnado (2023), could provide valuable justifications for punishment outcomes. Additionally, Clow et al.'s (2011) qualitative methodology exploring perceptions of exonerees and post-release services offered insights for subsequent quantitative research. Thus, a mixed-methods approach could be worthwhile to explore public perceptions of exonerees and rationalisations for punishment decisions. These additions would strengthen the methodological rigour and depth of understanding in future studies on moral judgments, punishment decisions, and perceptions of wrongful convictions as these reactions from JMT are rational and may lead to worthy underpinnings as to why even these rational reactions can be influenced by factors which are not legal (i.e., extra-legal factors) or even systemic failings.

Final remarks

Previously, just-world theory research heavily focused on non-rational reactions (i.e., victim blame and derogation) to victimisation (Dawtry et al., 2020), exploring how people make sense of suffering by manipulating its severity (Lerner & Simmons, 1966) or the victim's innocence (Hafer, 2000). Less work directly explored rational strategies for justice maintenance or how these reactions translate to other samples, such as exonerees. This thesis addressed these gaps. The research suggested that even rational reactions to injustice, including punishment, can be influenced by extra-legal attributes (such as the character of the

target) that should be disregarded in courtroom settings. These inconsistencies in punishment allocation threaten the legitimacy of the criminal justice system, potentially leading to unfair sentences and wrongful convictions. Wrongfully convicted individuals also pose a threat to justice and may face similar devaluation and blame as 'prototypical victims'. Moreover, exonerees can face further doubt when their evidence is reviewed. Collectively, this work contributes to a long-standing and complex understanding of how just-world theory underpins reactions to injustice, regardless of who experiences it. It extends our knowledge of justice perceptions beyond traditional victim scenarios to include those wronged by the justice system itself, offering a more comprehensive view of how people psychologically process and respond to various forms of injustice.

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Appendices

Appendix A

Individual differences in just-world beliefs were measured throughout the empirical chapters using the 7-item Global-Just-World-Beliefs-Scale (Lipkus, 1991). Scaled from 0 = “Strongly disagree” to 6 = “Strongly agree”.

1. I feel that people get what they are entitled to have.
2. I feel that a person’s efforts are noticed and rewarded.
3. I feel that people earn the rewards and punishments they get.
4. I feel that people who meet with misfortune have brought it on themselves.
5. I feel that people get what they deserve.
6. I feel that rewards and punishments are fairly given.
7. I basically feel that the world is a fair place.

Appendix B

The scenarios used throughout the thesis

Chapter 2	
Experiment 1	This is Harrison Smith; he was caught attempting to break and enter a local family home at around 3am This is Shaun Michael, a car registered to his name was reported to have driven off at excessive speed following a hit and run, leaving a passenger in the receiving car injured. This is Blake Roberts; his home was raided at the beginning of the year; the attending police discovered a series of fake identification documents. Blake claims he did not make them and that they do not belong to him. This is Aaron Kitchener; he was reportedly seen by several local parents loitering around the school gates, he was arrested for the accused attempted abduction of a school aged child.
Experiment 2 This person was found guilty of….	False accounting; Possession of Class B or C drugs; Obtaining property by deception; Breaching a restraining order; Burglary of a domestic property; Causing injury by failing to keep their dogs under control; Disguising a firearm as another object; Making threats to kill another person; Affray (threatening a person with unlawful violence); Being drunk on an aeroplane; Murder; Writing false prescriptions for controlled drugs; Assisting a prisoner to escape; Tax avoidance; Fraud by abusing their position; Counterfeiting customs documentation; Breaching a sex offender order; Possessing prohibited weapons; Failing to disclose information about terrorism; Endangering the safety of railways passengers; Possessing a firearm with the intent to endanger life; Theft; Attempting to injure the sovereign; Dangerous driving; Carrying a loaded firearm; Aiding suicide; Causing an explosion which endangered life; Child abduction; Possessing a firearm with criminal intent; Putting the public in fear of violence; Absconding from court whilst on bail; Obtaining goods by deception; Illegally importing counterfeit notes and coins; Intentionally

	possessing the materials for making false identity documents; Possessing opium; Cruelty to a 15 year old; Unlawfully wounding another; Administering chloroform; Breaching a harassment injunction; Arson; Using deception to avoid liability; Administering poison to endanger the life of another; Impersonating a customs officer; Trespassing with a firearm; Obstructing a carriage on the railway; Applying fraudulent trademarks to antiques; Falsifying parking documentation; Sending prohibited articles via the post; Causing bodily harm with explosives; Concealing the birth of a child; Handling stolen goods; Going equipped to steal from private property; Unlawfully collecting information for terrorism; Possession with the intent to supply class C drugs; Escaping from custody without force; Blackmail; Possessing class A drugs; Obstructing a customs officer; Burglary of a non-domestic property; Assaulting with a weapon with the intent to rob; Illegally dealing firearms; Making gun powder to commit offences; Producing and supplying class A drugs.

Chapter 3	**Experiment 1a**	**Experiment 1b**
Attractiveness	Anthony Leto was arrested shortly after 3pm Saturday afternoon in association with the assault of a member of the public just outside their home in Ipswich. The victim was rushed to the hospital and treated for a fractured jaw and broken nose.	Local man Daniel Roberts from Colchester is recovering in hospital with a fractured jaw and broken nose after being assaulted on the quiet road close to his home. The incident occurred shortly before 3pm on Saturday afternoon whilst Daniel was walking to his home, after a visit to the local town centre.
Character	Michael Nickels, a suspected paedophile/an award-winning teacher… was arrested at around 1pm Wednesday afternoon, in association with a vicious assault and mugging of a member of the public outside a local greengrocer. The victim was treated in hospital	David Ellery, a suspected local paedophile/ a keen charity supporter and community activist …was attacked by an unknown assailant on Tuesday evening when leaving the greengrocers, the attacker pinned David to the floor before stealing his bag. David's bag contained his wallet and a few other personal

	for a fractured arm after the incident.	possessions, he was rushed to A&E following the attack and is being treated for a fractured arm
SES	Ryan Simmons was arrested Thursday morning shortly after collecting his benefits from the post-office/a respectable lawyer was arrested Thursday morning shortly after leaving the post-office… A local reported that Ryan had repeatedly hit a gardener on the head with a spade. The victim remains in hospital with a suspected concussion and fractured skull.	Shortly after Louis Avery had collected his benefits on Thursday morning, he was rushed to the hospital / Louis Avery a highly respectable lawyer was rushed to hospital Thursday morning …after being struck over the head with a spade whilst tending to his front garden. Louis is being treated for a suspected concussion and a cracked skull from the incident.
Gender	At around 6:45pm on Tuesday evening Avery Willis/ April Newman…was arrested after reportedly cornering an individual at an ATM machine, pushing their face into the machine and taking their withdrawn money. The victim was treated for a broken nose and possible concussion.	At around 6:30pm on Tuesday evening Andy Clarke/ Melissa Steward… was unknowingly cornered and mugged whilst using a local ATM machine. The unknown assailant verbally threatened Andy before pushing his head into the cash machine and stealing the money from his hand and wallet. Andy was treated in hospital for a broken nose and possible concussion.

Chapter 4	**High Severity MCJ**	**Low Severity MCJ**
Experiment 1	Daniel McKenzie served 25 years in a high-security prison, housing the Nation's most dangerous offenders. He was reunited with his family when Judge Wolfe of Ipswich Crown Court overturned his sentence. Daniel received 77 years for the murder of his neighbour, who died from the sort of injuries usually seen in car crash victims or people who have fallen from a significant height. The judge indicated that he would serve 38 years before he was considered for release. Since his release, the Suffolk Police Constabulary have reopened the investigation, yet there are no substantial leads. Daniel's lawyers have been unsuccessful in securing compensation for his wrongful conviction	Daniel McKenzie was detained for 96 hours at the Suffolk Police Constabulary, which detain individuals from the surrounding area. He was reunited with his family when Officer Wolfe of the Suffolk Police Constabulary withdrew the charges. Daniel was accused of the murder of his neighbour, who died of the sort of injuries usually seen in car crash victims or people who have fallen from a significant height. The officers indicated that if he was found guilty, he would serve 38 years before he was considered for release. Since his release, the Suffolk Police Constabulary continued their investigation, and have made an arrest. Daniel's lawyers have been successful in securing £3,500 in compensation for his wrongful detaining.

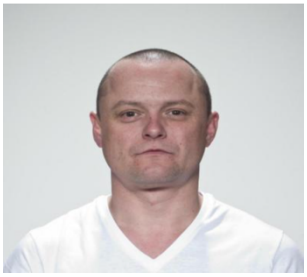
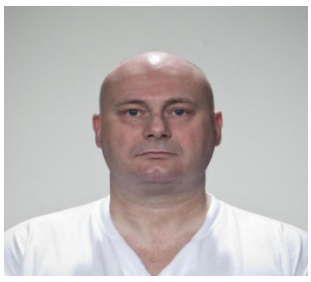
Experiment 2	High Severity MCJ	Low Severity MCJ
	Norfolk murder investigation reopens: Local who allegedly 'beat his neighbour to death with rounders bat' at their home is released. Norfolk Police Constabulary has reopened a murder investigation following the overturning of Ashley Johnson's conviction. Alex Campbell was found unresponsive on the living room floor in their home. Ashley Johnson was alleged to have struck his neighbour to death with a rounders bat at their home in Norwich. Ashley Johnson was accused of causing fatal injuries to Alex Campbell. Emergency services were called to Webster Close in Norwich, where they found Alex unresponsive and suffering from injuries. Despite the efforts of paramedics, Alex was pronounced dead at the scene. The victim - who was found on the living room floor, suffered bruising to their hands and legs and severe facial injuries. Ashley Johnson was arrested and charged with the murder of Alex Campbell.	**Norfolk murder investigation reopens: Local who allegedly 'beat his neighbour to death with rounders bat' at their home is released.** Norfolk Police Constabulary has reopened a murder investigation following the overturning of Ashley Johnson's detainment. Alex Campbell was found unresponsive on the living room floor in their home. Ashley Johnson was alleged to have struck his neighbour to death with a rounders bat at their home in Norwich. Ashley Johnson was accused of causing fatal injuries to Alex Campbell. Emergency services were called to Webster Close in Norwich, where they found Alex unresponsive and suffering from injuries. Despite the efforts of paramedics, Alex was pronounced dead at the scene. The victim - who was found on the living room floor, suffered bruising to their hands and legs and severe facial injuries. Ashley Johnson was arrested and detained for the murder of Alex Campbell. After being detained for 96 hours in Norfolk's Police Constabulary, which detains dangerous individuals in the surrounding area, Ashley Johnson was

	After serving 25 years in HMP Wakefield, a high-security prison which houses the nation's most dangerous offenders, Ashley Johnson was reunited with his family. Based on the evidence presented, Judge Wolfe of Norwich Crown Court deemed the 77-year sentence tariff "unfit", resulting in the overturning of his conviction. In an interview after his release, Ashley stated, "*Never would I have thought that I would spend more than half my life in prison, especially for something I didn't do".* Ashley's father followed this up with "*I watched my son go to prison a child and leave prison a man, we missed out on quality time that we will never get back".* Since the overturning of his conviction, Ashely Johnson's lawyers have been unsuccessful in securing compensation. Police are appealing for any information concerning the murder of Alex Campbell. Anyone with information can contact Norfolk Police on 102 extension 881 7239 or by email: norfolkpoliceUK@police.uk	reunited with his family. Based on the evidence presented, Officer Wolfe of Norfolk's Police Constabulary withdrew the pending charges. In an interview after his release, Ashley stated, "*Never would I have thought that I would spend almost half a week in a police station, especially for something that I did not do".* Ashley's father followed this up with "*I watched my son be detained at a police station for something he didn't do, we missed out on precious quality time that we will never get back".* Since the charges were dropped, Ashely Johnson's lawyers have been successful in securing £2,500 in compensation. Police are appealing for any information concerning the murder of Alex Campbell. Anyone with information can contact Norfolk Police on 102 extension 881 7239 or by email:norfolkpoliceUK@police.uk

Chapter 4	**Effective Prime**	**Ineffective Prime**
Experiment 3	The review suggests that *"our current system of punishment is effective at preventing crimes"* and that the police force *"are trained so well, that there is less crime than there could be"*. Whilst the review suggests that juries were characterised as only *"basing their decisions on facts instead of prejudices"*, and that our judges *"are not bought off by corrupt politicians"*. Finally, that *"prosecution and defence attorneys are honest even if it means that they will lose the case"*.	The review suggests that *"our current system of punishment is ineffective at preventing crimes"* and that the police force *"are trained so poorly, that there is more crime than there could be"*. Whilst the review suggests juries were characterised as only *"basing their decisions on prejudice instead of facts"*, and that our judges *"are bought off by corrupt politicians"*. Finally, that *"prosecution and defence attorneys are dishonest if it means that they will win the case"*.

Appendix C

Images used throughout the thesis.

Chapter 2		
Experiment 1	**Attractive**	**Unattractive**
Images from the Face Research Lab London Set (version 5) (Debruine & Jones, 2017).	   	   

Experiment 2	**Foil images**
Images from the Chicago Face Database (Ma, et al., 2020).	

Chapter 3	**Experiment 1a**	**Experiment 1b**
Images from the Chicago Face Database (Ma, et al., 2020).		
Attractive		
Unattractive		
Character		

SES		
Gender		
		

Appendix D

T-test with the image excluded from Chapter 2 Experiment 1

No significant differences were observed in the deservingness of punishment ratings between the attractive (M = 5.74, SD = 0.82) and unattractive defendants (M = 5.53, SD = 1.02), $t(245) = 1.75$, $p = .081$, $d = 0.21$. Furthermore, there were no significant differences observed between the punishment severity of the attractive (M = 5.30, SD = 1.05) and unattractive defendants (M = 5.52, SD = 1.1), $t(245) = 1.53$, $p = .127$, $d = 0.20$.

Appendix E

The 16 unique stimuli sets from Chapter 2 Experiment 2

Set1	**Set2**	**Set3**	**Set4**	**Set5**	**Set6**	**Set7**	**Set8**
Crime 1 Image 1	Crime 17 Image 1	Crime 33 Image 1	Crime 49 Image 1	Crime 3 Image 3	Crime 19 Image 3	Crime 35 Image 3	Crime 51 Image 3
Crime 2 Image 2	Crime 18 Image 2	Crime 34 Image 2	Crime 50 Image 2	Crime 4 Image 4	Crime 20 Image 4	Crime 36 Image 4	Crime 52 Image 4
Crime 5 Image 5	Crime 21 Image 5	Crime 37 Image 5	Crime 53 Image 5	Crime 7 Image 7	Crime 23 Image 7	Crime 39 Image 7	Crime 55 Image 7
Crime 6 Image 6	Crime 22 Image 6	Crime 38 Image 6	Crime 54 Image 6	Crime 8 Image 8	Crime 24 Image 8	Crime 40 Image 8	Crime 56 Image 8
Crime 9 Image 9	Crime 25 Image 9	Crime 41 Image 9	Crime 57 Image 9	Crime 11 Image 11	Crime 27 Image 11	Crime 43 Image 11	Crime 59 Image 11
Crime 10 Image 10	Crime 26 Image 10	Crime 42 Image 10	Crime 58 Image 10	Crime 12 Image 12	Crime 28 Image 12	Crime 44 Image 12	Crime 60 Image 12
Crime 13 Image 13	Crime 29 Image 13	Crime 45 Image 13	Crime 61 Image 13	Crime 15 Image 15	Crime 31 Image 15	Crime 47 Image 15	Crime 63 Image 15
Crime 14 Image 14	Crime 30 Image 14	Crime 46 Image 14	Crime 62 Image 14	Crime 16 Image 16	Crime 32 Image 16	Crime 48 Image 16	Crime 64 Image 16
Foil 1 Image 17 (Male)	Foil 1 Image 17 (Male)	Foil 1 Image 17 (Male)	Foil 1 Image 17 (Male)	Foil 1 Image 17 (Male)	Foil 1 Image 17 (Male)	Foil 1 Image 17 (Male)	Foil 1 Image 17 (Male)
Foil 2 Image 18 (Male)	Foil 2 Image 18 (Male)	Foil 2 Image 18 (Male)	Foil 2 Image 18 (Male)	Foil 2 Image 18 (Male)	Foil 2 Image 18 (Male)	Foil 2 Image 18 (Male)	Foil 2 Image 18 (Male)

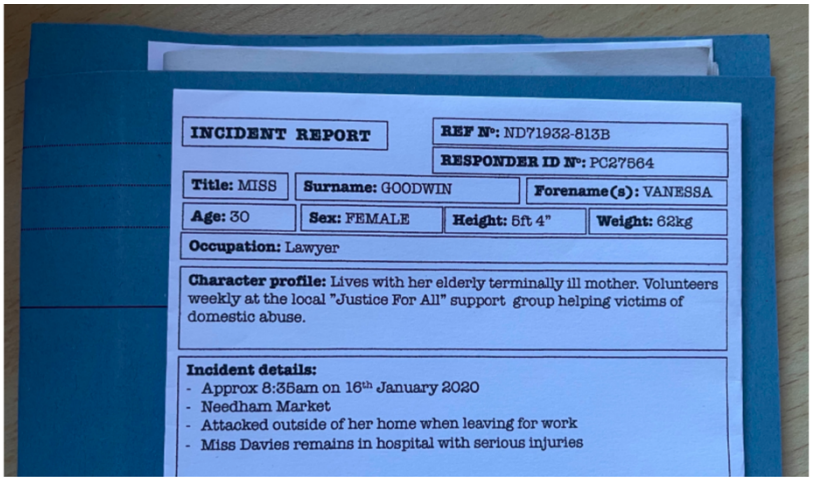
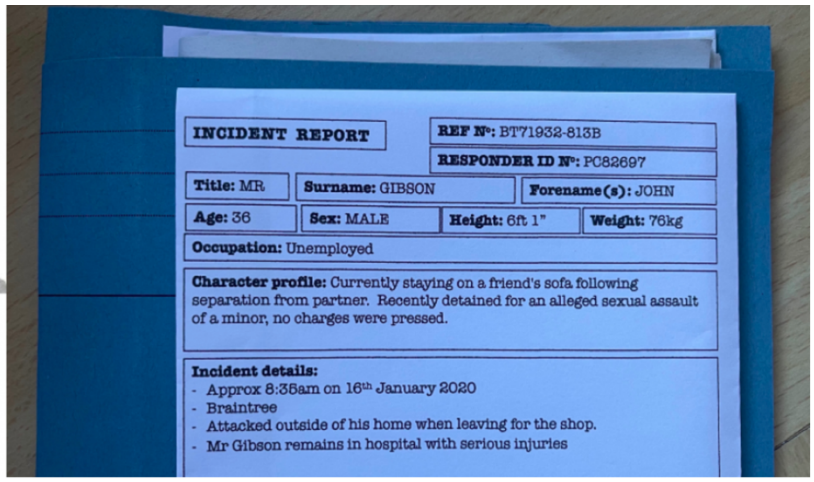
Foil 3 Image 19 (Male)	Foil 3 Image 19 (Male)	Foil 3 Image 19 (Male)	Foil 3 Image 19 (Male)	Foil 3 Image 19 (Male)	Foil 3 Image 19 (Male)	Foil 3 Image 19 (Male)	Foil 3 Image 19 (Male)
Foil 4 Image 20 (Male)	Foil 4 Image 20 (Male)	Foil 4 Image 20 (Male)	Foil 4 Image 20 (Male)	Foil 4 Image 20 (Male)	Foil 4 Image 20 (Male)	Foil 4 Image 20 (Male)	Foil 4 Image 20 (Male)
Foil 5 Image 21 (Female)	Foil 5 Image 21 (Female)	Foil 5 Image 21 (Female)	Foil 5 Image 21 (Female)	Foil 5 Image 21 (Female)	Foil 5 Image 21 (Female)	Foil 5 Image 21 (Female)	Foil 5 Image 21 (Female)
Foil 6 Image 22 (Female)	Foil 6 Image 22 (Female)	Foil 6 Image 22 (Female)	Foil 6 Image 22 (Female)	Foil 6 Image 22 (Female)	Foil 6 Image 22 (Female)	Foil 6 Image 22 (Female)	Foil 6 Image 22 (Female)
Foil 7 Image 23 (Female)	Foil 7 Image 23 (Female)	Foil 7 Image 23 (Female)	Foil 7 Image 23 (Female)	Foil 7 Image 23 (Female)	Foil 7 Image 23 (Female)	Foil 7 Image 23 (Female)	Foil 7 Image 23 (Female)
Foil 8 Image 24 (Female)	Foil 8 Image 24 (Female)	Foil 8 Image 24 (Female)	Foil 8 Image 24 (Female)	Foil 8 Image 24 (Female)	Foil 8 Image 24 (Female)	Foil 8 Image 24 (Female)	Foil 8 Image 24 (Female)

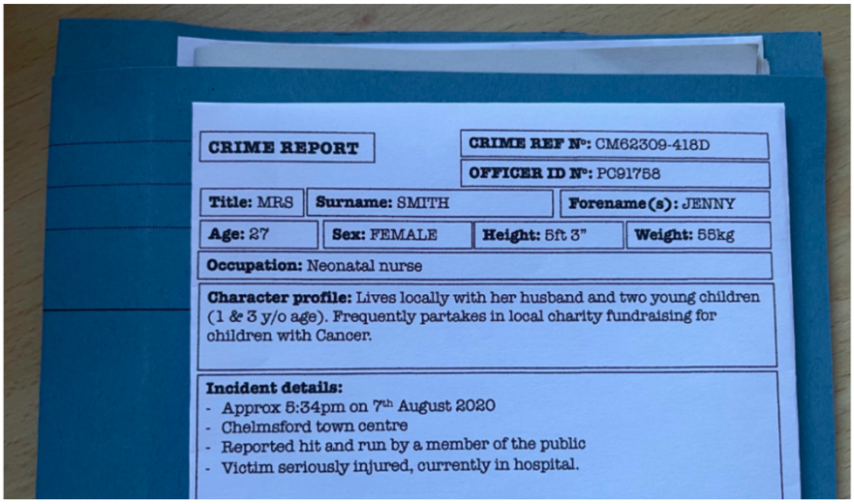
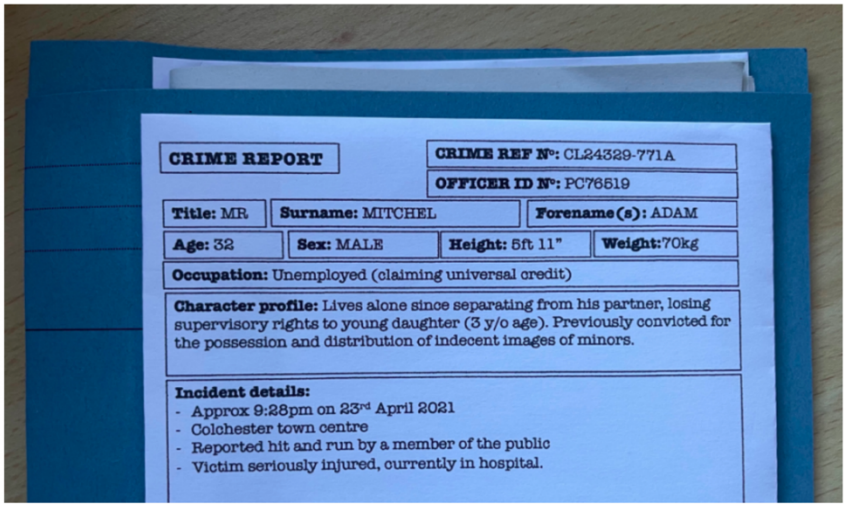
Set9	**Set10**	**Set11**	**Set12**	**Set13**	**Set14**	**Set15**	**Set16**
Crime 1 Image 1	Crime 17 Image 1	Crime 33 Image 1	Crime 49 Image 1	Crime 2 Image 2	Crime 18 Image 2	Crime 34 Image 2	Crime 50 Image 2
Crime 3 Image 3	Crime 19 Image 3	Crime 35 Image 3	Crime 51 Image 3	Crime 4 Image 4	Crime 20 Image 4	Crime 36 Image 4	Crime 52 Image 4
Crime 5 Image 5	Crime 21 Image 5	Crime 37 Image 5	Crime 53 Image 5	Crime 6 Image 6	Crime 22 Image 6	Crime 38 Image 6	Crime 54 Image 6
Crime 7 Image 7	Crime 23 Image 7	Crime 39 Image 7	Crime 55 Image 7	Crime 8 Image 8	Crime 24 Image 8	Crime 40 Image 8	Crime 56 Image 8
Crime 9 Image 9	Crime 25 Image 9	Crime 41 Image 9	Crime 57 Image 9	Crime 10 Image 10	Crime 26 Image 10	Crime 42 Image 10	Crime 58 Image 10
Crime 11 Image 11	Crime 27 Image 11	Crime 43 Image 11	Crime 59 Image 11	Crime 12 Image 12	Crime 28 Image 12	Crime 44 Image 12	Crime 60 Image 12
Crime 13 Image 13	Crime 29 Image 13	Crime 45 Image 13	Crime 61 Image 13	Crime 14 Image 14	Crime 30 Image 14	Crime 46 Image 14	Crime 62 Image 14

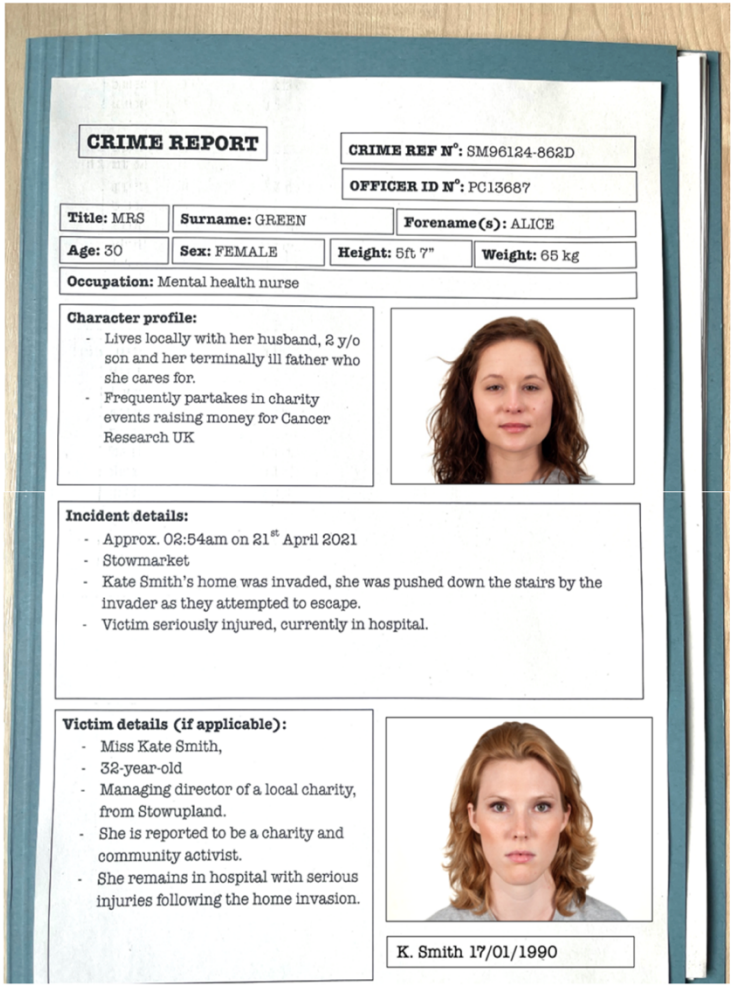
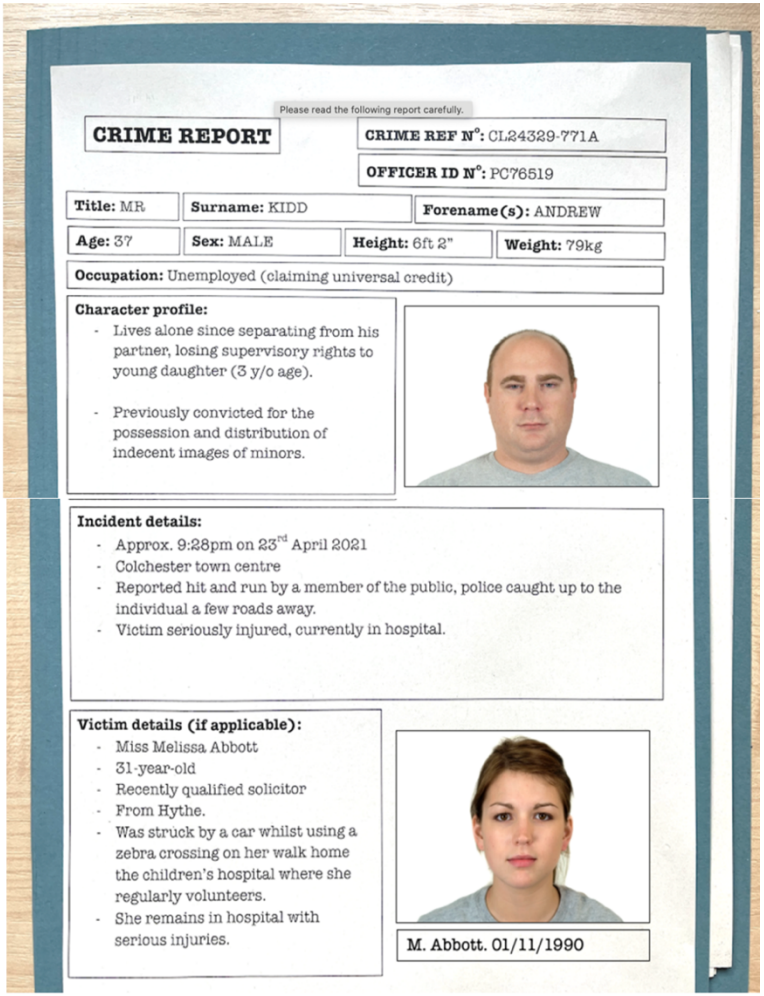
Crime 15 Image 15	Crime 31 Image 15	Crime 47 Image 15	Crime 63 Image 15	Crime 16 Image 16	Crime 32 Image 16	Crime 48 Image 16	Crime 64 Image 16
Foil 1 Image 17 (Male)	Foil 1 Image 17 (Male)	Foil 1 Image 17 (Male)	Foil 1 Image 17 (Male)	Foil 1 Image 17 (Male)	Foil 1 Image 17 (Male)	Foil 1 Image 17 (Male)	Foil 1 Image 17 (Male)
Foil 2 Image 18 (Male)	Foil 2 Image 18 (Male)	Foil 2 Image 18 (Male)	Foil 2 Image 18 (Male)	Foil 2 Image 18 (Male)	Foil 2 Image 18 (Male)	Foil 2 Image 18 (Male)	Foil 2 Image 18 (Male)
Foil 3 Image 19 (Male)	Foil 3 Image 19 (Male)	Foil 3 Image 19 (Male)	Foil 3 Image 19 (Male)	Foil 3 Image 19 (Male)	Foil 3 Image 19 (Male)	Foil 3 Image 19 (Male)	Foil 3 Image 19 (Male)
Foil 4 Image 20 (Male)	Foil 4 Image 20 (Male)	Foil 4 Image 20 (Male)	Foil 4 Image 20 (Male)	Foil 4 Image 20 (Male)	Foil 4 Image 20 (Male)	Foil 4 Image 20 (Male)	Foil 4 Image 20 (Male)
Foil 5 Image 21 (Female)	Foil 5 Image 21 (Female)	Foil 5 Image 21 (Female)	Foil 5 Image 21 (Female)	Foil 5 Image 21 (Female)	Foil 5 Image 21 (Female)	Foil 5 Image 21 (Female)	Foil 5 Image 21 (Female)
Foil 6 Image 22 (Female)	Foil 6 Image 22 (Female)	Foil 6 Image 22 (Female)	Foil 6 Image 22 (Female)	Foil 6 Image 22 (Female)	Foil 6 Image 22 (Female)	Foil 6 Image 22 (Female)	Foil 6 Image 22 (Female)
Foil 7 Image 23 (Female)	Foil 7 Image 23 (Female)	Foil 7 Image 23 (Female)	Foil 7 Image 23 (Female)	Foil 7 Image 23 (Female)	Foil 7 Image 23 (Female)	Foil 7 Image 23 (Female)	Foil 7 Image 23 (Female)
Foil 8 Image 24 (Female)	Foil 8 Image 24 (Female)	Foil 8 Image 24 (Female)	Foil 8 Image 24 (Female)	Foil 8 Image 24 (Female)	Foil 8 Image 24 (Female)	Foil 8 Image 24 (Female)	Foil 8 Image 24 (Female)

Appendix F

Example crime reports from Chapter 3.

Experiment 2	
Favourable Victim	  **INCIDENT REPORT** **REF Nº:** ND71932-813B **RESPONDER ID Nº:** PC27564 **Title:** MISS **Surname:** GOODWIN **Forename(s):** VANESSA **Age:** 30 **Sex:** FEMALE **Height:** 5ft 4" **Weight:** 62kg **Occupation:** Lawyer **Character profile:** Lives with her elderly terminally ill mother. Volunteers weekly at the local "Justice For All" support group helping victims of domestic abuse. **Incident details:** - Approx 8:35am on 16th January 2020 - Needham Market - Attacked outside of her home when leaving for work - Miss Davies remains in hospital with serious injuries
Unfavourable Victim	  **INCIDENT REPORT** **REF Nº:** BT71932-813B **RESPONDER ID Nº:** PC82697 **Title:** MR **Surname:** GIBSON **Forename(s):** JOHN **Age:** 36 **Sex:** MALE **Height:** 6ft 1" **Weight:** 76kg **Occupation:** Unemployed **Character profile:** Currently staying on a friend's sofa following separation from partner. Recently detained for an alleged sexual assault of a minor, no charges were pressed. **Incident details:** - Approx 8:35am on 16th January 2020 - Braintree - Attacked outside of his home when leaving for the shop. - Mr Gibson remains in hospital with serious injuries

Favourable Defendant	  **CRIME REPORT** **CRIME REF Nº:** CM62309-418D **OFFICER ID Nº:** PC91758 **Title:** MRS **Surname:** SMITH **Forename(s):** JENNY **Age:** 27 **Sex:** FEMALE **Height:** 5ft 3" **Weight:** 55kg **Occupation:** Neonatal nurse **Character profile:** Lives locally with her husband and two young children (1 & 3 y/o age). Frequently partakes in local charity fundraising for children with Cancer. **Incident details:** - Approx 5:34pm on 7th August 2020 - Chelmsford town centre - Reported hit and run by a member of the public - Victim seriously injured, currently in hospital.
Unfavourable Defendant	  **CRIME REPORT** **CRIME REF Nº:** CL24329-771A **OFFICER ID Nº:** PC76519 **Title:** MR **Surname:** MITCHEL **Forename(s):** ADAM **Age:** 32 **Sex:** MALE **Height:** 6ft 11" **Weight:** 70kg **Occupation:** Unemployed (claiming universal credit) **Character profile:** Lives alone since separating from his partner, losing supervisory rights to young daughter (3 y/o age). Previously convicted for the possession and distribution of indecent images of minors. **Incident details:** - Approx 9:28pm on 23rd April 2021 - Colchester town centre - Reported hit and run by a member of the public - Victim seriously injured, currently in hospital.

Chapter 3	Congruent Pair	Incongruent Pair
Experiment 3		

Appendix G

Full write-ups of t-tests in from Experiments 1a and 1b in Chapter 3.

Experiment 1a

Deservingness of Punishment

Firstly, the defendant with a 'bad' character (M = 6.00, SD = 1.07) was rated as being more deserving of punishment than the defendant with a 'good' character (M = 5.39, SD = 1.07), $t(199.08) = 3.77$, $p < .001$, $d = 0.53$. There was no difference in the deservingness of punishment between the attractive (M = 5.49, SD = 1.23) and the unattractive defendant (M = 5.57, SD = 1.05) $t(197.16) = 0.52$, $p = .606$, $d = 0.07$. The deservingness of punishment ratings also did not differ between the defendant with the low (M = 6.07, SD = 0.89) or the high SES (M = 5.82, SD = 1.23), $t(187.83) = 1.69$, $p = .094$, $d = 0.23$. Finally, there was no difference in the deservingness of punishment ratings between the male (M = 5.72, SD = 1.17) and the female defendant (M = 5.62, SD = 1.14) $t(202.74) = 0.61$, $p = .54$, $d = 0.09$.

Punishment severity

Punishment severity was significantly greater towards the defendant with a 'bad' character (M = 5.72, SD = 1.20) than the defendant with a 'good' character (M = 4.69, SD = 1.37), $t(199.93) = 5.70$, $p < .001$, $d = 0.80$. There was no difference in the punishment severity between the attractive (M = 4.85, SD = 1.35) and the unattractive defendant (M = 4.97, SD = 1.34) $t(202.96) = 0.62$, $p = .53$, $d = 0.09$. The punishment severity ratings also did not differ between the defendant with the low (M = 5.66, SD = 1.16) or the high SES (M = 5.49, SD = 1.40), $t(197.73) = 0.96$, $p = .334$, $d = 0.13$. Finally, there was no difference in

punishment severity between the male (M = 5.09, SD = 1.45) and the female defendant (M = 4.92, SD = 1.26) t(198.58) = 0.90, p = .368, d = 0.13.

Experiment 1b

Injustice

The amount of injustice reported within the attribute levels differed significantly based on the victim's character. There was a greater amount of injustice reported when the victim had a 'good' character (M = 6.25, SD = 1.11) compared to when the victim had a 'bad' character (M = 4.77, SD = 1.66), t(181.83) = 7.54, p <.001, d = 1.04. There was no difference in the perception of injustice between the attractive (M = 6.24, SD = 0.97) and the unattractive victim (M = 6.23, SD = 1.20), t(197.07) = 0.13, p = .899, d = 0.02. There was no difference in the injustice reported between the victim with a high (M = 6.08, SD = 1.25) or the victim with a low SES (M = 6.26, SD = 0.93), t(193.23) = 1.21, d = 0.17. Finally, there was no difference in the injustice ratings towards the male (M = 6.32, SD = 1.01) or the female victim (M =6.48, SD = 0.93), t(205.25) = 1.24, p = .217, d = 0.17.

Deservingness of Punishment and Punishment Severity

The amount the unknown defendant deserved to be punished only significantly differed within the manipulation of the victim's character. The deservingness of punishment was greatest when the victim was described as having a 'good' character (M = 5.98, SD = 0.99) compared to the victim who was described as having a 'bad' character (M = 5.2, SD = 1.52), t(179.60) = 4.42, p < .001, d = 0.61. There was no significant difference in the deservingness of punishment when the victim was attractive (M = 6.07, SD = 0.93) compared to when the victim was unattractive (M = 6.09, SD = 0.97), t(205.62) = 0.11, p = .913, d =

0.02. There was not a significant difference in the deservingness of punishment ratings when the victim had a high (M = 6.11, SD = 1.08) or a low SES (M = 6.02, SD = 1.10), t(205.53) = 0.59, p = .558, d = 0.08. Finally, there was no difference in the deservingness of punishment when the victim was male (M = 6.01, SD = 1.08) compared to when the victim was a female (M = 6.23, SD = 0.85), t(196.61) = 1.58, p = 1.15, d = 0.22.

Appendix H

Exploratory analyses from Chapter 3

Chapter 3: Experiment 1a (Defendant Attributes)

Exploratory analyses

A repeated measures Analysis of Variance (ANOVA) tested the effect of the crime scenario presented in the vignette, which was not crossed by the attribute manipulation to explore the perceived suffering of the victim. There was a significant main effect of the crime scenario on the perceived suffering of the victim $F(3, 673) = 17.61$, $p < .001$, $\eta^2_p = 0.07$. Post hoc comparisons using the Tukey HSD test indicated that the victim suffered significantly more in scenario 4 ($M = 6.15$, $SD = 1.14$) than in scenario 1 ($M = 5.39$, $SD = 1.26$), scenario 2 ($M = 5.45$, $SD = 1.38$) and in scenario 3 ($M = 5.11$, $SD = 1.38$). The perceived victim suffering did not significantly differ between any of the other combinations (see Table 9).

Table 9

Tukey Post Hoc comparisons of the perceived victim suffering by scenario context.

		M diff	*Sig.*
Scenario 1	Scenario 2	0.06	.97
	Scenario 3	-0.28	.20
	Scenario 4	0.76	<.001***
Scenario 2	Scenario 3	-0.34	.08
	Scenario 4	0.70	<.001***
Scenario 3	Scenario 1	0.65	< .001***

Note: *** $p < .001$

Chapter 3: Experiment 1b (Victim Attributes)

Exploratory analyses

A repeated measures ANOVA tested the effect of the crime scenario presented in the vignette, which was not crossed by the attribute manipulation to explore the perceived suffering of the victim. There was a significant main effect of the crime scenario on the perceived suffering of the victim $F(3, 738) = 30.36$, $p < .001$, $\eta^2_p = 0.11$. Post hoc comparisons using the Tukey HSD test indicated that the victim suffered significantly less in scenario 2 ($M = 4.66$, $SD = 1.43$) than in scenario 1 ($M = 5.60$, $SD = 1.02$), scenario 3 ($M = 5.78$, $SD = 1.15$) and in scenario 4 ($M = 5.35$, $SD = 1.18$). There was also significantly more suffering perceived in response to scenario 3 ($M = 5.78$, $SD = 1.15$) than in scenario 4 ($M = 5.35$, $SD = 1.18$). The perceived victim suffering did not significantly differ from the other combinations (see Table 10).

Table 10

Tukey Post Hoc comparisons of the perceived victim suffering by scenario context.

		M diff	*Sig.*
Scenario 1	Scenario 2	0.94	<.001***
	Scenario 3	-0.18	.53
	Scenario 4	0.25	.16
Scenario 2	Scenario 3	-1.12	<.001***
	Scenario 4	-0.69	<.001***
Scenario 3	Scenario 1	-0.43	< .01**

Note: ** $p < .01$, *** $p < .001$

Chapter 3 Experiment 2

Exploratory analyses

An exploratory analysis was conducted using a repeated measures ANOVA testing the effects of the target (whether a crime report included information about either the victim or defendants' attributes) and favourability (whether the target had favourable vs unfavourable attributes) and their interaction on the perceived suffering of the victim. There was a significant main effect of favourability $F(1,122) = 23.49$, $p < .001$, $\eta^2_p = 0.16$, with the person being seen to suffer more when they had favourable ($M = 5.76$, $SE = 0.07$) compared to unfavourable attributes ($M = 5.37$, $SE = 0.09$). There was not a significant main effect of the target on perceived suffering experienced by the victim ($p = .757$); however, there was a significant interaction $F(1,122) = 20.37$, $p < .001$, $\eta^2_p = 0.14$. Follow-up tests using pairwise comparison indicated that the victim was rated to have suffered significantly more when they had favourable ($M = 5.93$, $SD = 0.91$) compared to unfavourable attributes ($M = 5.22$, $SD = 1.20$), $t(122) = 6.70$, $p < .001$, $d = 0.60$. There was not a significant difference in the amount that the victim was perceived to suffered when the defendant had favourable ($M = 5.59$, $SD = 1.01$) or unfavourable attributes ($M = 5.51$, $SD = 1.01$), $t(122) = 0.68$, $p = .499$, $d = 0.06$.

Following the significant interaction with the differences between the crime reports, which focused on the favourability of the victims, a simple mediation analysis was conducted using model 1 of the MEMORE macro (Montoya and Hayes, 2017). The mediation explored the effect that the favourability of a victims' attributes (favourable – unfavourable) had on punishment severity and whether the effect was mediated by the perceived suffering of the victim in the crime report. The bootstrapped analysis revealed that the perceived suffering of

the victim positively mediated the effect of the favourability of a victim's attributes on punishment severity (indirect effect = 0.42, *SE* = 0.98, 95% CI [0.24, 0.63].

Chapter 3: Experiment 3

Exploratory Analyses

Separate factorial ANOVAs were conducted testing the effects of the victim favourability (whether a crime report involved a victim with favourable or unfavourable attributes), and the congruency of the attributes that the defendant had (whether the defendant had the same/ congruent or different/ incongruent attributes to the victim) and their interaction on the perceived suffering of the victim.

The results indicated a significant main effect of the favourability of the victim's attributes on the perceived suffering F (1,120) = 16.91, p <.001, η^2_p = 0.12, with more suffering being reported when the victim had favourable (M = 5.56, SE = 0.08) compared to unfavourable attributes (M = 5.23, SE =0.08). There was not a significant main effect of the congruency of the pair's attributes on the perceived suffering of the victim F (1,120) = 3.52, p = .063, η^2_p = 0.03. The perceived suffering of the victim in the congruent pairs (M = 5.47, SE = 0.08) was not significantly different than the suffering of the victim in the incongruent pairs (M = 5.32, SE = 0.08). There was a significant interaction between the favourability of the victims attributes ad the congruency of the pairs attributes on the perceived suffering of the victim F (1,120) = 20.40, p < .001, η^2_p = 0.15. Follow-up tests using pairwise comparisons indicated that the perceived victim suffering was significantly greater when a victim with favourable attributes was paired with a defendant had opposing/incongruent attributes (M = 5.68, SD = 1.02) compared to when the defendant had the same/congruent attributes (M =

5.45, *SD* = 0.97), *t*(120) = 2.36, *p* = .020, *d* = 0.22. The perceived suffering of the victim was significantly greater when a victim with unfavourable attributes was paired with a defendant with the same/congruent attributes (*M* = 5.48, *SD* = 1.17) compared to when the defendant had different/incongruent attributes (*M* = 4.97, *SD* =1.10), *t*(120) = 4.10, *p* <.001, *d* = 0.37. the final comparison of interest identified that there was not a significant difference in the perceived suffering of the victim when the victim and defendant both had favourable (*M* = 5.45, *SD* = 0.97) or unfavourable attributes (*M* = 5.48, *SD* = 1.17), *t*(120) = 0.35, *p* = .730, *d* = 0.03.

Two serial mediation models were conducted using MEMORE Model 1 (Montoya & Hayes, 2017). The first model explored whether manipulating the defendant's attributes (favourable vs. unfavourable) impacted punishment via the direct pathway when the victim had favourable attributes. Additionally, if the relationship was mediated by the perception of the victim's suffering. The bootstrapped analysis revealed that when a victim had favourable and the defendant had unfavourable attributes, the participants were perceived to suffer more and the defendant was punished more (indirect effect = 0.10, *SE* = 0.05, 95% CI [0.01, 0.23].

The second model explored whether manipulating the defendant's attributes (favourable vs. unfavourable) impacted punishment via the direct pathway when the victim had unfavourable attributes. Additionally, if the relationship was mediated by the perception of the victim's suffering. The bootstrapped analysis revealed that when a victim had unfavourable and the defendant had unfavourable attributes, the participants were perceived to suffer less and the defendant was punished less (indirect effect = -0.16 *SE* = -0.07, 95% CI [-0.32, -0.05].

Appendix I

Individual differences in perceptions of the criminal justice system were measured throughout the empirical chapters using the 24-item Attitudes-Towards-the-Criminal-Legal-System scale - Martin and Cohn (2004). Scaled from 1 = “Strongly Disagree” to 7 = “Strongly Agree”.

1. Juries make accurate decisions most of the time.
2. Punishment in this country is basically ineffective.
3. Most of our laws are fair and just.
4. Juries are often base decisions on their prejudices instead of facts.
5. Defence attorneys are dishonest if it means they can win a case.
6. Judges usually make fair decisions.
7. Police officers unfairly harass certain groups such as minorities and high school kids.
8. Most of our laws are effective at protecting people.
9. Lots of police are corrupt and hypocritical.
10. Judges are easily “bought off” by corrupt politicians.
11. Because police officers are trained so well there is less crime than there might be.
12. Our current system of punishment is effective at preventing crime.
13. Defence attorneys care more about their clients than making money.
14. In general, defence attorneys represent their clients very well.
15. Most prosecuting attorneys are as fair to the victim and defendant as possible.
16. Police officers treat everyone equally because they are able to ignore prejudice.
17. There are too many laws that impose on personal freedom.

18. Judges tend to let bias and prejudice affect their decisions.

19. Prosecuting attorneys are dishonest if it means they can win the case.

20. A lot of judges make poor decisions.

21. Most defence attorneys don’t have the time or resources to do their jobs well.

22. Juries make fair decisions most of the time.

23. Defence attorneys aren’t fair to victims because they represent criminals.

24. The punishment given usually fits the crime.

Appendix J

List of available documents and their descriptions given to participants in Experiments 1 and 2 in Chapter 5.

Defence Documents

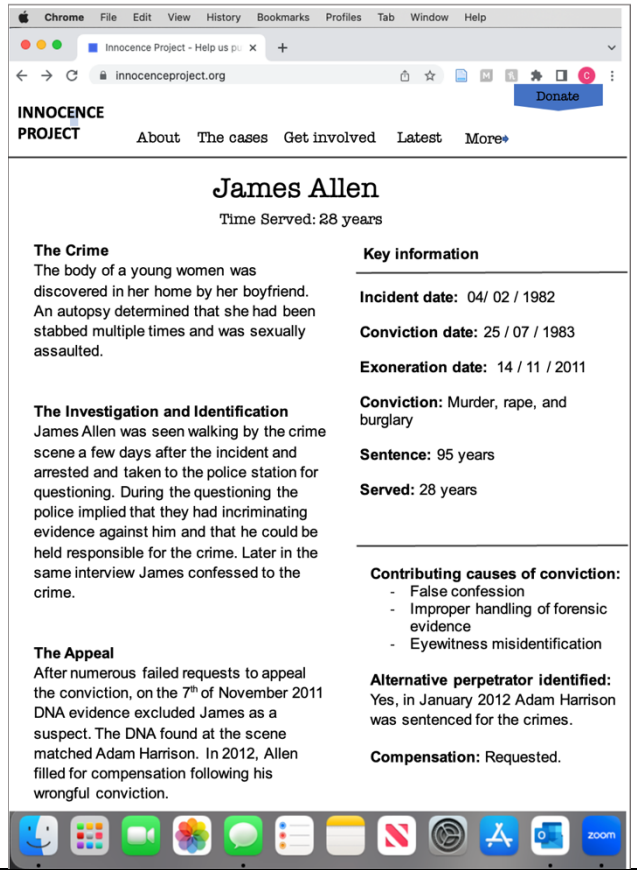
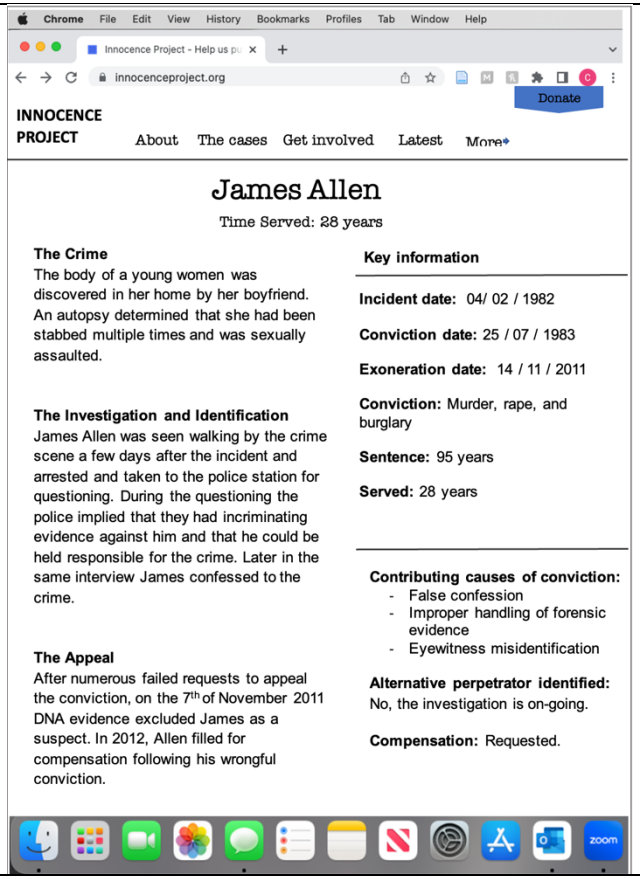
1. **Alibi statement 1:** The statement given by the suspect to the police in favour of their innocence.
2. **Alibi statement 2:** The statement given as supporting evidence of the suspect's alibi statement given to the police in favour of their innocence.
3. **CCTV evidence:** Camera images with the time stamp in favour of the suspect's innocence.
4. **Coroner report:** The report conducted by the defence attorney's coroner in favour of the suspect's innocence.
5. **Digital crime scene reconstruction:** A digital reconstruction of crime scene created by the defence in favour of the suspect's innocence.
6. **Crime map of key locations:** A map of key locations, created by the defence, in favour of the suspect's innocence.
7. **Victim impact statement:** A statement collected by the defence that highlights the impact that the crime had on the victim and the victim's family, in favour of the suspect's innocence.

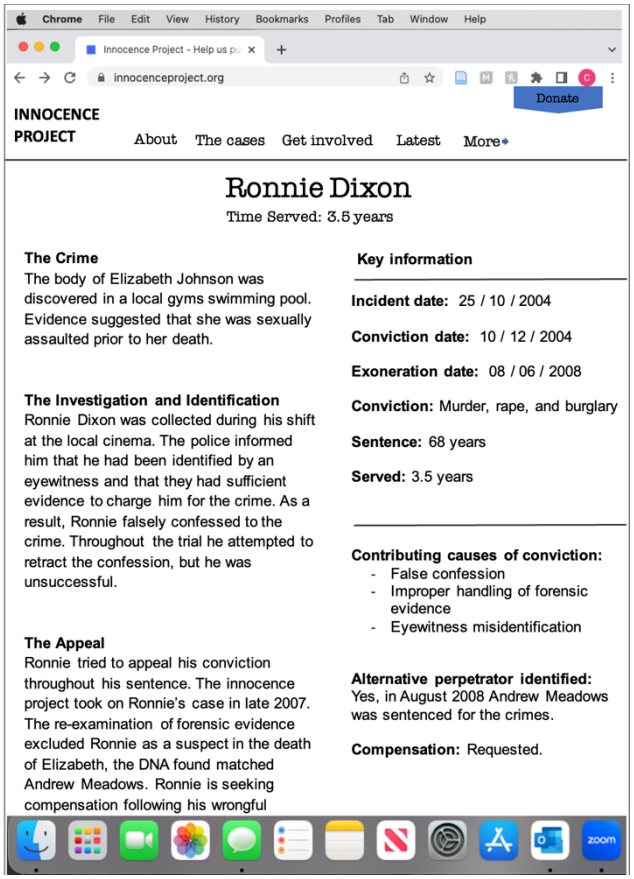
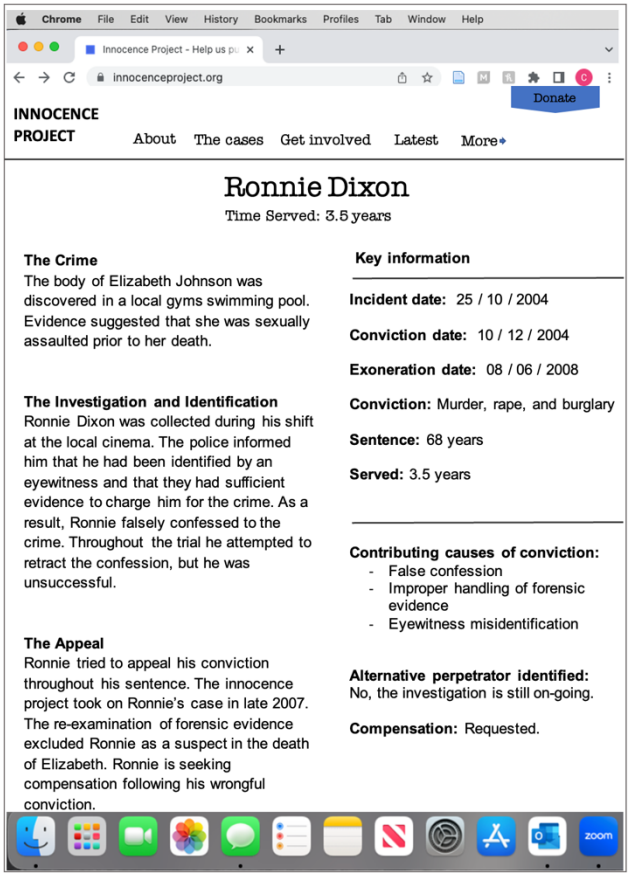
Prosecution Documents

1. **Witness statement 1:** The statement given by a witness to the police in favour of the suspect's guilt.
2. **Witness statement 2:** The statement another witness gave to the police in favour of the suspect's guilt.
3. **CCTV evidence:** Camera images with the time stamp in favour of the suspect's guilt.
4. **Coroner report:** The report conducted by the prosecution attorney's coroner in favour of the suspect's guilt.
5. **Digital crime scene reconstruction:** A digital reconstruction of crime scene created by the prosecution in favour of the suspect's guilt
6. **Crime map of key locations:** A map of key locations, created by the prosecution in favour of the suspect's guilt.
7. **Victim impact statement:** A statement collected by the prosecution that highlights the impact that the crime had on the victim and the victim's family in favour of the suspect's guilt.

Appendix K

Example case reports from Chapter 5 Experiment 2

High Severity – Resolved MCJ case	High Severity – Unresolved MCJ case
	

Low Severity – Resolved MCJ case	Low Severity – Unresolved MCJ case
	

Appendix L

Table of viewing codes with their labels used and available documents and their names.

Viewing Code	Viewing Label
0	Viewing begins
1	Defence Scanning
2	Defence Selecting
3	Defence Focused
4	Prosecution Scanning
5	Prosecution Selecting
6	Prosecution Focused
8	Document Returned
9	Dual Doc Viewing (D-D)
10	Dual Doc Viewing (D-P)
11	Dual Doc Viewing (P-P)
97	Blank Space
98	Table / Arm
99	Fixation Marker Undetected
100	Viewing Ends

Document Code	Document Label
1	Defence: Alibi Statement 1
2	Defence: Alibi Statement 2
3	Defence: CCTV Evidence
4	Defence: Coroners Report
5	Defence: Digital Crime Scene Reconstruction
6	Defence: Crime Map
7	Defence: Victim Impact Statement
8	Prosecution: Witness Statement 1
9	Prosecution: Witness Statement 2
10	Prosecution: CCTV Evidence
11	Prosecution: Coroners Report
12	Prosecution: Digital Crime Scene Reconstruction
13	Prosecution: Crime Map
14	Prosecution: Victim Impact Statement
0	N/A

Appendix M

Results from survey data from Experiment 2 in Chapter 5.

Table 11

Table of Correlational Coefficients of all measures

	Injustice	Derogation	Blame	Compensation
Derogation	-.44***			
Blame	-.63***	.45***		
Compensation	.27**	-.05	-.13	
BJW	-.34***	.39***	.52***	.13

Note. ***p <.001 **p<.01

Responses to Exonerees

Three separate repeated measures ANOVA's testing the effects of the MCJ severity (whether the crime profile described a MCJ of high or low severity in terms of wrongful imprisonment duration) and resolution status (whether another person had been convicted for the original crime, or not) and their interaction on injustice, derogation and blame.

The ANOVAs explored the effect of MCJ severity (low vs. high) and the resolution status (resolved vs. unresolved) on responses to exonerees including injustice, derogation, blame and the desire to compensate them following their release. The first ANOVA revealed that there was not a significant main effect of MCJ severity $F(1,126) = 0.00$, $p = .990$, $\eta^2_p =$

0.00, or resolution status $F(1,126) = 2.84$, $p = .094$, $\eta^2_p = 0.02$ on the perception of injustice felt for the exoneree nor was there a significant interaction of MCJ and resolution status $F(1, 126) = 0.53$, $p = .466$, $\eta^2_p = 0.00$. The second ANOVA revealed that there was not a significant main effect of MCJ severity $F(1,126) = 0.50$, $p = .482$, $\eta^2_p = 0.00$, or resolution status $F(1,126) = 0.58$, $p = .448$, $\eta^2_p = 0.00$ on derogation towards the exoneree, nor was there a significant interaction $F(1, 126) = 0.52$, $p = .473$, $\eta^2_p = 0.00$. The third ANOVA identified that there was not a significant main effect of MCJ severity $F(1,126) = 0.47$, $p = .494$, $\eta^2_p = 0.00$, or resolution status $F(1,126) = 1.32$, $p = 0.253$, $\eta^2_p = 0.01$ on the blaming of the exoneree for their wrongful imprisonment, there was also not a significant interaction $F(1, 126) = 1.33$, $p = .251$, $\eta^2_p = 0.01$.

Exploratory Analyses

A repeated measures ANOVA's tested the effects of the MCJ severity (whether the crime profile described a MCJ of high or low severity in terms of wrongful imprisonment duration) and resolution status (whether another person had been convicted for the original crime, or not) and their interaction on the desire to compensate the exoneree following their release. The ANOVA revealed that there was a significant main effect of MCJ severity on compensation desired for the exoneree $F(1,126) = 15.03$, $p < .001$, $\eta^2_p = 0.11$, however there was not a significant main effect of resolution status $F(1,126) = 0.69$, $p = .407$, $\eta^2_p = 0.00$, nor was there a significant interaction on the desire to compensate the exoneree $F(1, 126) = 0.01$, $p = .931$, $\eta^2_p = 0.01$.