CRIMINAL JUSTICE ADMINISTRATION AND BIASED MENS REA ASSESSMENTS: THE SEVERITY EFFECT, EXPERTISE AND EDUCATION

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MSc. In Public Administration

Track: Public Management

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January 11, 2019

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INTRODUCTION

When cases are brought to the judicial system, judges, judicial functionaries, prosecutors and jurors are faced, among other things, with a major and complex task: to assess culpability. This is essentially a process of determining the state of mind or *mens rea* of the offender at the time of the commission of the criminal conduct. The task, however, is not easy. Not only is it extremely difficult to have smoking gun kind of proofs but, in general, direct evidence of an inculpating mental state of the offenders is quite uncommon. As an observer one can only attempt to come close to such state of mind through circumstantial evidence or presumptions (Briggs, 1989).

In such complex circumstances, prosecutors, judges and juries may become highly susceptible to taking into account irrelevant factors (legally wise) or exaggerating the evidence collected in favor of one or another case theory. As accounted by several empirical studies, laypeople and experts (mainly philosophers) are sensitive to biases when assessing for culpability or mens rea (see Knobe, 2003; Feltz & Cokely, 2010; Miller, 2018; etc.). More striking however is the fact that recent empirical studies (Kneer & Bourgeois – Gironde, 2017) have found that professional judges themselves are also susceptible to some of the aforementioned biases.

That laypeople, experts and judges are susceptible to biases when assessing mens rea is central for discussions revolving around errors of justice and the role of juries and judges in the processes that lead to such errors. Not only does it shed light on the probable causes of errors of justice but also it touches upon a particular discussion: what should and can be done to solve, at least partially, errors of justice caused by judges' biases. Should we modify the mens rea concepts at the foundation of the penal codes? Should we educate better our lawyers? Should we modify the guilty/not guilty verdict system? Arguing for any of these positions would signify different but important reforms of the criminal law systems and legal education.

In this study, as similarly done by Kneer & Bourgeois – Gironde, 2017, I will conduct a between – subjects survey experiment to determine if professional judges and law bachelor students are sensitive to a particular outcome bias when assessing mens rea (and intentionality more

particularly): the severity effect. The latter is regarded as the effect that the severity of a harmful outcome has on intentionality ascriptions, so that the more severe the outcome the more likely foreknowledge will suffice for ascribing intentionality (Kneer & Bourgeois – Gironde, 2017). The research question of this study then is: *are intentionality assessments made by professional judges and law students affected by the severity of the outcome of a criminal conduct under their consideration*?

The focus of this thesis will be placed on professional judges from Colombia and law students from Dutch universities, populations of particular relevance for the study. Judges occupy a central role in the justice system: they are responsible for defining the judicial relevance of conducts and outcomes and assess whether offenders are liable (or not) on the basis of, among other things, culpability. Law students, on the other hand, are bound to be legal professionals and will potentially become judges, prosecutors or attorneys, thus occupying an important role in the operation of justice systems. Considering the characteristics of the populations just described, this study will further examine whether judges' degree of specialization in relevant areas of the legal practice has an effect on their intentionality ascriptions, whether both judges and law students are aware of the legal concept of intentionality, and if the awareness of such concept has an effect on their intentionality ascriptions.

The present thesis then attempts to contribute on several and varied aspects. First, it aims to contribute to the literature regarding miscarriages of justice and its causes by providing empirical research on a particular phenomenon that may lead to unequal and unfair judicial decisions - *i.e.* the severity effect. Second, it attempts to contribute to the literature on biases and heuristics of judicial decision-making. Third, it aims to contribute to the discussions around the solutions to the outcome biases (to which laypeople and legal experts are susceptible when assessing culpability), by analyzing to what extent does the degree of specialization and the awareness of the legal concept of intentionality has an effect on intentionality ascriptions. Finally, the severity effect is empirically tested on two different populations that differ from that studied before by Kneer & Bourgeois – Gironde (2017) -*i.e.* professional judges in Colombia and law students in The Netherlands, with the aim of proving whether the severity effect is persistent across cultures and diverse populations.

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The thesis is structured as follows: I will first provide the theoretical framework in which this empirical research study is situated and the hypothesis that will be tested. Later on, the data collection method –*i.e.* between – subjects survey experiment – will be explained in detail. The empirical findings will be then presented, analyzed and discussed. Finally, a conclusion will be drawn, and policy and research recommendations will be made.

THEORETICAL FRAMEWORK AND HYPOTHESES:

1. **Errors of justice**

Modern societies rely heavily on their criminal justice system for social control, and the criminal justice system, in turn, relies mostly on humans for its functioning. From prosecutors to defense attorneys, from secretaries to judges, humans have a central role in defining whether an agent should be brought to the criminal justice system, processed, judged and sanctioned. Humans and justice systems on their own, however, may be highly susceptible of incurring in errors and, when it comes to criminal justice, such mistakes or errors can deliver a heavy burden on citizens under judgement: the unjust deprivation of liberty.

Criminal justice systems -and the humans upon which it relies for its functioning- incur in errors of justice when the law is not applied accordingly, meaning that it was either misinterpreted, not applied or applied wrongfully; or as put forward by Forst (2004) "errors of justice are taken to mean errors in the interpretation, procedure, or execution of the law – typically, errors that violate due process, often resulting in the conviction of innocent people" (p. 3). Forst also classifies errors of justice in two: errors of due process and errors of impunity. The first type of error concerns excessive intrusions on citizens' rights (freedom and due process particularly) by harassing, detaining and convicting the innocent or by imposing excessive (above the optimal or legal) sanctions and burdens on actual offenders (Forst, 2004). The second type of error concerns cases where the sanctions imposed on offenders are insufficient (under the optimal or legal), and where a criminally relevant conduct or outcome is not sanctioned at all (Forst, 2004).

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The causes of errors or miscarriages of justice are as varied as numerous. Naughton (2013), for example, identified the following: impartial police investigation methods, prosecutors' adversarial advantages, a lousy defense, eyewitness misidentification, voluntary confessions and forensic science and unintentionally wrongful expert evidence. Sorochan, D. (2008) also identified, based on the September 2004 Report on the Prevention of Miscarriages of Justice made by the Canadian Federal-Provincial-Territorial Heads of Prosecutions Committee, the following: ineffective assistance of the counsels and untimely disclosure of all the evidence by the prosecution. Nevertheless, besides the studies focusing on particular judgment biases (e.g. gender bias, Knobe effect, severity effect, skill effect, hindsight bias, etc.), the literature on wrongful convictions seems to be blind to causes related to judges' wrongful assessments.

That being said, this thesis will focus on a potential cause of errors of due process (*i.e.* excessive sanctions and wrongful convictions) related to biased assessments of mens rea. More specifically, focus will be placed on a recently empirically discovered outcome bias: the effect of increasingly negative or harmful outcomes on intentionality ascriptions. As will be further explained, Kneer & Bourgeois-Gironde (2017) found that, when ascribing intentionality, legal experts are susceptible not only to the moral valence of the outcome but also to the severity of negatively evaluated outcomes, what the authors have called the severity effect. With ever more harmful effects, the likelihood of knowledge sufficing for attributing intentionality increases.

The relevance for criminal justice of the potential (negative) effects of increasingly harmful outcomes in assessments of mens rea should bear no question: similar cases may be judged and sentenced differently due to views on the concept of intentionality diverging from that found at standard criminal law. Indeed, the severity effect on mens rea assessments can lead both to convicting people for crimes they did not commit (*e.g.* murder instead of manslaughter as described in the US Model Penal Code) and being imposed excessive sanctions for their offenses. If judges apply the legal concept of intentionality in their culpability assessments, the resulting sentence may acquit or impose the according sanction; on the contrary, if judges apply a different concept of intentionality than that of criminal law the resulting sentence may convict wrongfully or impose an excessive sanction.

2. Mental state ascriptions and intentionality

The mental state of agents being judged for harmful conducts is of major importance for criminal justice. For the configuration of criminal and other types of legal liability (e.g. civil and administrative liability) it is generally required, beyond a relevant conduct and a harmful outcome, a particular mental state: a culpable one. Kneer (2018), referring to such principle of criminal law, stated that "a defendant is deemed legally responsible for a harmful outcome only if it can be established that she committed a guilty act (*actus reus*) with an inculpating state of mind (*mens rea*)" (p. 314 - 315). In that sense, most of the criminally reprehensible conducts listed in criminal codes textually include the inculpating mental states in their descriptions or an article that states that some inculpating mental states are presumed to be part of such description.

Culpable or inculpating mental states relevant for criminal law regimes, i.e. required for determining legal liability, are generally the *intention* to bring about a harmful outcome and the *knowledge* or *belief* that a harmful outcome will be brought about (Kneer, 2018). Nevertheless, there are differences (some terminological) between the various legal systems in the world. In the US Model Penal Code, for example, there are four major mens rea: intention or purpose, knowledge, negligence and recklessness. In the Dutch Criminal Code, the commonly invoked mens rea are intent or *opzet*, and negligence or *schuld* (Tak, 2008). Finally, in the Colombian Criminal Code, Law No. 599 (2000) the most distinguishable mens rea are *dolo* (or intentionality) and *culpa* (which includes knowledge and belief).

Beyond the terminological differences, criminal law regimes commonly invoke the intentionality mens rea and it is arguably one of the most prominent legal standards of culpability. The legal mens rea of intentionality requires the presence of two elements to be attributed: a cognitive and a volitional one. For an action to count as intentional it is then necessary to have previous knowledge or foresee the consequences of an action, and the will or desire to bring about such known or expected consequences (Kneer & Bourgeois - Gironde, 2017). As put forward by Lyons (2005):

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> "In exemplar cases of intentional wrongdoing under the law, actors are culpable because they bring about unlawful effects that they cognitionally and volitionally specify as 'what-is-to-be-caused'; in negligent conduct, however, the unlawful effects for which actors are responsible do not correspond to anything actors cognitively specify as 'what-is-to-be-caused' or intended by their chosen conduct" (p. 458)

Mere foreknowledge of the reprehensible consequences of an action does not and should not suffice for such action to count as intentional under legal standards. Furthermore, the content, valence or magnitude of the outcome of an action are not relevant for the ascription of intentionality or mens rea in general (Kneer & Bourgeois – Gironde, 2017) -although important for determining the criminal relevance of the action (whether it should be brought to the criminal justice system or not), the type and degree of the sanction applicable. Put differently, the attribution of intentionality to an action under consideration of the criminal justice system does not and should not depend on the moral valence or magnitude (or the content) of the outcome of such action.

Nevertheless, some scholars still regard the ascription of intentionality as dependent on the moral features of the cases under consideration. Lowe (1978), for example, argues that, when the outcome is harmful, knowledge of the possibility to bring about an outcome suffices for such outcome to be regarded as intentional and the agent should be therefore blameworthy. Harman (1976) also argues that the foreseeability of the consequences of an action sometimes suffices for such action to count as intentional, and that the ascription of intentionality depends on our considerations of what is wrong or right. In this view, not only should the moral valence of the outcome be considered when assessing for the inculpating mental state of the conduct under study, but also the assessment of intentionality may rest only on knowledge of the morally wrong or bad consequences of an action.

Arguments favoring morally charged mens rea aside, the fact remains that, strict legal standards followed, intentionality can only be ascribed to outcomes under consideration of the criminal justice system if there is enough evidence (or it can be legally presumed) of the presence of both a cognitive and volitional element. However, biased intentionality assessments may be occurring

in practice as there is significant empirical research showing that laypeople, philosophers and legal experts operate with distorted concepts of intentionality when presented to thought experiments.

3. Outcome biases

As stated in the former section, under legal standards mens rea ascriptions should not depend on the moral valence of outcome. Whether the result of an action is evaluated as good or bad should not be taken into account when ascribing a mental state to such conduct. More particularly, foreknowledge should not suffice for ascribing intentionality to a harmful outcome. In support of this, Kneer & Bourgeois – Gironde (2017) expressed:

> "A coherent practice of mens rea ('guilty mind') ascription in criminal law presupposes a concept of mens rea which is insensitive to the moral valence of an action's outcome. For instance, an assessment of whether an agent harmed another person intentionally should be unaffected by the severity of harm done" (p. 139)

Nonetheless, mens rea ascriptions made by laypeople and experts seem to be sensitive to outcome biases such as the Knobe effect and the severity effect. The Knobe effect has to do with the asymmetry of intentionality ascriptions to outcomes when the moral valence of such outcomes change, while the severity effect refers to the asymmetry of intentionality ascriptions to harmful outcomes when the magnitude of such outcomes increases (Kneer & Bourgeois-Gironde, 2017). These biases are however different and more specific than the negativity bias. The latter refers generally to psychological phenomena according to which people attribute more salience, potency and value dominance to negative events than to positive ones or, as put by Baumeister et. al (2001), that "bad is stronger than good" (see, e.g., Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D., 2001; Rozin & Royzman, 2001). On the contrary, both the Knobe and severity effects are biases related to the effect of morally and legally reprehensible outcomes on assessments of mens rea and, more particularly, intentionality. That is, both of the latter are a more specific kind of psychological phenomena related to moral and legal attributions of intentionality.

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3.1.The Knobe effect

Following that of Knobe (2003), several empirical studies (cf. Cushman & Mele, 2008; McCann, 2005; Knobe & Mendlow, 2004; Knobe & Burra, 2006; Nadelhoffer, 2004, 2005; Leslie, Knobe & Cohen, 2006) have studied the effect of the moral or normative valence of outcomes on intentionality ascriptions made by laypeople. Consider the following chairman scenarios described by Knobe (2003):

> **Harm scenario**: "The vice-president of a company went to the chairman of the board and said, 'We are thinking of starting a new program. It will help us increase profits, but it will also harm the environment.'
>
> The chairman of the board answered, 'I don't care at all about harming the environment. I just want to make as much profit as I can. Let's start the new program.'
>
> They started the new program. Sure enough, the environment was harmed." (Knobe, 2003, p. 191)
>
> **Help scenario:** "The vice-president of a company went to the chairman of the board and said, 'We are thinking of starting a new program. It will help us increase profits, and it will also help the environment.'
>
> The chairman of the board answered, 'I don't care at all about helping the environment. I just want to make as much profit as I can. Let's start the new program.'
>
> They started the new program. Sure enough, the environment was helped" (Knobe, 2003, p. 191)

Most of the subjects presented to the harm scenario (82%) judged the side effects as intentionally brought by the chairman, while most of the subjects presented to the help scenario (77%) judged the side effects as not being intentionally brought by the chairman (Knobe, 2003). In that sense, for laypeople, foreknowledge of the side effects of an action is sufficient for ascribing

intentionality to it when such consequences are deemed negative or bad; on the other hand, foreknowledge of the side effects of an action does not suffice for ascribing intentionality to such consequences when they are deemed positive or good.

The Knobe effect has been empirically tested and found in different languages (Knobe & Burra, 2006), ages (Leslie, Knobe & Cohen, 2006) and countries (Kneer, 2017; Feltz & Cokely, 2010). Knobe & Burra (2006) demonstrated that Hindi-speakers also operate with a morally charged concept of intentionality in such a way that harmful side effects were judged to be intentionally brought about, while beneficial or helpful side effects were judged as not intentionally brought about. Leslie, Knobe & Cohen (2006), found that Pre-school children's intentionality ascriptions of side effects were also sensitive to the moral valence of such effects. Finally, Feltz & Cokely (2010) found the Knobe effect to persist in students in Florida, United States of America, while Cova & Naar (2012) found such bias to be present in laypeople from France.

The Knobe effect has also been found to be susceptible to an order effect and to individuals' characteristics. Feltz & Cokely (2011), following Cushman & Mele's (2008) experiment, further proved that the order of the presentation of the different scenarios (in terms of the moral valence of their outcomes) affected the strength of the asymmetry between intentionality ascriptions made by laypeople. Participants were more likely to ascribe intentionality to harmful side effects when introduced to the harm (morally negative) scenario before the help (morally positive) one, in comparison to those introduced to the harm scenario after the help one. Furthermore, Feltz & Cokely (2011) also found beliefs about the identity of the agent in each scenario and philosophical training to be important factors in the order effect of the Knobe effect.

Two main challenges to the Knobe effect have been raised and later disconfirmed by Cova, Lantian & Bodesseul (2016). According to the first challenge, answers given by participants in the related studies do not reflect what they really think. Participants either have no other option than using the word "intentionally" to express their moral disapproval of the conduct of the chairman or they are forced to express the non-accidental relationship between the chairman's decision and the harm to the environment as "intentionally". The second challenge states that agents' desire (and other traditional factors such as beliefs) instead of moral factors can fully explain the Knobe effect. Both

of these challenges point out to the same direction: The Knobe effect may just be a methodological creation. Nonetheless, Cova, Lantian & Bodesseul (2016) demonstrated empirically through survey experiments that the measures of intentionality used by Joshua Knobe and related studies do reflect participants' actual thoughts and that normative evaluations always play a role in shaping intentionality ascriptions. This, of course, further confirming that ascriptions of intentionality made by laypeople are sensitive to moral or normative considerations about the outcomes under consideration.

The concept of intentionality that laypeople hold then differs significantly from that standardly invoked in criminal law codifications. As stated above, the legal concept of intentionality has both a cognitive and conative element, so foreknowledge of the harmful consequences of an action does not suffice for intentionality to be ascribed. Moreover, under legal standards, moral considerations should not affect intentionality ascriptions. On the other hand, the Knobe effect suggests that the concept of intentionality of laypeople is morally/normatively charged. Foreknowledge suffices for intentionality to be ascribed when the outcome under consideration is deemed as harmful or bad, but does not suffice when the outcome is positively evaluated.

The different concepts of intentionality of the lay and the legal has been used by certain scholars (see, e.g., Kobick, 2010; Nadelhoffer, 2006) as an argument to further reforms to criminal justice system, including the mens rea of intentionality at the foundation of criminal law. Although they all agree that such difference represents an issue, especially for juror systems where laypeople have to attribute mens rea and guilt to agents, the solutions proposed differ substantially according to the view of the nature of the Knobe effect (Cova, Lantian & Boudesseul, 2016).

There are scholars that advocate for competence and bias accounts of the Knobe effect, as put by Kneer & Bourgeois – Gironde (2017). For advocates of competence accounts, the Knobe effect shows a gap between what ordinary people consider as intentional and what the law requires to count as intentional (Kneer & Bourgeois - Gironde, 2017). In order to close such gap, the legal concept of intentionality should become that of the laypeople as long as the use of the folk concept is uniform and systematic (Kobick, 2010; Malle & Nelson, 2003). The adoption of the folk concept of intentionality in the legal codification, Malle & Nelson (2003) argue, would foster clarity and

fairness to the practice of ascribing intentionality to actions and outcomes under consideration of the criminal justice systems, especially where jurors exist. Other authors, on the contrary, argue that the Knobe effect is just a distortion or bias that affects the concept of intentionality of laypeople, and that the solution may be to abolish juror systems (see Nadelhoffer, 2006; Adams, 2015). In this bias view of the Knobe effect, the folk concept of intentionality is not sufficiently systematic or uniform to be adopted as the legal definition, and abolishing juror systems would then lead to a more coherent practice of mens rea ascriptions.

Advocating for competence view on the Knobe effect would have major implications for criminal justice systems and criminal law. First, criminal justice can and should rely on laypeople juries as part of the judicial decision-making process. Second, culpability standards such as negligence and intentionality for ascribing liability and convicting offenders would become similar: foreknowledge of the harmful consequences of an action could suffice for ascribing culpability. Finally, all of the crimes in which the actual legal standard of intentionality is required as the minimum standard of culpability (including both a cognitive and a volitional element) will be implicitly modified and some distinctions for particular crimes would necessarily have to disappear: e.g., murder and manslaughter would simply become homicide.

On the other hand, advocating for the bias view of the Knobe effect implies the immutability of both the cognitive and volitional elements as necessary requirements for the ascription of the legal mens rea of intentionality. Moreover, it would lead to the abolishment of laypeople jurors and, in general, not giving the option to laypeople to assess intentionality for conducts under consideration of the criminal justice system. If the decision is to maintain them, it must be advised to provide extensive legal training to laypeople juries o the different mens rea and how to consequently apply such concepts when judging. Without proper training, laypeople should not be given the option to assess culpability.

The Knobe effect affects legal professionals as pronouncedly as it affects laypeople nevertheless. Kneer & Bourgeois-Gironde (2017) empirically proved that professional judges in France presented to Knobe's chairman scenario were more prone to ascribe intentionality on the basis of mere foreknowledge of the consequences of an action when such outcomes were negative or

harmful; when the outcome was positive, judges were less prone to ascribe intentionality on the basis of mere foreknowledge. According to this, not only are laypeople and experts operating with a morally charged concept of intentionality, but also professional judges.

Notwithstanding the findings of the Knobe effect on professional judges, Kneer & Bourgeois – Gironde (2017) expressed that such effect might be irrelevant for legal matters as the only outcomes that are relevant for criminal justice are harmful, and thus justice equality is ensured to all agents brought to court. What is problematic, the authors argue, is that different concepts of intentionality (one in which knowledge suffices and another in which it does not) may be operating in the criminal justice system and that similar cases –i.e. negatively valenced cases– may be subject to unequal assessments of culpability due to differing notions of intentionality (Kneer & Bourgeois – Gironde, 2017). This would suggest that criminal justice systems with and without jurors might be equally susceptible to errors of justice due to intentionality ascriptions that do not conform to the legal definition of intentionality. Put differently, judges who ultimately decide whether the conducts under their consideration are deemed intentional or negligent may also be incurring in unequal convictions for similar cases, or more simply put errors of justice.

It is in that context that Kneer & Bourgeois – Gironde (2017) expand their research on outcome biases. More specifically, they tested whether the severity of the outcome also affects intentionality ascriptions, which will be further explained, as it is our central focus in this thesis. Before moving onto that chapter, however, I would like to express a slight disagreement with Kneer & Bourgeois – Gironde's following statement:

> "One might argue - the distinction between positive and negative moral or normative valence is mute as regards legal matters, since the only outcomes of relevance are negative ones. (…). Though there might thus be an asymmetry across positive and negative outcomes, the fact that only the latter matter ensures equality before the law: Those doing harm do not get judged differently from those doing good, because the latter don't get judged in court in the first place." (Kneer & Bourgeois – Gironde, 2017, p. 140).

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Contrary to the former statement, I would argue that the asymmetry between negative and positive outcomes and the effect of such asymmetry in intentionality ascriptions is worrying for criminal justice systems. All judges and juries do not always evaluate outcomes brought to the justice system to be negative or harmful (enough). Consider the following situation: a poor hungry man finds a bag of bread that he knows belongs to someone else – simply because it is not his. Neither the poor man nor the owner knew the bread was just expired. The judge considering the case may deem the outcome (the loss of the bread for the owner) as negative if he were to adopt a strict interpretation of the law: taking away property belonging to another person is wrongdoing. The judge (or another judge) could also consider such outcome as not harmful or even positive: the bread was expired so the poor man actually did not take away something of value and, on the contrary, he did the owner a favor. Moreover, it was for feeding a poor hungry person: himself.

A different case may also be helpful for clarifying the argument that judges and juries do not always consider outcomes brought to the justice system to be negative or harmful. Consider the following real situation: the judicial system is processing a drug-addict that was roaming around the streets in possession of an amount of drugs that exceeds the minimum dose. The judge of the case might consider such possession as bringing about a negative outcome – as a strict interpretation of the criminal law would suggest: harming public health. The judge might also consider the possession of drugs as not bringing about a negative outcome. For example, he might consider the possession as not harmful to public health and, on the contrary, necessary for maintaining the drug-addict's psychological and physical stability.

In both of the former cases, the outcomes under consideration are (potentially) not standardly evaluated as morally bad. Whether the judge of the case evaluates the outcome as negative or positive (or not negative) could then lead to unequal sentencing on similar cases. When the outcome is deemed as negative, the judge will likely ascribe intentionality without evidence of the volitional element –as the Knobe effect would suggest–and convict the agent under consideration. When the judge evaluates the outcome as positive or not negative, he will be less likely to ascribe intentionality and will probably acquit the alleged offender. This would imply that, contrary to Kneer & Bourgeois – Gironde's statement, the Knobe effect is of major practical relevance for the criminal justice system. Insofar as outcomes brought to the justice system are standardly

interpreted as negative or harmful, the Knobe effect is irrelevant. However, that might not be the case.

3.2.The severity effect

Kneer & Burgeois – Gironde (2017) conducted empirical research to test whether professional lawyers were not only sensitive to the moral valence of the outcome, but to the severity or magnitude of a negative outcome. As similarly done to test the Knobe effect, the researchers conducted a between-subjects survey experiment on professional judges in France and randomly assigned the participants to one of the two following scenarios:

'Somewhat bad' scenario: "The mayor of a small beach town is approached by his advisor who says: 'We could build a new highway connection. This would make car traffic much more efficient. However, there would be minor adverse effects on the environment. During construction, the animals in the construction zone will be disturbed. This is only temporary, everything goes back to normal once construction is finished.'

The mayor responds: 'I don't care at all about the environment. All I care about is making car traffic as efficient as possible. Let's build the new highway connection.'

They build the new highway connection. The animals in the zone are temporarily disturbed. Everything goes back to normal after construction is finished." (Kneer & Bourgeois-Gironde, 2017, p. 143)

'Very bad' scenario: "The mayor of a small beach town is approached by his advisor who says: 'We could build a new highway connection. This would make car traffic much more efficient. However, there would be severe adverse effects on the environment. During construction, the animals in the construction zone will die. This is not a temporary condition; things will not go back to normal once construction is finished.'

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The mayor responds: 'I don't care at all about the environment. All I care about is making car traffic as efficient as possible. Let's build the new highway connection.'

They build the new highway connection. The animals in the zone are die. Things do not go back to normal after construction is finished." (Kneer & Bourgeois-Gironde, 2017, p. 143)

Participants presented to the *very bad* scenario attributed intentionality to the side effects of the mayor's decision on a significant higher average level in comparison to those subjects presented to the *somewhat bad* scenario (Kneer & Bourgeois-Gironde, 2017). In other words, when the consequences are 'somewhat bad' judges are less prone to ascribe intentionality relying only on the foreknowledge mens rea, than when the consequences are 'very bad'. The findings suggest, as Kneer & Bourgeois – Gironde (2017) point out, that the Knobe effect "captures just two data points of a broader phenomenon" (p. 143) and that legal experts –*i.e.* judges- are not exempt of ascribing mens rea based on distorted concepts of intentionality. Legal experts still hold a concept of intentionality that resembles that found at criminal law, but some of them are still sensitive to irrelevant factors when assessing intentionality.

The severity effect findings contribute to the discussions revolving around solutions to avoid unfair and unequal trials were intentionality assessments are outcome-biased, but they do not provide clear arguments in favor of any solution proposed so far. Modifying the legal concept of intentionality according to the severity effect, as competence theorists might argue, seems clearly impractical; it would require each particular crime to specify the magnitude of the harmful outcome necessary for the different inculpating mental states to be ascribed (Kneer & Bourgeois – Gironde, 2017). Nevertheless, the findings still do not provide a strong argument for furthering bias advocates' solution consisting in eliminating jurors were implemented or restraining from implementing them. More specifically, they do not lend support to professionals' monopoly for deciding about guilt and mens rea ascriptions. Both laypeople's and judges' intentionality ascriptions are sensitive to outcome biases and as Kneer & Bourgeois – Gironde (2017) point out, criminal trials conducted and decided by judges on their own may still be highly unequal and unfair as some judges may decide to ascribe intentionality and punish conducts more harshly than others

on the basis of non-legal standards. Judges as laypeople may be incurring in errors of justice due to the severity effect.

One might still argue that modifying the legal notion of intentionality is plausible. The reform should not be directed towards specifying for each crime the severity of the outcome required for the different mens rea. As first proposed by advocates of the competence account, the reform should simply be directed towards modifying the mens rea of intentionality (or abolishing it as a culpability standard) so that foreknowledge of the outcome of an action suffices for culpability (and criminal responsibility) to be ascribed. The *actus reus* relevant for criminal law must be previously defined by the law, and the magnitude of the outcome should be taken into account for the sole purpose of measuring the sanction or punishment and not IF the *actus reus* deserves punishment.

Modifying the legal concept of intentionality could be regarded as practical since judges and jurors would be spared from the exercise of determining whether the agents under consideration acted volitionally or not. They would be left with discovering if such agents knew about the consequences of their actions and whether those foreseen consequences were the same that got realized. Moreover, such modification could contribute to lower rates of errors of justice. Judges and jurors would have one less guilty state of mind to ascribe (i.e. intentionality) and it would be irrelevant whether normative considerations retained by judges about the valence or severity of the outcome affect intentionality ascriptions. Both the severity and the Knobe effect would lose most of its practical relevance for criminal justice.

Nevertheless, the former solution could face some resistance, especially by law scholars and practitioners, as it would imply eliminating one of the most basic distinctions in criminal and civil law culpability: negligence v. intentionality. For example, some scholars and legal practitioners might argue that "the clinical concept of intentionality, dominant in legal scholarship and firmly entrenched in criminal law all over the world, is the appropriate one, since it is the product of expert judgment and rigorous conceptual analysis" (Kneer & Bourgeois – Gironde, 2017, p. 141). Furthermore, criminal law and the justice system could face decreasing legitimacy since intentionally harmful actions would become equally punished as unintentional harmful actions.

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On the other hand, the solution against outcome-biased assessments of intentionality might lie at the basis of legal education. What if general legal expertise is not sufficient for deterring the outcome biases when ascribing intentionality? What if judges and lawyers in general do not endorse the legal concept of intentionality? What if judges that have interiorized the legal concept of intentionality are less susceptible to the severity effect? What if judges specialized in legal regimes where intentionality is relevant for determining liability are less affected by the severity effect? If the answer to these questions is affirmative, one might argue that specialized legal education or training could resolve (at least partially) the negative practical implications of the Knobe and severity effects.

4. Expertise, training and intentionality assessments

Scholars who advocate for a bias view on the Knobe effect retain legal expertise as necessary for giving coherence and fairness to the practice of assessing mens rea. In this view, legal experts themselves, and not laypeople, should decide the assessments of intentionality on criminally relevant outcomes. Jurors composed by laypeople, on the contrary, should not be given the opportunity to assess intentionality. As put by Kneer & Bourgeois – Gironde (2017):

> "Bias theorists (…) might want to advocate the abolishment of juries composed of laypeople: Legal professionals who are well-versed with the law and its requirements, and who have received extensive training, one might suppose, are less susceptible to outcome biases such as the Knobe effect" (p. 141)

The former statement is supported in a general argument sustained by some scholars (mostly philosophers), according to which expertise (the mastery of a discipline's theories, principles and concepts) should predict better judgments on topics under their domain (cf. Huff, Rattner & Sagarin, 1996; Williamson, 2011; Feltz & Cokely, 2010). Williamson (2011), for example, argues that training (philosophical) is still efficacious for thought experiments on judgments as well as for other cognitive tasks. Consistent with the former argument, Feltz & Cokely (2010) found that

philosophically initiated people (by receiving philosophy courses) were less affected by the Knobe effect in comparison to people who were philosophically uninitiated.

Nonetheless, the literature on the expertise argument has not been as straightforward as the argument itself. In fact, some scholars have argued that judgments made by experts may not always 'better' or more reliable than those of the laypeople. Weinberg, Gonnerman, Buckner & Alexander (2010, p. 345), for example, argue that the expertise argument would imply that experts (philosophers in particular) have internalized a vast amount of theories (or concepts, or principles) that would deflect irrelevant factors that may be otherwise taken into account, and this may not be the case. Experts' judgments, they argue, are often better because of "their possession of and mastery with various external aids" (Weinberg et al. 2010, p. 349). Moreover, Schulz, Cokely & Feltz (2011), as well as Schwitzgebel & Cushman (2015), empirically tested the expertise defense argument –*i.e.* that expertise deflects the influence of external factors on moral judgments- in philosophers and found that, contrary to expected, expertise and training do not always lead to "better" judgments: their moral intuitions do not differ significantly from that of laypeople.

Scholars also have diverging views (theoretically and empirically supported) on the expertise argument when it comes to judicial decision-making. Huff, Rattner & Sagarin (1996), for example, state that legal training can help reduce errors of justice and policies in that direction should be implemented. Rachlinski, Guthrie & Wistrich (2011) also found that, contrary to lay people, the hindsight bias does not affect professional judges when assessing for probable cause determinations; that is, judges are able to disregard known outcomes when assessing for probable causes for conducting unwarranted searches. Miller (2018), on the contrary, found that judges' general expertise and specialized expertise does not reduce the influence of gendered bias in their judgments.

Compatible with the empirical research results against the expertise argument, Kneer & Bourgeois – Gironde (2017) empirically showed that legal experts –*i.e.* judges- are not that "better" than laypeople when assessing intentionality, since they are also susceptible to outcome biases. Nevertheless, the study on the severity effect done by Kneer & Bourgeois – Gironde (2017), even though it surveyed judges – i.e. legal experts –, is not conclusive proof that expertise and training

cannot help avoid the outcome biases under study. The former, for the following three reasons that were not addressed by the scholars but this study will address:

a) The area of specialization among surveyed judges varies significantly (from civil law to social law, from criminal law to administrative law) but is not taken into account for the analysis of the findings;

b) The study does not explicitly address whether judges are actually aware or conscious of the concept of intentionality at the foundation criminal law (*i.e.* a concept of intentionality composed by both a cognitive and a volitional element);

c) The study does not account for the impact (if existent) of the awareness on the severity effect. In other words, it does not address whether judges that are aware of the legal concept of intentionality are less susceptible to the severity effect than those who are not.

5. The severity effect on professional judges' and law students' assessments of intentionality

This study will partially replicate Kneer & Bourgeois – Gironde's (2017) survey experiment for testing the severity effect on professional judges in Colombia. Similar to France, in Colombia laypeople juries are almost inexistent and law professionals –*i.e.* judges– hold the monopoly of deciding criminal trials. Moreover, the mental states of intention and knowledge are also invoked in culpability standards (*e.g.* in criminal, civil and administrative law) in such a way that, e.g., intentionality (or *dolo* as technically called) requires a cognitive and volitional element; knowledge of the consequences of an action does not suffice for intentionality to be ascribed. Considering the results of Kneer & Bourgeois – Gironde (2017) – *i.e.* ascriptions of intentionality made by professional judges are impacted by the severity of the outcome, one can then expect professional judges in Colombia to be susceptible to the severity effect. In that sense, my first hypothesis is:

H1: *The severity of the outcome of an action affects the ascription of intentionality made by professional judges.*

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This study will also consider specialized expertise and knowledge as potential tools for deflecting biased assessments. Weinberg, Gonnerman, Buckner & Alexander (2010), e.g., suggest that experts in a particular discipline may not necessarily retain all of the theories, concepts and principles of their discipline and they must sometimes rely on external aids when making judgements related to their discipline. Nevertheless, experts specializing in a certain area of practice within their discipline need not retain all of the theories, concepts and principles of the whole legal discipline, but those who are more relevant for their day-to-day practice. As put by Miller (2018), "It may be the case that different types of expertise play different roles in the reduction of bias in decision-making" (p. 7). In that sense, both the legal area of specialization and the awareness of the legal concept of intentionality might reduce judges' likelihood to ascribe intentionality to outcomes based only on the offender's previous knowledge of such consequences.

Professional judges specializing in areas of the legal practice where the mens rea concept of intentionality is central for determining culpability (and liability at last) are expected to retain such concept on a higher level than those specialized in other areas where it might be of minor importance. In Colombia's legal regime, three major areas of the legal practice where intentionality is central for determining liability are criminal law (art. 22 Criminal Code No 599 of 2000), civil law (art. 63, Civil Code No. 57 of 1887) and administrative law (e.g. Administrative Code No. 1437 of 2011; Disciplinary Unified Code No. 734 of 2002; Fiscal Responsibility Law No. 610 of 2000). Consequently, I expect judges specializing in those areas to be less affected by irrelevant factors when assessing about mens rea. Moreover, even if not specializing in any of the areas of practices mentioned before, one could also expect professional judges aware of the legal concept of intentionality – *i.e.* conscious and retain the knowledge of the legal mens rea of intentionality, to incur in biased assessments of intentionality on a minor extent than those who are not aware of such concept of intentionality. In that sense, my second and third hypotheses are the following:

> **H2:** *Professional judges specializing in criminal, civil and administrative law are less likely to ascribe intentionality on the sole basis of an offender's knowledge of the consequences of his actions, than judges specializing in other areas of the legal practice.*

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H3: *Professional judges aware of the legal concept of intentionality are less likely to ascribe intentionality on the sole basis of an offender's knowledge of the consequences of his actions, than judges that are not aware of the legal concept of intentionality.*

This thesis research will also focus on undergraduate law students from two Dutch universities: Leiden University and Maastricht University. Law students of Dutch universities are of particular interest for the discussions derived from the severity effect study conducted by Kneer & Bourgeois – Gironde (2017). In first place, law students are bound to be legal practitioners, ranging from prosecutors, defense attorneys, denouncers, victims' attorneys and judges. In second place, one could expect the knowledge of the legal concept of intentionality to vary among Law students depending on the courses they have taken and the semester in which they are. Finally, in Dutch law *knowledge* and *intentionality* are also relevant mens rea for distinguishing between culpability standards as negligence (*schuld*) and intent (*opzet*). For intent to be ascribed, both a cognitive and a volitional element must be present, while negligence requires to be aware of a "considerable and unjustifiable risk that the element exists or will result from the act but thinks on unreasonable grounds that the risk will not materialize" (Tak, P., 2008, p. 32).

As with professional judges, one could expect law students from Dutch universities to be affected by the severity of the outcome when ascribing intentionality to criminally relevant conducts. Law students are bound to be legal experts, as actual judges and lawyers are, but they are not expected to produce "better" judgments or assessments of intentionality than the latter. On the other hand, knowing and retaining the legal concept of intentionality might still be an important tool, or guide if preferred, for producing reliable assessments of mens rea. One can expect law students that are aware of the legal concept of intentionality to be less affected by the severity effect. In that sense my fourth and fifth hypothesis are:

H4: *The severity of the outcome of an action impacts the ascription of intentionality made by law students.*

H5: *Law students aware of the legal concept of intentionality are less likely to ascribe intentionality on the sole basis of an offender's knowledge of the consequences of his actions, than law students that are not aware of the legal concept of intentionality.*

EXPERIMENTAL DESIGN AND DATA COLLECTION

The data to test the aforementioned hypotheses was collected through two (2) separate experiments. For **Experiment No. 1**, conducted to test hypotheses 1 to 3, an online survey experiment was setup in the Qualtrics software and later administered to professional judges in Colombia. The judges received the online survey in the Spanish language through a link sent to their institutional e-mail addresses, found in the website of the national Judicial Directory of the Statistic System of the Judicial Branch (http://190.217.24.164/Sierju-Web/app/login) and later confirmed personally. A sample of N = 84 professional judges effectively responded to the survey experiment. For **Experiment No. 2**, conducted to test hypotheses 4 and 5, an online survey experiment was also setup in the Qualtrics software and administered to bachelor students from the Maastricht University and Leiden University law faculties. The students received the online survey in the English language through a link shared by teachers of the corresponding law faculties, through e-mail. A sample of N = 74 Law students effectively responded to the survey experiment; N = 18 of them from Maastricht University and N = 56 of them from Leiden University. Finally, the data collected from both experiments was combined to produce a third joint analysis, which I call **Experiments 1 and 2**.

The type of research design is an experimental between - subjects survey design. Such design is considered appropriate since the research proposed is explanatory, it will test a theoretically driven expectation and evaluate a causal effect (Toshkov, 2016) – i.e. the severity effect on intentionality ascriptions-, and uncover a psychological phenomenon (Visser, Krosnick & Lavrackas, 2000). Moreover, the empirical study conducted by Kneer & Bourgeois – Gironde (2017), which I am partially replicating, also tested the severity effect on professional judges in France through a between – subjects survey experiment design.

6. Survey setup for Experiment No. 1

As similarly done by Kneer & Bourgeois-Gironde (2017), participants were randomly presented with one of four scenarios about a criminal case in which the outcomes of the conduct under consideration varied between 'no negative' outcome, 'somewhat bad', 'bad' and 'very bad' outcome. Moreover, participants were asked to 'judge' the intentionality of the conduct by selecting a value on a 7-point Likert scale and answering an open-ended question, followed by a manipulation check. Later, in order to test whether judges were aware or not of the legal concept of intentionality, participants were asked a close-ended question about the elements of the concept of intentionality. Finally, participants were asked to provide socio-demographic information and their area of specialization.

The experiment to test the first hypothesis (**H1**) –i.e. *the severity of the outcome of an action impacts the ascription of intentionality made by professional judges*– was based on a modified and summarized version of the "21 Angels" criminal case, taken from the jurisprudence of the Colombian Supreme Court of Justice in its Sentence of June 22, 2011, Rad. No. 36734. The original case is as follows:

> On April the 3rd of 2004, during service hours, Reinaldo Blanco was driving an asphalt recycling machine that provided its services to the construction and expansion of a main Avenue in Bogotá, Colombia. Not only did he -the driver- had no expertise on driving the machine but forgot to check its technical conditions before driving it, which were found to be precarious. After initiating its descent on the inclined and multileveled highway, the driver lost control of the machine, which slid, hit a metallic fence and fell on a road 10 meters below it. The machine fell on top a school bus and hit two motorcycles, causing the death of 21 students (the "angels") and an adult, and injuries to 28 more people who were passing through the area of the accident.

To test **H1** I conducted the survey experiment with a treatment variable –i.e. the severity of the outcome- separated into four different conditions of the case scenario: 'no negative' outcome,

'somewhat bad', 'bad' and 'very bad' outcome. The treatment variable was formulated as a vignette in the survey in which the conditions are randomly assigned to the participants. The whole survey was written in Spanish.

Participants first got the following modified description of the "21 Angels" case:

> On April the 3rd of 2004, the construction of an avenue was underway. In order for the construction to keep its pace, one of the bulldozers at the site had to be moved from one of the construction sectors to the other one. After realizing that there were no expert bulldozer drivers in the site, the Contractor decided to drive the machine. Before hopping on it, one of his colleagues approached him and said: "Driving the bulldozer is not that difficult. However, it is not in proper technical conditions for transiting. Driving it can lead to an accident and the subsequent injury or death of the people transiting through this area." The Contractor responds: "I do not care about that. All I care for is getting the bulldozer to the other site so the construction can continue." He then started driving the bulldozer.

After presenting the former case description, one of the four following treatments –in which the outcome of the conduct varied– was randomly assigned to the participants:

> **Treatment 1 ('no negative' outcome condition):** After initiating its descent on the inclined highway, the driver lost control of the bulldozer, broke a metallic fence and fell on a road 10 meters below. Notwithstanding the accident, the driver resulted unharmed and there were no injuries or deaths involved.

> **Treatment 2 ('somewhat bad' outcome condition):** After initiating its descent on the inclined highway, the driver lost control of the bulldozer, broke a metallic fence and fell on a road 10 meters below. The bulldozer hit a car, causing minor injuries to the driver and passenger of the car. The car suffered minor damages, and the driver and passenger of the car recovered fully from their injuries.

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Treatment 3 ('bad' condition): After initiating its descent on the inclined highway, the driver lost control of the bulldozer, broke a metallic fence and fell on a road 10 meters below. The bulldozer hit a car, gravely injuring the driver and the passenger of the car. The car suffered severe damages, and the driver and the passenger of the car never fully recovered from their injuries.

Treatment 4 ('very bad' condition): After initiating its descent on the inclined highway, the driver lost control of the bulldozer, broke a metallic fence and fell on a road 10 meters below. The bulldozer hit a car, killing the driver and passenger of the car. The car was destroyed.

The dependent variable –*i.e.* intentionality ascriptions– was operationalized and measured in the same manner as Kneer & Bourgeois – Gironde (2017): "*On a scale from 1 to 7, where 1 means strongly disagree and 5 means strongly agree, to what extent do you agree or disagree with the following statement: "The driver of the bulldozer intentionally caused the accident*".

The participants also responded the following open-ended question: "*In the scale from 1= 'strongly disagree' to 7= 'strongly agree' with the statement "The driver of the bulldozer intentionally caused the accident", you selected the value of X ('X'). Please explain succinctly the reasons that support your selection.*"

After collecting the responses to the aforementioned questions, a manipulation check was included. Participants were asked the following question related to the treatment condition: "The bulldozer accident resulted in…

    a. … no injured or dead.
    b. … minor injuries to a car driver and a passenger.
    c. … grave injuries to a car driver and a passenger.
    d. … the death of a car driver and a passenger."

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Later on, in order to measure whether participants were aware or not the legal concept of intentionality (**H3)**, participants responded the following multiple-choice question, binary-coded as either 0 (wrong answer) or 1 (right answer): "In Criminal Law, intentionality (dolo) is composed by:

  a. A cognitive element, that is the knowledge of the facts constitutive of a criminal conduct.
  b. A volitional element, that is to want the realization of facts constitutive of a criminal offense.
  c. A cognitive and a volitional element, that is the knowledge of the facts constitutive of a criminal conduct and the desire to bring about such envisioned facts.
  d. None of the described responses.

Some descriptive statistics were included in the survey as participants were asked to provide the following information: age (range), gender (male, female or other), family income (or economic strata), religion (Catholic, Christian, Muslim, Buddhist, Hinduist, etc.), years of experience in the judicial branch and political ideology. The latter control variable, political ideology, was operationalized as a left-right orientation and measured by using an 11-point scale in which '0' meant 'very left', '5' meant 'center' and '10' meant 'very right'. The 11 – point scale on the left-right orientation was selected as the appropriate measure considering Martin Kroh (2007) study that showed that an 11 – point scale generates the highest validity of the left – right data.

Finally, the area of specialization of professional judges, which is relevant for my **H2**, was measured by including the following question "Please indicate in which area (s) of the legal practice you are currently specialized in". A list of possible answers was given, including criminal, labor, administrative, family, procedural, international, commercial, administrative, and civil law, as well as text box for those who selected 'other' as their option. The answers were then binary-coded as either 0 (other specialization: commercial, family, procedural, international, labor and other type of law area) or 1 (criminal, administrative and civil law).

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7. Survey setup for Experiment No. 2

As done with professional judges in Colombia, participants in this experiment – *i.e.* law students - were randomly presented with one of four scenarios about a criminal case in which the outcomes of the conduct under consideration varied from 'no negative' outcome, 'somewhat bad', 'bad' and 'very bad'. They were also asked to 'judge' the intentionality of the conduct by selecting a value on a 7-point Likert scale and answering an open-ended question, followed by a manipulation check. Later, in order to test whether judges endorse or not the legal concept of intentionality, participants were asked a close-ended question about the elements of the concept of intentionality. Finally, participants were asked to provide socio-demographic information.

The experiment to test the fourth hypothesis (**H4**) –i.e. *the severity of the outcome of an action impacts the ascription of intentionality made by law students*– was also based on the modified and summarized version of the "21 Angels" criminal case presented to the professional judges in Colombia. The treatment variable –i.e. the severity of the outcome- was also formulated as a vignette in the survey in which four different conditions were randomly assigned to the participants: 'no negative' outcome, 'somewhat bad', 'bad' and 'very bad' outcome.

Participants first got the following modified description of the "21 Angels" case:

> On April the 3rd of 2004, the construction of an avenue was underway. In order for the construction to keep its pace, one of the bulldozers at the site had to be moved from one of the construction sectors to the other one. After realizing that there were no expert bulldozer drivers in the site, the Contractor decided to drive the machine. Before hopping on it, one of his colleagues approached him and said: "Driving the bulldozer is not that difficult. However, it is not in proper technical conditions for transiting. Driving it can lead to an accident and the subsequent injury or death of the people transiting through this area." The Contractor responds: "I do not care about that. All I care for is getting the bulldozer to the other site so the construction can continue." He then started driving the bulldozer.

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After being presented the former case description, one of the four following treatments was randomly assigned to the participants:

Treatment 1 ('no negative' outcome condition): After initiating its descent on the inclined highway, the driver lost control of the bulldozer, broke a metallic fence and fell on a road 10 meters below. Notwithstanding the accident, the driver resulted unharmed and there were no injuries or deaths involved.

Treatment 2 ('somewhat bad' outcome condition): After initiating its descent on the inclined highway, the driver lost control of the bulldozer, broke a metallic fence and fell on a road 10 meters below. The bulldozer hit a car, causing minor injuries to the driver and passenger of the car. The car suffered minor damages, and the driver and passenger of the car recovered fully from their injuries.

Treatment 3 ('bad' condition): After initiating its descent on the inclined highway, the driver lost control of the bulldozer, broke a metallic fence and fell on a road 10 meters below. The bulldozer hit a car, gravely injuring the driver and the passenger of the car. The car suffered severe damages, and the driver and the passenger of the car never fully recovered from their injuries.

Treatment 4 ('very bad' condition): After initiating its descent on the inclined highway, the driver lost control of the bulldozer, broke a metallic fence and fell on a road 10 meters below. The bulldozer hit a car, killing the driver and passenger of the car. The car was destroyed.

The dependent variable –*i.e.* the intentionality assessment- was operationalized and measured as follows: "*On a scale from 1 to 7, where 1 means strongly disagree and 5 means strongly agree, to what extent do you agree or disagree with the following statement: "The driver of the bulldozer intentionally caused the accident*". The participants also responded the following open-ended question: "*In the scale from 1= 'strongly disagree' to 7= 'strongly agree' with the statement "The*

driver of the bulldozer intentionally caused the accident", you selected the value of X ('X'). Please explain succinctly the reasons that support your selection."

After collecting the responses to the aforementioned questions, a manipulation check was included. Participants were asked the following question related to the treatment condition: "The bulldozer accident resulted in…

    a. … no injured or dead.

    b. … minor injuries to a car driver and a passenger.

    c. … grave injuries to a car driver and a passenger.

    d. … the death of a car driver and a passenger."

Later on, in order to measure whether participants were aware or not of the legal concept of intentionality (**H5**), I asked the participants to respond the following multiple-choice question, binary-coded as either 0 (wrong answer) or 1 (right answer): "In criminal law, intentionality is composed by:

    a. A cognitive element, that is the knowledge of the facts constitutive of a criminal conduct.

    b. A volitional element, that is to want the realization of facts constitutive of a criminal offense.

    c. A cognitive and a volitional element, that is the knowledge of the facts constitutive of a criminal conduct and the desire to bring about such envisioned facts.

    d. None of the described responses."

Some control variables were included in the survey as participants were asked to provide the following information: age (range), gender (male, female or other), family income (or economic strata), religion (Catholic, Christian, Muslim, Buddhist, Hinduist, etc.), semester in the law career and political ideology. The latter control variable was also operationalized as a left-right orientation and measured by using an 11-point scale in which '0' meant 'very left', '5' meant 'center' and '10' meant 'very right'.

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DATA ANALYSIS AND METHODS

8. Experiment No. 1

A sample of N = 83 professional judges from different regions in Colombia responded the survey experiment but only N = 63 completed the whole survey. The sample's age average is 40.84, ranging from 24 to 63 (see **Figure No. 1**), and there were more male participants than female participants (see **Figure No. 2**). The most common category of religion is the Catholic followed by Christian (see **Figure No. 3**), which is not surprising considering that Colombia is a Catholic – majority country. The majority of participants' –*i.e.* 26.4% - familiar income is under $30,000,000 COP, roughly 8,300 EUR (see **Figure No. 4**). Regarding political ideology, judges are located mostly at the center level of the left-right orientation spectrum. Finally, most judges specialize in criminal law (20) followed by administrative law (10) (see **Figure No. 5**) and the average of years working in the judicial branch is 11.32, ranging from 1 to 40.

Figure No. 1: age distribution
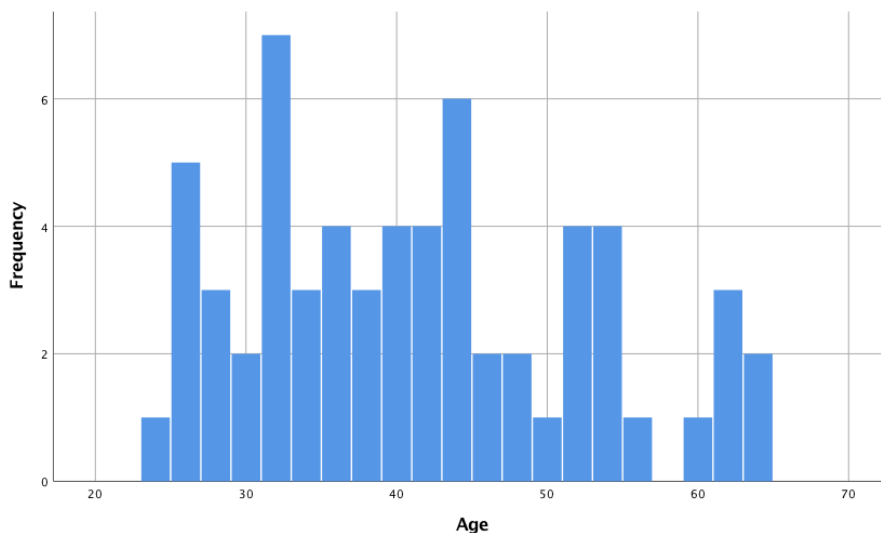
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Figure No. 2: Gender distribution
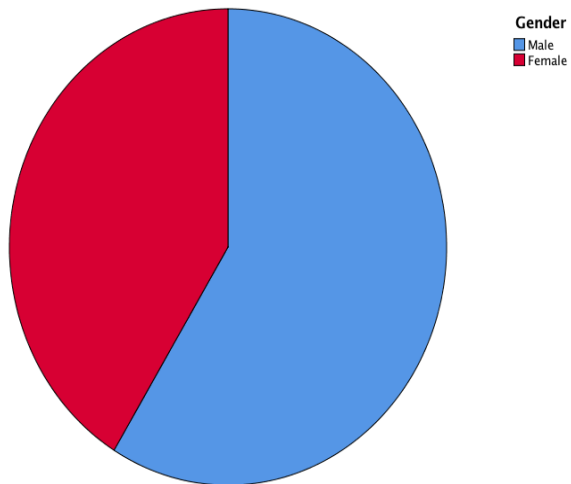
Figure No. 3: Religion distribution
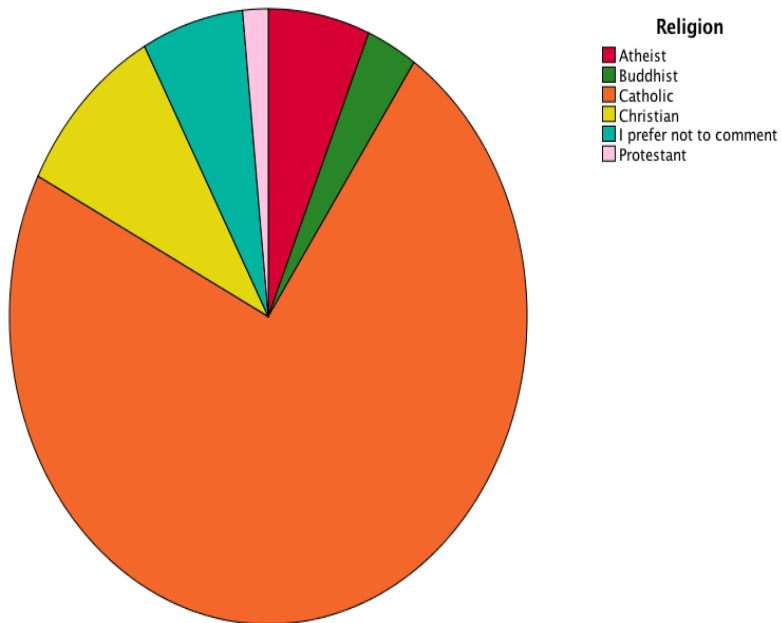
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Figure No. 4: Income distribution
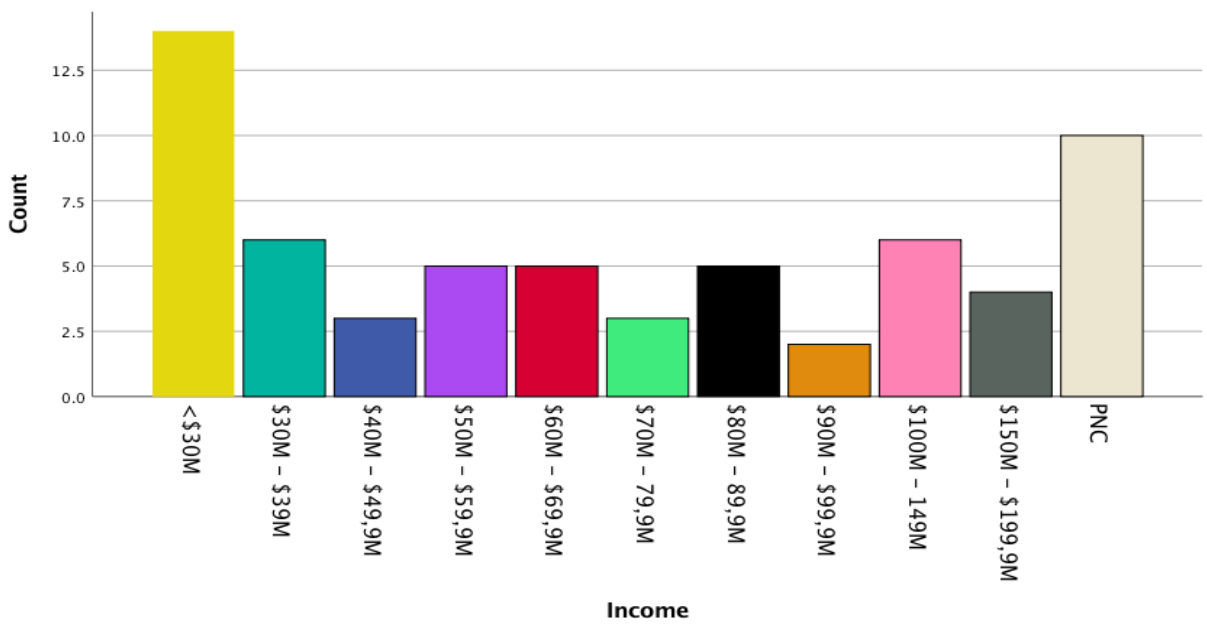
Figure No. 5: political ideology
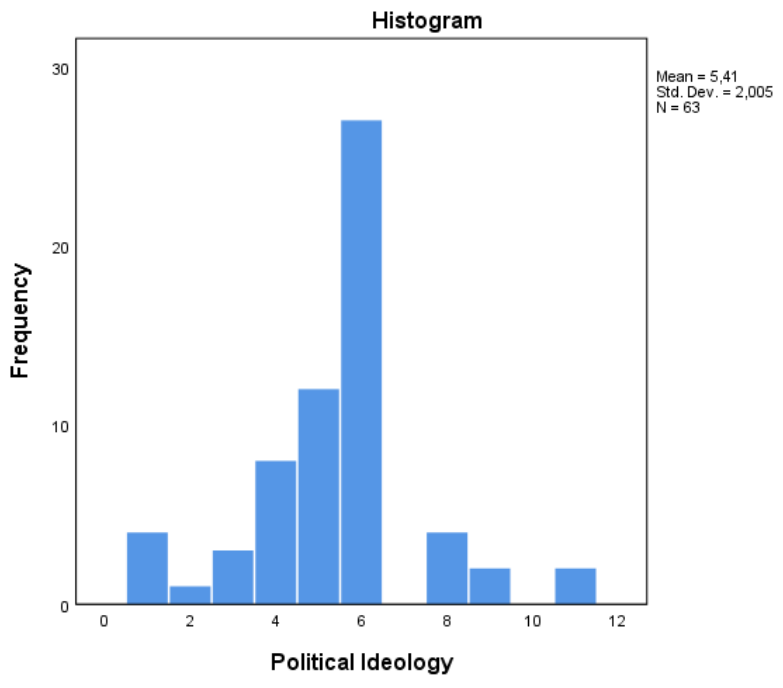
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8.1. Hypothesis No. 1

The first hypothesis (**H1**) – *i.e.* that intentionality ascriptions made by professional judges in Colombia is affected by the severity of the outcome – was tested relying on a close-ended vignette question in which participants had to select, on a 7-point Likert scale, their level of disagreement with the statement that *'The driver of the bulldozer intentionally caused the accident'*.

Table No. 1 shows that the average ascriptions of intentionality for every treatment differ: Treatment 1 – 'No negative outcome' (M: 3,68; SD: 2,58); Treatment 2 – 'Somewhat bad' (M: 3,67; SD: 2,24); Treatment 3 – 'Bad' (M: 4; SD: 2,11); Treatment 4 – 'Very bad' (M: 3,38; SD: 2,20). However, the means (M) of the intentionality ascriptions for every treatment do not differ in an increasing or decreasing fashion. Rather, the mean of Treatment 1 is almost equal to that of Treatment 2 and higher than the mean of Treatment 4, but lower than the mean of Treatment 3; the mean of Treatment 2 is higher than the mean of Treatment 4 but lower than the mean of Treatment 3; the mean of Treatment 3 is higher than all of the means; and, the mean of treatment 4 is lower than all of the means. Moreover, as shown in **Table No. 1**, the variance within all treatments is high (Treatment 1: 6,67; Treatment 2: 5,03; Treatment 3: 4,47; and, Treatment 4,84).

Table No. 1: severity effect initial statistics on judges

Treatment	Mean	N	Std. Deviation	Variance
1	3,68	19	2,583	6,673
2	3,67	21	2,244	5,033
3	4,00	22	2,116	4,476
4	3,38	21	2,202	4,848
Total	3,69	83	2,252	5,071

Considering that after running a normality test –*i.e.* Shapiro-Wilk Test- the data is not normally distributed in any of the treatments (as depicted in **Table No. 2**), I ran a non-parametric test –*i.e.* a Kruskal-Wallis test- to test if the severity of the outcome (operationalized as an increasingly harmful outcome in every treatment scenario) had an effect on intentionality assessments. As depicted in **Table No. 3** and **Table No. 4**, even though the Kruskal-Wallis test shows increasing mean ranks from Treatments 1 to 3 (**T1 M**: 41,39; **T2 M**: 42,45; **T3 M**: 44,70) –and then a lower

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mean for Treatment 4 (M: 39,26), the difference between those mean ranks is not statistically significant at the level of 0.899.

Table No. 2: Shapiro – Wilk normality test

	Treatment	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Agreement Likert	1	,269	19	,001	,795	19	,001
	2	,200	21	,028	,867	21	,008
	3	,273	22	,000	,863	22	,006
	4	,188	21	,052	,862	21	,007

The former results indicate that I cannot confirm our **H1** since the means for each treatment do not differ significantly. It is not possible to state that the severity of the outcome has a significant effect on intentionality ascriptions made by Colombian judges. If the difference between means were statistically significant, however, I could have asserted that increasingly harmful outcomes influence assessments of intentionality but not as initially thought and found by Kneer & Bourgeois – Gironde (2017). Judges are more likely to ascribe intentionality on the basis of mere foreknowledge with increasingly harmful outcomes but when results might be "too severe", e.g. when death(s) are involved, the likeliness to ascribe intentionality then reduces.

One might argue, according to the former results, that judges are affected by the severity effect up to a certain degree of harm (what they might consider "too severe" outcomes); once that certain degree of harm has been reached, they become more careful when realizing culpability assessments and are thus less susceptible to the severity effect. Another way to interpret it would be that when the outcome is harmful against a particular legally protected good (*e.g.* life in its biological dimension) or falls under the description of certain crimes (*e.g.* homicide), judges are more careful in their culpability assessments and thus are less susceptible to the severity effect. In any of the former cases, judges "carefulness" might be accompanied by a certain degree of awareness of the negative costs of wrongfully ascribing intentionality for conducts that are sanctioned considerably harder than others (e.g. homicide vs personal injuries).

Table No. 3: Kruskal-Wallis test mean ranks

	Treatment	N	Mean Rank
Agreement Likert	1	19	41,39
	2	21	42,45
	3	22	44,70
	4	21	39,26
	Total	83	

Table No. 4: Kruskal-Wallis statistics

	Agreement Likert
Kruskal-Wallis H	,587
df	3
Asymp. Sig.	,899

8.2. Hypotheses No. 2 and No. 3

The second (**H2**) and third hypothesis (**H3**) were tested relying on two questions. For **H2** I relied on the question about the area of specialization of the professional judges, and the responses were then binary coded as either 0 (other specialization: commercial, constitutional, family, procedural, international, labor, and other type of law) or 1 (criminal, administrative and civil law). For **H3** I relied on a close-ended question in which participants had to choose between four different answers regarding the elements that compose the legal concept of intentionally, and the responses were then binary coded as either 0 (wrong concept) or 1 (right concept of intentionality).

In **Table No. 5**, contrary to the prediction in **H2**, the average ascriptions of intentionality for the group 1 - 'criminal, administrative and civil law specialization' exceeds (M: 4,03; SD: 2,409) the average intentionality ascription of the 0 - 'other specialization' group (M: 3,69; SD: 2,187). Moreover, the variance within all treatments is considerably high (0M: 4,782; 1M: 5,805).

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Table No. 5: descriptive statistics – area of specialization and intentionality ascriptions:

Specialisation binary	Mean	N	Std. Deviation	Variance
0	3,69	26	2,187	4,782
1	4,03	37	2,409	5,805
Total	3,89	63	2,308	5,326

In **Table No. 6**, contrary to the prediction in **H3**, the average ascriptions of intentionality for the group of 'aware of the concept of intentionality' exceeds (M: 4,02; SD: 2,329) the average intentionality ascription of the 'not aware of the legal concept of intentionality (M: 3,30; SD: 2,263). Moreover, the variance within all treatments is high (0M: 5,122; 1M: 5,426).

Table No. 6: descriptive statistics – awareness of the legal concept of intentionality

Q1	Mean	N	Std. Deviation	Variance
0	3,30	10	2,263	5,122
1	4,02	55	2,329	5,426
Total	3,91	65	2,317	5,366

After running a normality test –*i.e.* Shapiro-Wilk Test- I realized that the data is not normally distributed in any of the groups (see below **Table No. 7** and **Table No. 8**), and so I ran a nonparametric test –*i.e.* a Mann-Whitney U- to test if the area of specialization and being aware of the concept of intentionality had an effect on intentionality ascriptions[1].

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[1]The Mann-Whitney tests that were ran for testing **H2** and **H3** only checked for the difference of the mean ranks between groups **1 - 'criminal, administrative and civil law specialization**' and **0 – 'other specializations',** and the mean ranks between groups **0 - 'wrong concept of intentionality'** and **1 – 'right concept of intentionality'**, respectively. Ideally, a non-parametric test that checks for interaction effects between different independent variables should have been run to test whether the variables of specialization and awareness of the legal concept of intentionality moderate the severity effect. Nevertheless, running the initial Mann-Whitney independently on each hypothesized moderating variable gives a proxy on whether those hypothesized variables (*i.e.* specialization and awareness of the legal concept of intentionality) reduce the likeliness to ascribe intentionality on the basis of foreknowledge, considering that in all of the treatments the only purported mental state is foreknowledge of the harmful outcome and that there is a statistically not significant difference between the means of all severity treatments. Furthermore, running a non-parametric test that checks for interaction effects of different independent variables supposes a difficulty that is beyond my actual knowledge on statistical analysis.

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Table No. 7: normality tests for data on the area of specialization variable

	Specialisation binary	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Agreement Likert	0	,187	26	,020	,879	26	,006
	1	,170	37	,008	,844	37	,000

Table No. 8: normality test for data on the awareness of the legal concept of intentionality

	Q1	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Agreement Likert	0	,253	10	,070	,856	10	,068
	1	,195	53	,000	,856	53	,000

Regarding **H2,** as depicted in **Table No. 9** and **Table No. 10**, the Mann-Whitney test shows increasing mean ranks between both groups (0M: 30:52; 1M: 33,04), but the difference between those mean ranks is not statistically significant at the level of 0.584. In other words, I cannot confirm our **H2** since the means for each group differ on an increasing fashion (instead of decreasing as expected) and the difference is not statistically significant. What is worse, if results were statistically significant I could have asserted that judges specialized in those three legal areas of practice are more likely to ascribe intentionality on the basis of mere foreknowledge.

The statistically not significant difference between the two groups of specializations (criminal, administrative or civil law v. others) may suggest two things. First, specializations may still include much knowledge that lawyers are not always able to retain, internalize and apply when assessing for culpability in thought experiments. Put differently, the different areas of legal practice in which judges specialize include a vast amount of concepts, theories, principles and information. Legal professionals specializing in any of those areas may not be capable of retaining and readily applying all of this when presented with experiments in which they face decisions (*e.g.* assessing intentionality) that require the application of a very specific concept within that universe of knowledge. Second, law specializations may be the kind education focused on teaching legal professionals on efficiently and effectively using external aids -e.g. jurisprudence and legal codes- for taking on issues circumscribed to specific areas of legal practice, rather than internalizing and learning by heart the concepts, theories and information. When presented to thought experiments

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judges may face more difficulties for 'correctly' assessing culpability than when presented to real life situations, since in the former they have limited time and access to external aids.

Table No. 9: Mann-Whitney test mean ranks

	Specialisation binary	N	Mean Rank	Sum of Ranks
Agreement Likert	0	26	30,52	793,50
	1	37	33,04	1222,50
	Total	63		

Table No. 10: Mann-Whitney statistics

	Agreement Likert
Mann-Whitney U	442,500
Wilcoxon W	793,500
Z	-,547
Asymp. Sig. (2-tailed)	,584

Regarding **H3,** as depicted in **Table No. 11** and **Table No. 12** the Mann-Whitney test shows increasing mean ranks between both groups (0M: 28,75; 1M: 33,77), but the difference between those mean ranks is not statistically significant at the level of 0.432. In other words, I cannot confirm our **H3** since the means for each group differ on an increasing fashion (instead of decreasing as expected) and the difference is statistically not significant: judges aware of the legal concept of intentionality are not affected by the severity effect differently than those who are not aware of the legal concept of intentionality.

Table No. 11: Mann-Whitney test mean ranks

	Awareness LCO	N	Mean Rank	Sum of Ranks
Agreement Likert	0	10	28,75	287,50
	1	55	33,77	1857,50
	Total	65		

Table No. 12: Man-Whitney statistics

	Agreement Likert
Mann-Whitney U	232,500
Wilcoxon W	287,500
Z	-,786
Asymp. Sig. (2-tailed)	,432

The statistically not significant result could be due to the fact that the close-ended question of the concept of intentionality is more proximate to measure judges' awareness and not their endorsement and internalization of the legal concept of intentionality, so it does not make much of a difference when assessing for intentionality in thought experiments. Furthermore, if the difference between the means was statistically significant I could have asserted that, contrary to the expectation, judges aware of the legal concept of intentionality are more susceptible to the severity effect.

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9. Experiment No. 2

A sample of N = 68 law students from Maastricht and Leiden University responded the survey experiment but only N = 59 completed the whole survey[2]. The sample's (respondents of the whole survey) age average is 21 years, ranging from 18 to 26 (see **Figure No. 6**), and there were more female (68.5%) than male participants (31.5) (see **Figure No. 7**). The most common category of religion is the Non-religious followed by Protestant (see **Figure No. 8**), and most participants' familiar income is either between €50,000 and €59,999 or over €150.000 (see **Figure No. 9**). Regarding political ideology, the law students are located mostly at the center-left side of the left-right orientation spectrum (see **Figure No. 10**).

Figure No. 6: age distribution - students

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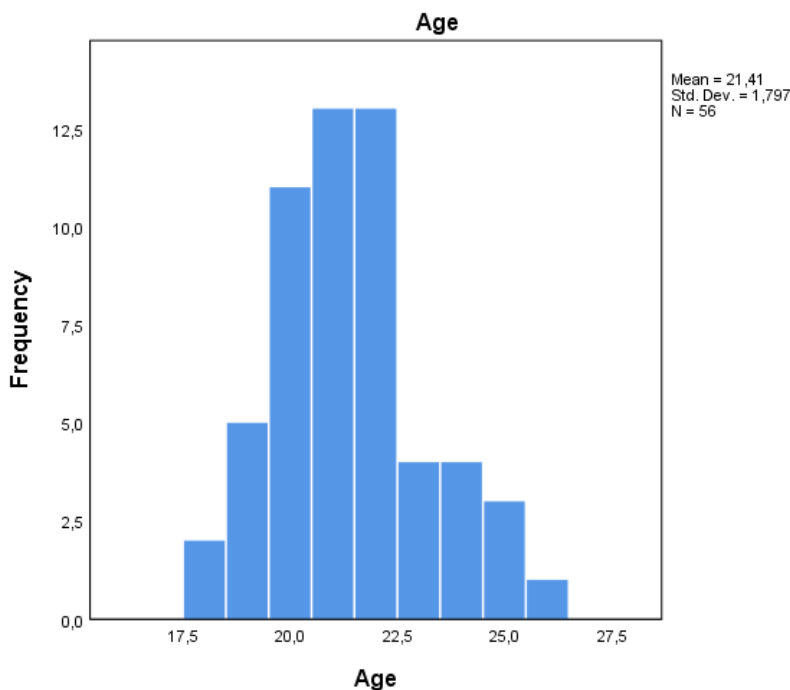
[2]Data collected on both Leiden and Maastricht students was combined into a single dataset considering that they are both part of a same larger population – i.e. law students of Dutch universities, the data collected refers to the same variables and descriptive statistics, and the experiment presented to both samples was the same.

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Figure No. 7: gender - students

Gender

■ Male
■ Female
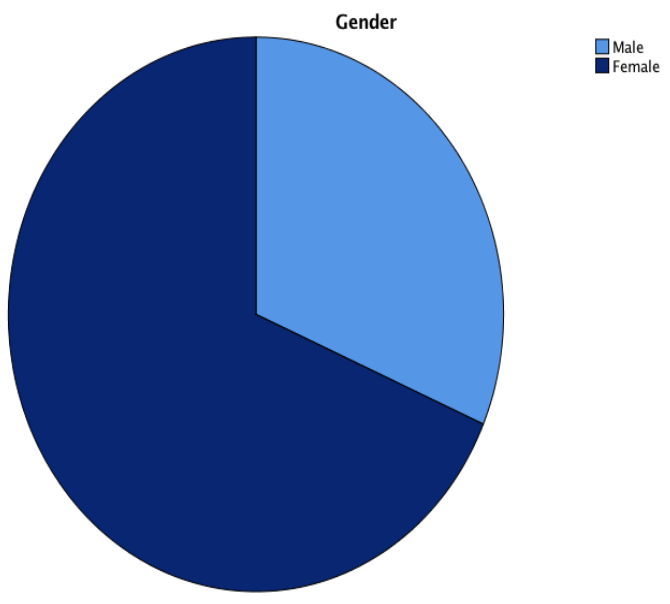
Figure No. 8: religion - students

Religion

■ Buddhist
■ Catholic
■ Christian
■ Hinduist
■ Jewish
■ Muslim
■ Non – religious
■ Protestant
■ PNC
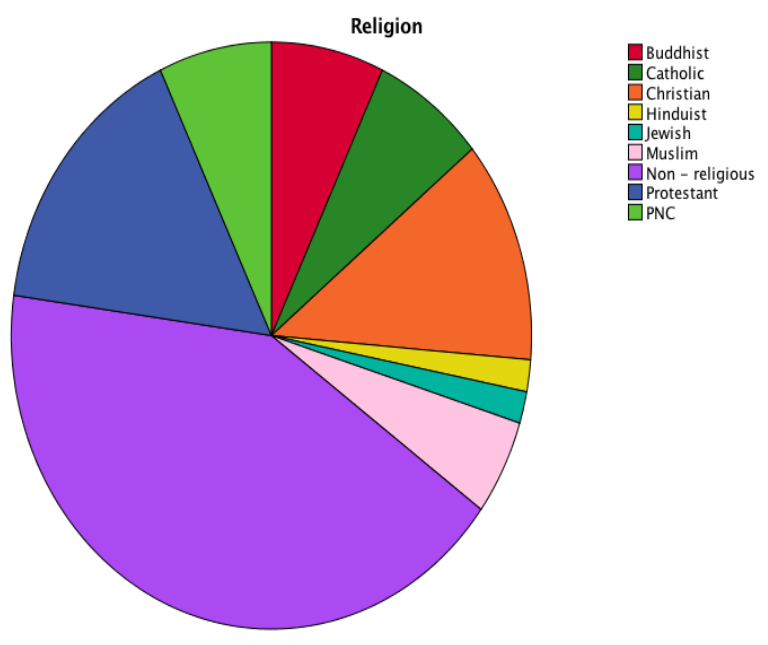
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Figure No. 9: annual familiar income - students
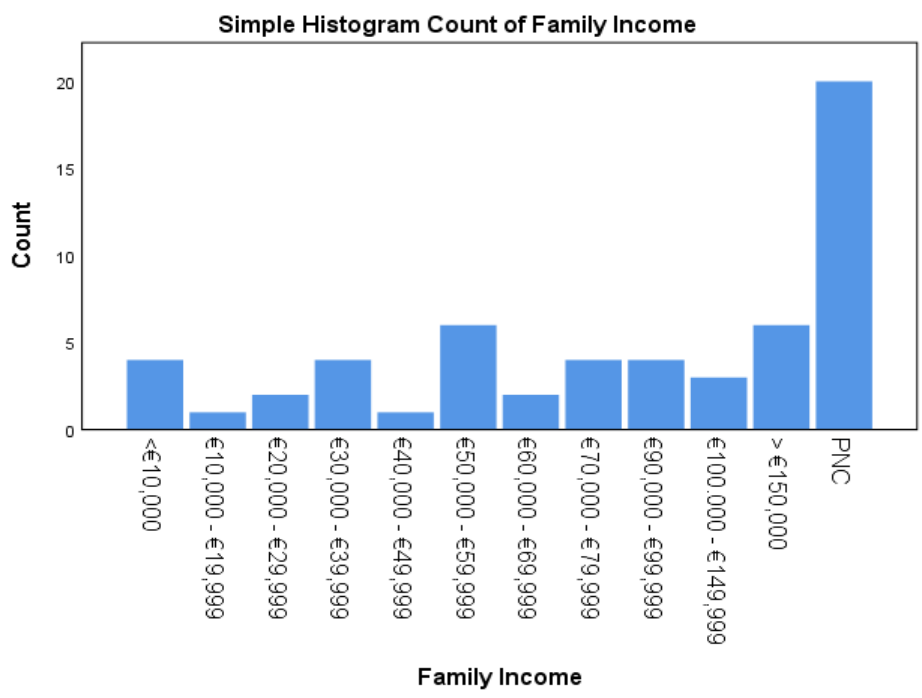
Figure No. 10: left-right orientation - students
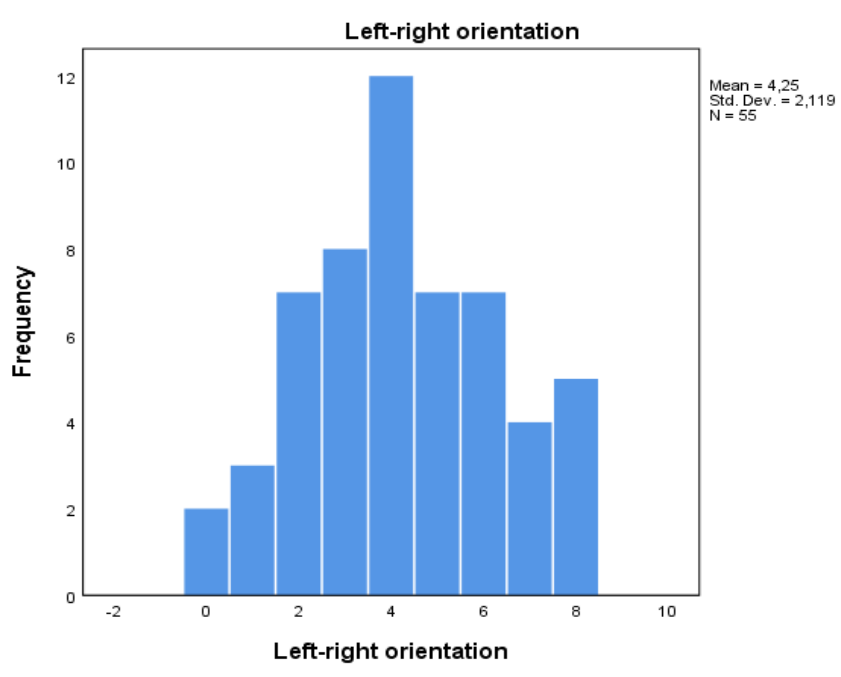
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9.1. Hypothesis No. 4

The fourth hypothesis (**H4**) – *i.e.* that intentionality ascriptions made by law students in The Netherlands is affected by the severity of the outcome – was tested relying on one close-ended vignette question in which participants had to select, on a 7-point Likert scale, their level of disagreement with the statement that *'The driver of the bulldozer intentionally caused the accident'*. In **Table No. 13**, the average ascriptions of intentionality for every treatment differ: Treatment 1 – 'No negative outcome' (M: 4,65; SD: 1,618); Treatment 2 – 'Somewhat bad' (M: 4,29; SD: 2,02); Treatment 3 – 'Bad' (M: 4,00; SD: 1,96); Treatment 4 – 'Very bad' (M: 4,28; SD: 1,56). However, the means (M) of the intentionality ascriptions for every treatment do not differ in a linear increasing or decreasing fashion. Rather, the mean of Treatment 1 is higher to that of Treatments 2 and 3, but lower than the mean of Treatment 4; the mean of Treatment 2 is higher than the mean of Treatment 3, lower than the mean of Treatment 1 and not different than that of Treatment 4; the mean of Treatment 3 is lower than all of the means; and, the mean of treatment 4 is higher than the mean of Treatment 3, not different than the mean of Treatment 2 and lower than the mean of Treatment 1.

Table No. 13: descriptive statistics

Treatment	Mean	N	Std. Deviation	Variance
1	4,65	17	1,618	2,618
2	4,29	17	2,024	4,096
3	4,00	16	1,966	3,867
4	4,28	18	1,565	2,448
Total	4,31	68	1,773	3,142

Considering that after running a normality test –*i.e.* Shapiro-Wilk Test- the data is not normally distributed in 3 out of the 4 treatments (see **Table No. 14**), I ran a non-parametric test – *i.e.* a Kruskal-Wallis test - to test if the severity of the outcome had an effect on intentionality. As can be observed in **Table No. 15** and **Table No. 16**, the Kruskal-Wallis test shows decreasing mean ranks from Treatments 1 to 3 (T1 M: 37,15; T2 M: 35,91; T3 M: 31,53), and a returning mean rank

for Treatment 4 (M: 39,60). Nevertheless, the difference between those mean ranks is not statistically significant at the level of 0.835.

Table No. 14: normality tests

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Treatment	Statistic	df	Sig.	Statistic	df	Sig.
Agreement likert	1	,292	17	,000	,862	17	,016
	2	,271	17	,002	,829	17	,005
	3	,257	16	,006	,898	16	,075
	4	,289	18	,000	,869	18	,017

Table No. 15: Kruskal-Wallis mean ranks

	Treatment	N	Mean Rank
Agreement likert	1	17	37,15
	2	17	35,91
	3	16	31,53
	4	18	33,31
	Total	68	

Table No. 16: Kruskal-Wallis Statistics

	Agreement likert
Kruskal-Wallis H	,861
df	3
Asymp. Sig.	,835

The former results indicate that I cannot confirm our **H4** since the means for each treatment do not differ significantly; it is not possible to state that the severity of the outcome has an effect on intentionality ascriptions made by law students in The Netherlands. If the difference between means was statistically significant I could have asserted that the severity of the outcome influence assessments of intentionality but on a fashion that differs and opposes the hypothesized one. Students are less likely to ascribe intentionality on the basis of mere foreknowledge with increasingly harmful outcomes but, at a certain degree of harm ('very bad' outcome), they start becoming more prone to ascribe intentionality on the basis of mere foreknowledge of the outcome. The severity effect in students would then be opposed to the theoretical expectation since the average of intentionality ascriptions decrease with increasing harmful outcomes, instead of increasing; and, as for judges, it would have a non-linear nature.

In the hypothetical case that the differences between means were statistically significant, one might argue that law students are increasingly careful in assessing intentionality with increasing harmful

outcomes, so that *knowledge* is less likely to suffice for ascribing intentionality if the outcome under consideration becomes more and more harmful. However, this would be true up to a certain degree of harm: "very bad" outcomes. Once the outcome under consideration is 'very bad', students start becoming less careful when doing culpability assessments and thus become somewhat more susceptible to the severity effect. Moreover, it could also be the case that when the outcome involves a harmful affection to a specific legally protected good (*e.g.* life in its biological dimension) or certain crimes (*e.g.* homicide), students– as opposed to judges- are less careful and more susceptible to the severity effect.

9.2.Hypothesis No. 5

The fifth hypothesis (**H5**) was tested relying on one close-ended question in which participants had to choose between four different answers regarding the elements that compose the legal concept of intentionally, and the responses were then binary coded as either 0 (wrong concept) or 1 (right concept of intentionality). In **Table No. 17**, as predicted in **H5** the average ascriptions of intentionality for the group of 'aware of the concept of intentionality' (M: 3,92; SD: 1,738) is lower than the average intentionality ascription of the 'not aware of the legal concept of intentionality (M: 4,94; SD: 2,263).

Table No. 17: descriptive statistics – awareness of the legal concept of intentionality

Q1	Mean	N	Std. Deviation	Variance
0	4,94	18	1,798	3,232
1	3,92	39	1,738	3,020
Total	4,25	57	1,806	3,260

Considering that the data is not normally distributed in any of the groups (see below **Table No. 18**) I ran a nonparametric test –*i.e.* a Mann-Whitney U test- to test if being aware of the concept of intentionality had an effect on intentionality ascriptions[3]. As observed in **Table No. 19** and

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[3]The Mann-Whitney tests that were ran for testing **H5** (and **H3)** only checked for the difference of the mean ranks between groups **0 - 'wrong legal concept of intentionality'** and**1 – 'right legal concept of intentionality'**. Ideally, a non-parametric test that checks for interaction effects between different independent variables should have been run to test whether the variable 'awareness of the legal concept of intentionality' moderates the severity effect. Nevertheless, running the initial Mann-Whitney independently on the hypothesized moderating variable (*i.e.*

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Table No. 20, the Mann-Whitney test shows different mean ranks between the group 0 – 'wrong legal concept of intentionality' (M: 36,14) and the group 1 - 'right legal concept of intentionality' (M: 25,71), and such difference is statistically significant at the 0,024 level. Following the guidelines provided by Fritz, Morris, Richler & Gauthier (2012), the size of the effect ($\eta 2$) is 0.091. I can then confirm **H5** (*i.e. Law students aware of the legal concept of intentionality are less likely to ascribe intentionality on the sole basis of an offender's knowledge of the consequences of his actions, than law students that are not aware of the legal concept of intentionality*) since the average intentionality ascription level for students that are aware of the legal concept of intentionality is significantly lower than the average intentionality ascription level of those students that are not aware of the legal concept of intentionality. Being aware of the legal concept of intentionality then makes law students less prone to ascribe intentionality on the basis of mere knowledge.

Table No. 18: normality tests

	Q1	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Agreement likert	0	,290	18	,000	,744	18	,000
	1	,219	39	,000	,904	39	,003

Table No. 19:   Mann-Whitney mean ranks

	Q1	N	Mean Rank	Sum of Ranks
Agreement likert	0	18	36,14	650,50
	1	39	25,71	1002,50
	Total	57		

Table No. 20: M-W statistics

	Agreement likert
Mann-Whitney U	222,500
Wilcoxon W	1002,500
Z	-2,260
Asymp. Sig. (2-tailed)	,024

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awareness of the legal concept of intentionality) gives a proxy on whether it reduces the likeliness to ascribe intentionality on the basis of foreknowledge, considering that in all of the treatments the only purported mental state is foreknowledge of the harmful outcome and that there is a statistically not significant difference between the means of all severity treatments. Furthermore, running a non-parametric test that checks for interaction effects of different independent variables supposes a difficulty that is beyond my actual knowledge on statistical analysis.

10. Experiments 1 and 2

In this section I combine both samples of our relevant populations –*i.e.* judges and law students – for a final sample of N = 152 participants. N = 68 of those participants are law students from Maastricht and Leiden Universities while N = 84 are professional judges in Colombia. The size of the samples assigned to every group is almost equal. The means between the treatments differ: Treatment 1 – 'No negative outcome' (M: 4,22; SD: 2,22); Treatment 2 – 'Somewhat bad' (M: 3,95; SD: 2,14); Treatment 3 – 'Bad' (M: 4,00; SD: 2,02); Treatment 4 – 'Very bad' (M: 3,79; SD: 1,96) (see below **Table No. 21**).

Table No. 21: descriptive statistics

Treatment	Mean	N	Std. Deviation	Variance
1	4,22	37	2,225	4,952
2	3,95	38	2,143	4,592
3	4,00	38	2,027	4,108
4	3,79	39	1,963	3,852
Total	3,99	152	2,075	4,304

Table No. 22: normality test

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Treatment	Statistic	df	Sig.	Statistic	df	Sig.
Agreement Likert	1	,232	37	,000	,857	37	,000
	2	,213	38	,000	,874	38	,001
	3	,268	38	,000	,871	38	,000
	4	,192	39	,001	,901	39	,002

Nevertheless, the data is not normally distributed (see **Table No. 22**) so I ran a nonparametric Kruskal-Wallis test to check for the difference between treatments and if they were significant. As seen in **Table No. 23** and **Table No. 24**, the Kruskal-Wallis test shows decreasing mean ranks from Treatments 1 to 4 (T1 M: 80,61; T2 M: 76,87; T3 M: 76; &T4 M: 72,50), but the difference between those mean ranks is statistically not significant at the level of 0.880. In that sense, I cannot confirm that judges and law students altogether are susceptible to the severity effect. Moreover, if

results were statistically significant, I would have to assert that the severity effect operates in the opposite direction of that theoretically thought; with increasingly harmful outcomes, judges and students are less likely to ascribe intentionality based on mere *knowledge*.

Table No. 23: Kruskal-Wallis mean ranks

	Treatment	N	Mean Rank
Agreement Likert	1	37	80,61
	2	38	76,87
	3	38	76,24
	4	39	72,50
	Total	152	

Table No. 24: K-W statistics

	Agreement Likert
Kruskal-Wallis H	,669
df	3
Asymp. Sig.	,880

Considering that the datasets combine both judges and law students, I compared both populations' level of intentionality ascriptions for all of the treatments in order to check whether there were significant differences between them. In **Table No. 26** it can be observed that there is no statistically significant difference between judges' and students' level of intentionality ascriptions. However, as shown in **Table No. 25**, judges were less prone ascribe intentionality on the basis of mere foreknowledge than students, which could be understood as if judges assess intentionality more accordingly to the legal standards.

Table No. 25: Mann-Whitney mean ranks

	Participant type	N	Mean Rank	Sum of Ranks
Agreement Likert	0	68	82,43	5605,50
	1	84	71,70	6022,50
	Total	152		

Table No. 26: Mann-Whitney statistics

	Agreement Likert
Mann-Whitney U	2452,500
Wilcoxon W	6022,500
Z	-1,519
Asymp. Sig. (2-tailed)	,129

DISCUSSION, CONCLUSION AND RECOMMENDATIONS FOR FURTHER RESEARCH

11. Professional judges

The findings described in the first part of the Data Analysis chapter (**Experiment No.1**) show that the severity effect cannot be confirmed to exist in Colombian professional judges' intentionality assessments as initially proposed by Kneer & Bourgeois – Gironde (2017). There appears to be an increasing level of intentionality ascription as the outcome becomes more severe from T1 - 'no negative outcome' to T3 - 'bad outcome', and in this case one could have argued that there is severity effect affecting intentionality ascriptions and that, as stated by Kneer & Bourgeois – Gironde (2017), the Knobe effect only captures two points of a broader phenomenon. However, not only is the difference between the means statistically not significant but the level of intentionality ascription for the 'very bad outcome' treatment is lower than all of the former treatments. The latter indicates that the severity effect would have a non-linear nature: at a certain magnitude of the 'harmful' outcome, judges are less prone to ascribe intentionality[4].

Notwithstanding the statistically not significant results, some judges may still be operating with a significantly different concept of intentionality from that at the foundation of criminal law. As described in the Data analysis section, the variance within treatments is considerably high (Variance T1: 6,673; T2: 5,033 T3: 4,476; & T4: 4,848), meaning that the individual responses given by the participants are not located near the mean of all of the responses. Moreover, **Figure No. 11** shows that in all of the conditions (from 1- 'no negative outcome' to 2 – 'very bad' outcome) the respondents have strongly divided levels of agreement with the statement that the alleged offender intentionally caused a harmful outcome. Judges, this suggests, assess intentionality to harmful outcomes unequally; knowledge of the outcome suffices for intentionality

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[4] The non-linear nature of the severity effect can be interpreted in two different ways. First, when presented with cases where outcomes reach a degrees of harm deemed as 'very bad' judges become more careful when realizing culpability assessments. Second, when the outcome under consideration affects a specific legally protected good (*e.g.* life, health, public morality, etc.) or falls under the description of certain crimes, judges become more careful in their culpability assessments. It is worth suggesting that judges "carefulness" might be accompanied by a certain degree of awareness of the negative costs of wrongfully ascribing intentionality for conducts that are sanctioned considerably harder than others (e.g. homicide vs personal injuries).

to be ascribed for some judges, while for others the mens rea requires the presence of an additional element or elements (one supposes volition). It is interesting to note that, however, all of the means for intentionality ascriptions of the different treatments are situated on the disagreement side of the Likert scale (M1, M2, M3, & M4 <4), which would have supported initially the idea that on average judges operate with the legal concept of intentionality when assessing for culpability.

Hypotheses 2 and **3** could also not be confirmed: specializing in certain areas of the legal practice and being aware of the legal concept of intentionality has a statistically not significant effect on judges' intentionality assessments. On the contrary, even if the differences between the means in each type of comparison are statistically not significant, the mentioned variables seemed to have the opposite effect. Judges specialized in criminal, administrative and civil law, and judges aware of the legal concept of intentionality were more prone to ascribe intentionality when counting for all the scenarios, even slightly positioning the intentionality ascription mean on the agreement side of the Likert scale (M: 4,02 for relevant specializations and M: 4,03 for awareness of the legal concept of intentionality).

Figure No. 11: Likert scale responses
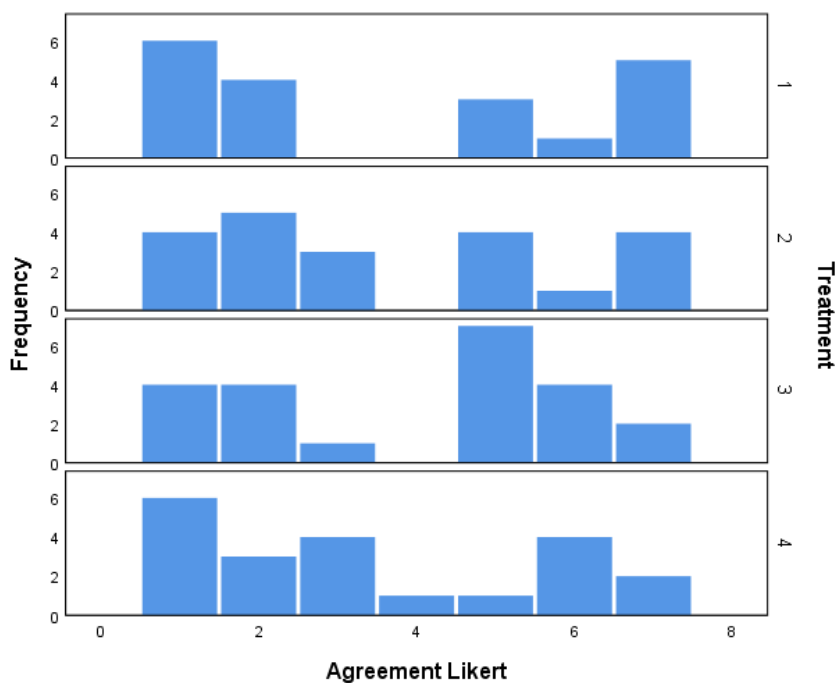
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Notwithstanding the statistically not significant results of the experiment for testing the first three hypotheses (**H1**, **H2**, and **H3**), there are reasons to worry about the criminal justice system. First, there is an apparently strong division between judges regarding the concept of intentionality they operate with. As observed, even though the means of the intentionality ascriptions made by judges in every treatment are situated in the disagreement-with-ascribing-intentionality side of the Likert scale, the variance within every treatment is high. Such variance suggests that in practice judges do not operate standardly with the legal concept of intentionality, a mens rea in which knowledge does not suffice and must be, on the contrary, accompanied by a volitional element (*i.e.* the desire to bring about envisioned consequences).

The disparity between judges regarding the concept of intentionality they operate with is highly problematic[5]. Some outcomes under consideration of the judicial system may be judged to be brought about intentionally without enough evidence of such mental state, leading to wrongful convictions or excessive sanctions against the alleged offenders. Meanwhile, in other similar cases (in terms of the circumstantial evidence regarding the mental state of the alleged offender at the moment of the crime) judges may not be willing to ascribe intentionality on the basis of mere knowledge. The justice system could then be regarded as functioning on an unfair and unequal manner: unfair for those wrongfully convicted, and unequal to the whole population of citizens that are brought into the justice system.

Second, judges specialized in those areas of the legal practices where the concept of intentionality holds more practical relevance (criminal, administrative and civil law) – and one could expect to judge 'better', seem to be more prone to ascribe intentionality on the basis of mere *knowledge* of the outcome. This puts pressure on legal education, considering that specializations do not prove to be helpful for lawyers to internalize and apply the correct concepts when presented to

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[5] In the sample of responding judges 38 of them partially agreed, agreed and totally agreed with the statement "the driver of the bulldozer intentionally caused the accident". From those 38, 32 responded the open-ended question, giving reasons for their selection on the 7-point Likert scale. When checking for the answers given by the participants to the open-ended question, I notice that, e.g., 53% of them mentioned 'knowledge of the outcome' and/or 'risk taking' as reasons for ascribing intentionality, while 28% of them mentioned '*dolus eventualis*' and/or 'leaving the realization of the outcome to chance'. None of them mentioned volition, purpose or desire as necessary for ascribing intentionality. This suggests that, indeed, the majority of the judges that situated their responses on the agreement side of the Likert scale operate with a concept of intentionality different from that at the foundation of criminal law. (See Appendix No. 5)

assessments of *mens rea*. Specializations may be failing to provide substantive knowledge, and standard understanding and application of *mens rea* concepts to judges specializing in law areas were such concepts are central. Moreover, it also puts pressure on the design of the criminal justice system since the merit system and requirements for becoming a judge may not be giving the expected results.

Finally, being aware of the legal concept of intentionality may not be of much help for assessing culpability respecting the concepts and standards required by law. On the contrary, there is an apparent opposite effect of such awareness on assessments of intentionality: those judges aware of the concept of intentionality were more prone to ascribe intentionality on the sole basis of *knowledge*. The reliability on judges for internalizing and applying the different mens rea in practice is thus put to question: judges' awareness of the legal concept of intentionality does not make them less prone to ascribing such intentionality in a wrongful and illegal manner. In that sense, it is fair to wonder if judges' ability to effectively and efficiently use external aids (*e.g.* codes and jurisprudence) for judging and assessing culpability is reliable, and whether the availability of such external aids actually makes them less prone to operate with a distorted concept of intentionality. If that is the case, we should worry less about the severity effect and its implications for the criminal justice system since judges and law professionals realize their judgments supported on external aids (or at least one would expect so) when presented to real life cases.

12. Law students

The findings of the second experiment show that the severity of the outcome does not affect intentionality ascriptions made by law students as proposed by Kneer & Bourgeois – Gironde (2017). The average level of intentionality ascriptions in every treatment does not differ significantly, meaning that increasingly harmful outcomes do not make a difference on students' assessments of intentionality. Moreover, if one were to consider the difference between the average levels of intentionality ascriptions as statistically significant, the severity effect operates in the opposite direction of that hypothesized and it has a non-linear nature. The levels of intentionality ascriptions made by students seem to decrease with increasingly harmful outcomes but when the

outcome is very severe, students become slightly more prone to ascribe intentionality based on mere *knowledge.*

On the other hand, law students' awareness of the legal concept of intentionality does appear to have a statistically significant effect on their intentionality ascriptions. Students that are not aware of the legal concept of intentionality are more likely to ascribe intentionality based on mere *knowledge* of the consequences, while students aware of such concept are less likely to ascribe intentionality based on mere *foreknowledge* of the consequences. The former suggests that teaching students the right concept of intentionality is valuable for producing better judgments of culpability, thus making legal education an important tool for reducing biases causing miscarriages of justice. This would then lend support to Huff, Rattner & Sagarin's (1996) statement according to which legal training is effective for reducing errors of justice.

The former findings are somehow more encouraging than those related to professional judges. Increasing harmful outcomes do not lead to increasing levels of intentionality ascriptions based on mere *foreknowledge*. On the contrary, students are less prone to ascribe intentionality with increasing harmful outcomes. Moreover, legal education may be leading to better assessments of culpability: students aware of the concept of intentionality on average are less prone to ascribing intentionality based only on *knowledge* of the outcome. Nevertheless, there is still a minor worry. Students, which are bound to be professional lawyers, still ascribe intentionality asymmetrically when presented to different outcomes, even if there is no evidence that the offenders under their consideration acted knowingly but not intentionally.

13. General discussion

When compiling the sample of students and judges into a single major sample, the severity effect experiment still leads to statistically not significant differences between participants presented to each treatment. This further confirms that, contrary to the findings of Kneer & Bourgeois – Gironde (2017) and to our hypotheses **H1** and **H4,** the severity of the outcome under consideration does not affect significantly the intentionality ascriptions. Moreover, if results were statistically significant, they would indicate that the severity effect operates on the opposite direction than

expected. Instead of increasing the level of intentionality ascription, such levels tend to decrease with ever more harmful outcomes. Judges and students, one might argue, are more careful when assessing culpability for harmful outcomes.

On the other hand, judges' and students' assessments of intentionality move in opposite directions when analyzed separately. While judges are more likely to ascribe intentionality with increasingly harmful outcomes, students are less likely to do so. Once the outcome is very severe, both judges and students tend to move back again into opposing directions: judges become less likely to ascribe intentionality, while students become more likely to do so. The only similarities in both experiments' findings are that the severity effect has a non-linear nature and that the difference between the means for every treatment were statistically not significant.

Finally, the awareness of the legal concept of intentionality seems to have an interesting effect: while it does not significantly affect judges, it does diminish significantly students' likelihood of ascribing intentionality on the sole basis of *foreknowledge.* One might argue that the main difference between judges and law students regarding legal education lies in the fact that while judges may have experience and accumulated knowledge, students generally have more recently acquired knowledge and internalized concepts and practices. If that is so, just receiving legal education is not sufficient for preventing wrongful assessments of intentionality. Rather, it may be the case that constant legal education (*i.e.* refreshing judges specialized knowledge) is required or at least useful for preventing distorted assessments of intentionality. In the end, it is not just expertise or experience that leads to better judgments; it is also a matter of constant education.

14. Conclusion and policy recommendations

The aim of this thesis was to empirically test whether professional judges' and law students' assessments of intentionality are affected by the severity of the outcome as described by Kneer & Bourgeois-Gironde (2017). I found that neither judges' nor students' assessments of intentionality were affected by such severity effect. Although there seemed to be a non-linear severity effect in Experiments 1 and 2, the difference between the means of intentionality ascriptions made by both populations was statistically not significant. Nonetheless, the findings suggest that assessments of

intentionality made by judges (and students) are highly unequal. There is a high variance within the different conditions, and almost half (n = 38) of the responding judges assessed intentionality on the basis of the agent's mere foreknowledge (*i.e.* without the desire to bring about envisioned consequences), while the other half seemed to apply the legal concept of intentionality (*i.e.* one in which foreknowledge does not suffices) when assessing for it.

Moreover, I tested whether judges' specializing in areas of legal practice where the concept of intentionality is highly relevant were less likely to ascribe intentionality on the basis of mere foreknowledge in comparison to those judges specializing in other areas of legal practice. Contrary to expected, I found that the difference between intentionality ascriptions made by both groups was statistically not significant. In other words, on average, judges specializing in criminal, administrative, and civil law (*i.e.* specializations were the concept of intentionality is of main relevance) assessed intentionality not differently than those judges specializing in other law areas.

Finally, I tested whether judges and students aware of the legal concept of intentionality were less likely to ascribe intentionality on the basis of mere foreknowledge than those judges and students that were not aware of such legal concept. While judges' awareness of the legal concept of intentionality did not have a significant effect on their intentionality assessments, students' awareness of such concept did have a significant effect (small, nevertheless). Students aware of the legal concept of intentionality are thus less likely to ascribe intentionality on the basis of the agent's mere foreknowledge.

The results of the present study would lend more support to the view of those who advocate that outcome effects (*i.e.* Knobe and severity effect) are biases and that legal experts should be let alone in assessing criminal liability. Indeed, the severity of the outcome had a statistically not significant effect on intentionality ascriptions made by professional judges and law students, meaning that one could initially assert that legal expertise deflects such outcome bias. Moreover, based on the results confirming **Hypothesis 5**, they could also argue that legal education (constant) helps buffer the severity effect and, consequently, legal experts are better suited for assessing culpability than laypeople. This would imply that the legal concept of intentionality should be maintained and legal experts should continue to have the monopoly of assessing culpability.

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Nevertheless, competence advocates could still argue that the division among judges regarding the concept of intentionality they operate with is proof of the difficulty of internalizing a concept of intentionality that differs from that of the folk. Experts in law – they might argue, are not all capable of applying the concept of intentionality according to legal standards even when they are supposed to have a better understanding of it. The solution would then be to reform the legal concept of intentionality so it can be ascribed on the basis of mere foreknowledge, disposing away the traditional volitional element it integrated. Furthermore, jurors should not be abolished as long as the legal concept of intentionality becomes the same as that of the folk.

Beyond the former discussions, in this thesis I consider the results as supporting (at least) the implementation of three different policies for the criminal justice system. As shown above, students aware of the legal concept of intentionality were on average less prone to ascribe intentionality on the sole basis of foreknowledge and, concerning legal expertise, one might argue that they differ from judges in the fact that their legal education is more recent as is their internalization of the main legal concepts. In that sense, the first solution to prevent errors of justice caused by unequal ascriptions of intentionality would be to implement courses or training to judges and other legal professionals involved in the functioning of the criminal justice system. Such courses and/or training should, at least, meet the following four conditions. First, they must be mandatory to all of the functionaries involved in judicial decision-making, including prosecutors. Second, they must be provided to judges on a constant basis, meaning that there should not be a wide time span between courses. Third, they must focus on the different concepts and theories related to the elements required by law to assess liability and more particularly the different mens rea. Focus should also be placed on teaching the best techniques and practices for judicial decision-making, and the consequences of acquitting the guilty and convicting the innocent. Finally, providing incentives to functionaries in order for them to assist to such courses can be helpful to avoid low assistance rates and desertion.

Bearing in mind the different effect of the awareness of the legal concept of intentionality on intentionality assessments made by judges and students, it is also fair to consider the introduction of mixed judicial bodies with both senior and junior judges. If the difference between judges and

students indeed resides in the fact that the latter have internalized relevant legal concepts on a more recent basis, the case could be that introducing junior judges in mixed judicial bodies may prove helpful for arriving to 'better' judgments. Both junior and senior judges would then have a say when discussing and voting in favor or against projected decisions that required collegial decisions (*e.g.* convicting and acquitting an alleged offender). Junior judges, in particular, could provide recently acquired knowledge and a more reliable application of legally relevant concepts to the judicial decision-making practice, thus preventing eventually unequal and unfair judicial decisions.

Finally, it is necessary to acknowledge that the criminal justice system and judges are fallible. Some judges may still assess intentionality based on distorted concepts that differ from that at the foundation of criminal law. In that sense, one might argue in favor of the introduction of a many-valued verdict system instead of a bi-valued one. In the many-valued verdict system the distinct verdicts correspond to different evidential thresholds, rather than the unique 'beyond reasonable doubt' threshold of the bi-valued (guilty/not guilty) systems (Picinali, 2018). With the introduction of the many-valued verdict system, judges would still have the option to adopt convicting sentences when there is not sufficient evidence to achieve the beyond-reasonable-doubt threshold of guilt and, particularly, of certain mens rea. This many-valued system, as put by Picinali (2018), may prove helpful to avoid extreme errors of justice as intermediate verdicts would produce milder sentences on the innocent, specifically those who did not intentionally committed crimes that require intent for culpability to be ascribed. Meanwhile, the many-valued system would also convict the factually guilt who may otherwise result acquitted due to insufficient evidence.

Notwithstanding the results here presented, the severity effect should be further tested for several reasons. First, the number of participants on every treatment is considerably low (≤ 20), placing doubts on the strength and generalizability of the results. Second, law students participating in the experiment came from only two Dutch universities, also placing doubts on the generalizability of the results towards the whole population of law students in The Netherlands. Third, the vignette scenario presented to the participants on this thesis is different from that used by Kneer & Bourgeois – Gironde (2017). Although in both cases the agent under consideration (the driver in this thesis, the mayor in Kneer & Bourgeois-Gironde's scenario) only had knowledge of the

consequences of his actions (and not the desire to bring about such outcomes) and the consequences were harmful, the outcomes presented were harmful towards different legally protected goods. While the outcomes in this thesis were harmful against physical integrity and life, the outcomes in Kneer & Bourgeois-Gironde's (2017) scenario were harmful against the environment. This could have an effect on the levels of intentionality ascriptions considering that, e.g., judges' assessments of intentionality may be more or less harsh when presented to cases where the outcome affects goods that they consider more valuable than others (e.g. life v. environment). Finally, this study does not account for a moderating effect of the participants' specializations and their awareness of the legal concept of intentionality on the severity effect. I only checked whether such variables had an effect on their intentionality assessments. Checking for interaction effects between the severity of the outcome and the participants' specializations and awareness of the concept of intentionality might give us more insights and empirical support (or not) on the expertise argument.

15. Recommendations for further research

Further empirical research is highly encouraged on certain topics. First, considering that the results here presented differ considerably from those of Kneer & Bourgeois – Gironde (2017), scholars should further explore the severity effect on bigger samples of participants. Moreover, standard scenarios should be included in the upcoming experiments of the severity effect. Second, the non-linear nature of the severity effect on judges should be further tested by including ever more harmful treatments on experiments empirically accounting for the severity effect. Third, with the purpose of further confirming (or disconfirming) the results here presented and considering the fact that it was not possible to run a non-parametric test that accounts for interaction effects, statistical analyses on potential moderating effect of the awareness of the legal concept of intentionality on the severity effect should be performed. Fourth, in order to test whether constant legal education or training is the key to preventing or buffering the severity effect and other outcome biases, researchers should conduct an experiment by first providing relevant training to some participants (*i.e.* treatment), later assigning all of the participants randomly to every treatment of the outcome bias of interest, and finally comparing the effects of the outcome bias between the participants that received training and those who did not. Finally, it is also worth

studying whether the availability of external aids (*e.g.* jurisprudence and legal codes) moderates the severity effect on legal experts and which of those aids proves to have a larger moderating effect.

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Criminal justice administration and biased mens rea assessments

Appendix No. 1 Survey Severity Effect – Professional Judges (translated)

You are invited to complete a short survey study for a Master thesis. Please be assured that your responses will be kept completely confidential. The study should take you around five (5) minutes to complete. Your participation in this research is voluntary. You have the right to withdraw at any point during the study, for any reason, and without any cost. If you would like to contact the Principal Investigator in the study to discuss this research, please e-mail Jan García Olier to the following address: j.a.garcia.olier@umail.leidenuniv.nl.

By clicking the button below, you acknowledge that your participation in the study is voluntary, you are 18 years of age or above, and that you are aware that you may choose to terminate your participation in the study at any time and for any reason.

Please read carefully. Note that you will not be able to change your responses. This survey will be best displayed on a laptop or desktop computer. Some features may be less compatible for use on a mobile device.

○ I consent, begin the study

○ I do not consent, I do not wish to participate

In this section, you will be presented with the description of a case. After reading the case, you will be presented with three short questions. Please read carefully:
On April the 3rd of 2004, the construction of an avenue was underway. In order for the construction to keep its pace, one of the bulldozers at the site had to be moved from one of the construction sectors to the other one. After realizing that there were no expert bulldozer drivers in the site, the Contractor decided to drive the machine. Before hopping on it, one of his colleagues approached him and said: "Driving the bulldozer is not that difficult. However, it is not in proper technical conditions for transiting. Driving it can lead to an accident and the subsequent injury or death of the people transiting through this area." The Contractor responds: "I do not care about that. All I care for is getting the bulldozer to the other site so the construction can continue." He then started driving the bulldozer.

Treatment 1: After initiating its descent on the inclined highway, the driver lost control of the bulldozer, broke a metallic fence and fell on a road 10 meters below. Notwithstanding the accident, the driver resulted unharmed and there were no injuries or deaths involved.

Treatment 2: After initiating its descent on the inclined highway, the driver lost control of the bulldozer, broke a metallic fence and fell on a road 10 meters below. The bulldozer hit a car, causing minor injuries to the driver and passenger of the car. The car suffered minor damages, and the driver and passenger of the car recovered fully from their injuries.

Criminal justice administration and biased mens rea assessments

Treatment 3: After initiating its descent on the inclined highway, the driver lost control of the bulldozer, broke a metallic fence and fell on a road 10 meters below. The bulldozer hit a car, gravely injuring the driver and the passenger of the car. The car suffered severe damages, and the driver and the passenger of the car never fully recovered from their injuries.

Treatment 4: After initiating its descent on the inclined highway, the driver lost control of the bulldozer, broke a metallic fence and fell on a road 10 meters below. The bulldozer hit a car, killing the driver and passenger of the car. The car was destroyed.

On a scale from 1 to 7, where 1 means 'strongly disagree' and 7 means 'strongly agree', to what extent do you agree or disagree with the following statement:

	1. Strongly disagree	2. Disagree	3. Somewhat disagree	4. Neither agree nor disagree	5. Somewhat agree	6. Agree	7. Strongly agree
"The driver of the bulldozer intentionally caused the accident"	○	○	○	○	○	○	○

In the scale from 1= 'strongly agree' to 7= 'strongly disagree' with the statement "The driver of the bulldozer intentionally caused the accident", you selected the option '${q://QID9/ChoiceGroup/SelectedAnswers}'. Please explain briefly the reasons that support your selection:

_____

In the case described before, the bulldozer accident resulted in...

○ … no injured or dead.

○ … minor injuries to a car driver and a passenger.

○ … grave injuries to a car driver and a passenger.

○ … the death of a car driver and a passenger.

Criminal justice administration and biased mens rea assessments

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In this section, you will be asked a short question regarding the concept of intentionality

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In Criminal Law, the concept of intentionality is composed by:

○ The foreseeability of the consequences of an action.

○ The foreseeability of the consequences of an action and the desire to bring about the envisioned consequences of the action.

○ The desire to bring about envisioned consequences of an action.

○ None of the answers described.

In this section, you will be asked six (6) short questions, mostly socio-demographic. Please read carefully.

What is your age? (please answer in numbers, not letters)

_____

Which gender do you identify the most with?

○ Male

○ Female

○ Other (specify): _____

○ I prefer not to comment

Criminal justice administration and biased mens rea assessments

What is your family's approximate annual income?

○ Less than $30,000,000

○ $30,000,000 - $39,999,999

○ $40,000,000 - $49,999,999

○ $50,000,000 - $59,999,999

○ $60,000,000 - $69,999,999

○ $70,000,000 - $79,999,999

○ $80,000,000 - $89,999,999

○ $90,000,000 - $99,999,999

○ $100,000,000 - $149,999,999

○ $150,000,000 - $199,999,999

○ More than $200,000,000

○ I prefer not to comment

Criminal justice administration and biased mens rea assessments

Which religion do you identify the most with?

○ Catholic

○ Christian

○ Protestant

○ Muslim

○ Buddhist

○ Hinduist

○ Other (specify): _____

○ I prefer not to comment

Please indicate the years of experience you have in the Judicial Branch:
_____

Criminal justice administration and biased mens rea assessments

Please indicate in which area (s) of the legal practice you are currently specializing in:

☐ Labor law

☐ Criminal law

☐ Civil law

☐ Procedure law

☐ Administrative law

☐ Constitutional law

☐ Commercial law

☐ International law

☐ Other (specify): _____

☐ None

Regarding political orientation, please indicate where would you position yourself on the following scale from 0 to 10, where 0 means 'very left', 5 means 'center' and 10 means 'very right'

	00	01	02	03	04	05	06	07	08	09	10	
	1	2	3	4	5	6	7	8	9	10	11	
Left	○	○	○	○	○	○	○	○	○	○	○	Right

Appendix No. 2 Survey Severity Effect - Students NL

You are invited to complete a short survey study for a Master thesis. Please be assured that your responses will be kept completely confidential. The study should take you around five (5) minutes to complete. Your participation in this research is voluntary. You have the right to withdraw at any point during the study, for any reason, and without any cost. If you would like to contact the Principal Investigator in the study to discuss this research, please e-mail Jan García Olier to the following address: j.a.garcia.olier@umail.leidenuniv.nl.

By clicking the button below, you acknowledge that your participation in the study is voluntary, you are 18 years of age or above, and that you are aware that you may choose to terminate your participation in the study at any time and for any reason.

Please read carefully. Note that you will not be able to change your responses. This survey will be best displayed on a laptop or desktop computer. Some features may be less compatible for use on a mobile device.

○ I consent, begin the study

○ I do not consent, I do not wish to participate

In this section, you will be presented with the description of a case. After reading the case, you will be presented with three short questions. Please read carefully:

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Treatment 1: After initiating its descent on the inclined highway, the driver lost control of the bulldozer, broke a metallic fence and fell on a road 10 meters below. Notwithstanding the accident, the driver resulted unharmed and there were no injuries or deaths involved.

Treatment 2: After initiating its descent on the inclined highway, the driver lost control of the bulldozer, broke a metallic fence and fell on a road 10 meters below. The bulldozer hit a car, causing minor injuries to the driver and passenger of the car. The car suffered minor damages, and the driver and passenger of the car recovered fully from their injuries.

Treatment 3: After initiating its descent on the inclined highway, the driver lost control of the bulldozer, broke a metallic fence and fell on a road 10 meters below. The bulldozer hit a car,

gravely injuring the driver and the passenger of the car. The car suffered severe damages, and the driver and the passenger of the car never fully recovered from their injuries.

Treatment 4: After initiating its descent on the inclined highway, the driver lost control of the bulldozer, broke a metallic fence and fell on a road 10 meters below. The bulldozer hit a car, killing the driver and passenger of the car. The car was destroyed.

On a scale from 1 to 7, where 1 means 'strongly disagree' and 7 means 'strongly agree', to what extent do you agree or disagree with the following statement:

	1. Strongly disagree	2. Disagree	3. Somewhat disagree	4. Neither agree nor disagree	5. Somewhat agree	6. Agree	7. Strongly agree
"The driver of the bulldozer intentionally caused the accident"	○	○	○	○	○	○	○

In the scale from 1= 'strongly agree' to 7= 'strongly disagree' with the statement "The driver of the bulldozer intentionally caused the accident", you selected the option '${q://QID9/ChoiceGroup/SelectedAnswers}'. Please explain briefly the reasons that support your selection:

_____

In the case described before, the bulldozer accident resulted in...

○ … no injured or dead.

○ … minor injuries to a car driver and a passenger.

○ … grave injuries to a car driver and a passenger.

○ … the death of a car driver and a passenger.

Criminal justice administration and biased mens rea assessments

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In this section, you will be asked a short question regarding the concept of intentionality

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In Criminal Law, the concept of intentionality is composed by:

○ The foreseeability of the consequences of an action.

○ The foreseeability of the consequences of an action and the desire to bring about the envisioned consequences of the action.

○ The desire to bring about envisioned consequences of an action.

○ None of the answers described.

In this section, you will be asked six (6) short questions, mostly socio-demographic. Please read carefully.
What is your age? (please answer in numbers, not letters)

_____

Which gender do you identify the most with?

○ Male

○ Female

○ Other (specify): _____

○ I prefer not to comment

What is your family's approximate annual income?

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○ Less than €10,000

○ €10,000 - €19,999

○ €20,000 - €29,999

○ €30,000 - €39,999

○ €40,000 - €49,999

○ €50,000 - €59,999

○ €60,000 - €69,999

○ €70,000 - €79,999

○ €80,000 - €89,999

○ €90,000 - €99,999

○ €100,000 - €149,999

○ More than €150,000

○ I prefer not to comment

Criminal justice administration and biased mens rea assessments

Which religion do you identify the most with?

○ Catholic

○ Christian

○ Protestant

○ Muslim

○ Buddhist

○ Hinduist

○ Other (specify): _____

○ I prefer not to comment

Which semester in your Law degree are you currently undertaking? (please answer in numbers, not letters)

_____

Regarding political orientation, please indicate where would you position yourself on the following scale from 0 to 10, where 0 means 'very left', 5 means 'center' and 10 means 'very right'

	00	01	02	03	04	05	06	07	08	09	10	
	1	2	3	4	5	6	7	8	9	10	11	
Left	C	C	C	C	C	C	C	C	C	C	C	Right

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Appendix No. 3 – Dataset professional judges in Colombia

ResponseId	Treatment	Agreement Likert	Awareness (0 = Wrong; 1 = right)	Age	Gender	Family Income	Religion	Years of experience	Specialization	Specialization binary	Left-right orientation
R_V3zslTzETPkaHGV	1	1	1	37	1	1	Atheist	4	Labor Law	0	6
R_1gbuf0o7hfAk1rw	1	7	1	43	0	1	Catholic		Criminal Law	1	6
R_VOU2SoMt70EMXlv	1	1	1	53	0	12	Christian		Criminal Law	1	5
R_1GNe37MunxPdaZz	1	7	1	27	0	6	Catholic	5	Criminal Law	1	5
R_2THld5yRrbKtyQu	1	1	1	29	1	7	Catholic	7	Family Law	0	6
R_2bJj5tzNPVHleoE	1	7	1	32	0	12	I prefer not to comment	9	Criminal Law	1	3
R_2E4OBeh9TPJyM28	1	6	0	35	0	4	Catholic	5	None	0	6
R_zZuRelyA10AF2tr	1	1	1	63	0	9	Catholic	10	Procedure Law	0	9
R_a99yQh6WztwNEK5	1	5	1	25	1	1	Christian	1	Civil Law	1	6
R_2OViO0rXIfTXa0p	1	5	1	39	0	2	Catholic	15	Criminal Law	1	5
R_TcqkEseS5kCRxXr	1	1									
R_2aVo6ASYAfIkEmJ	1	2									
R_1OGLn66nmCp12ZJ	1	2									
R_1qTWTvwsW4UJJWc	1	5									
R_2Pc0iliqeMoVLCE	1	2									
R_277EenafLqZZjHJ	1	7	1								
R_3fcu0uS45C5ARA3	1	2									
R_2c2ebPe5YFj4Cgd	1	7	1	44	0	2	Catholic	2	Criminal Law	1	6
R_Z2fpoCljbKXx30J	1	1									
R_2OJcFPIhgR1xyls	2	1	0	44	1	5	Catholic	11	Civil Law	1	6
R_3fdv3yRC0q6jKIt	2	5	1	37	0	8	Catholic	14	Family Law	0	1
R_wQV5lAAOtSBl0tP	2	7	1	45	1	7	Catholic	10	Constitutional Law	0	6
R_1fkLVQaMUqSxMmj	2	7	1	26	0	4	Christian	7	Procedure Law	0	6
R_1ithrF88NnkWGsg	2	3	1	26	0	5	Atheist	1	Civil Law	1	1

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ID							Religion		Law		
R_3qmNEmEx0oqXHZh	2	3	0		1	12	Catholic	38	Family Law	0	6
R_yrMNCoa2EKa8rhT	2	7	1	39	1	9	Catholic	16	Administrative Law	1	5
R_338bGmgGoBgcWhV	2	1	1	41	1	10	Christian	14	Administrative Law	1	6
R_2y17rnr4R9IRfD6	2	7	0	43	0	4	I prefer not to comment	10	Administrative Law	1	1
R_ph2wiqfbx47Vy81	2	2									
R_2D0JJboGTi1X3en	2	1									
R_24uSe6FZObqVAHE	2	1									
R_1HkFL3emU75O4qI	2	2									
R_2wBJ0n0KPGGxByd	2	2									
R_1NmD6rqtNF9LpxB	2	5									
R_eGb1GsGyu4TAbg5	2	5									
R_3iPWKKqRQc3hAwl	2	3	0	42	0	1	Catholic	8	Administrative Law	1	6
R_yRcdPer2rZ1aYvf	2	6	1	53	1	1	Catholic	18	Criminal Law	1	5
R_0HZEmERWToAwwIV	2	2	0	34	1	2	Christian	7	Constitutional Law	0	6
R_2dyTOEx4mIB7KAy	2	5	1	48	1	2	Catholic	5	Procedure Law	0	6
R_2rGYyH7pyKXZdCh	2	2	1	41	0	10	Buddhist	19	Criminal Law	1	3
R_31aCGhYyrSGsEEm	3	7	1	37	0	7	Catholic	10	Criminal Law	1	11
R_1Qa8chFYecFoKhl	3	1	1	31	1	2	Catholic	8	Criminal Law	1	6
R_24TWDUFXcs76Ke5	3	6	1	27	1	12	Catholic	3	Civil Law	1	5
R_2q7OB1HKo1Wvzaq	3	6	1	31	1	12	Catholic	8	Labor Law	0	4
R_2Vg2BtHsat5U0Zy	3	2	1	39	0	12	Atheist	5	Civil Law	1	5
R_2xW4l2fYxmn5JvM	3	1	0	50	0	1	Catholic	25	Administrative Law	1	6
R_273DzezA6x0jt0k	3	3	1	43	0	12	Catholic	14	Procedure Law	0	6
R_3lyPNraMYaQuIve	3	1	1	24	0	5	Catholic	5	Procedure Law	0	5
R_1Fy11uO2drh4dSm	3	7	1	60	0	7	Catholic	12	Administrative Law	1	8
R_2wMRCV8XYV8xRf2	3	6	1	27	0	4	Buddhist	8	None	0	4
R_3gOAc7hbcE9hEQZ	3	5	1	63	1	5	Catholic	29	Criminal Law	1	4

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ID											
R_12mOkKefO2fiRcx	3	5	1	32	0	9	Christian	8	None	0	6
R_2c5A11luxVjWbB0	3	5	1	52	0	7	Catholic	7	Criminal Law	1	8
R_0lEgeqcPI3Sn4qZ	3	5	1	26	0	3	Catholic	2	Criminal Law	1	4
R_ODugGbvqzOsXa7v	3	6	1	52	1	8	Catholic	23	Criminal Law	1	3
R_V3hKJwx2OAZ6YAp	3	2	1	62	0	1	Catholic	40	None	0	8
R_WrgrAuS5IB3Ukbn	3	5									
R_cYowl8oA1OlAwrD	3	2									
R_1eS3zHY4EfwHIHz	3	1	1	61	0	9	Catholic	25	Labor Law	0	11
R_123iQTzFTtYepRS	3	5	1	32	0	6	I prefer not to comment	9	Law Philosophy	0	5
R_25ZrcJpzc9vjWvt	3	5	1	52	1	1	Catholic	8	Constitutional Law	0	6
R_1eM1j6ja0h30avh	3	2	1	41	0	6	Catholic	13	Procedure Law	0	4
R_2qlTXsXj47pXRV3	4	2	1	26	1	3	Catholic	4	Human Rights Law	0	4
R_3rPvWTBgVbqlJMR	4	6	1	54	1	2	Catholic		Criminal Law	1	5
R_3GvuqsM5eEPIAxQ	4	1	1	43	1	1	Catholic	10	Labor Law	0	9
R_2U4tyfqZ1dGWw9c	4	1	1	29	0	1	Catholic	8	Civil Law	1	4
R_2tzivxgasfAEy5U	4	7	1	33	0	4	Catholic	8	Administrative Law	1	1
R_2pLV3MWXFtwTXCi	4	1	1	40	0	10	Protestant	6	Criminal Law	1	4
R_33dkO4HJLzRXAdw	4	1	0	36	1	9	Catholic	12	Criminal Law	1	8
R_3QLVSTpdSfZcy3z	4	6	0	34	0	1	Catholic	8	Labor Law	0	2
R_2TF3cW2jLWYNDnz	4	3	1	62	0	12	Catholic	35	Criminal Law	1	5
R_2wv0SgYPQrfKalD	4	3	1	52	0	12	Catholic	4	Criminal Law	1	6
R_DUJT64aFEPz1Q1b	4	1	1	54	0	3	Catholic	33	Criminal Law	1	6
R_1P04UrdPqDncNBY	4	5	1	45	1	12	I prefer not to comment	8	Administrative Law	1	6
R_3Rn1ecgl8X679dF	4	1	1	47	0	9	Catholic	12	Administrative Law	1	5
R_33pD7C5DN1zJJXj	4	2	1	55	0	10	Atheist	10	Administrative Law	1	6
R_2P1nytEcB7f5i7t	4	6									

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R_u2l1vGSiIWhEFtD	4	6									
R_TcFKaFFXkaJy4X7	4	2	1								
R_e37inOxIFHgu71n	4	3	1	31	1	1	Catholic	2	Constitutional Law	0	6
R_Oa2N0R5Pt7wBvG1	4	4	1	35	1	5	Catholic	8	Civil Law	1	6
R_88kDGsh3s1Hr74l	4	3	0	32	1	1	Catholic	6	Procedure Law	0	6
R_1Hc4IizHXIpeB8l	4	7	1	36	1	1	Catholic	7	Constitutional Law	0	6

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Appendix No. 4 – Dataset law students in The Netherlands

ResponseId	Treatment	Agreement likert	Awareness(0 = Wrong; 1 = right)	Age	Gender	Family Income	Religion	Semester	Left-right orientation
R_3plLSxZ3Cb2kWMj	1	5	0	21	1	11	Protestant	7	3
R_6txTvnmQZvdT5sd	1	5	1	21	1	4	Muslim	2	6
R_AumAmclvKe5ZoGJ	1	5	1	20	1	1	Non - religious	3	4
R_qQm8rCw32sYQla1	1	5	1	20	1	13	Non - religious	2	1
R_WcJadtDB1doxnCV	1	4	1	22	1	1	PNC	0	0
R_Rn6xZRpLIlW0L8R	1	1	1	21	0	10	Protestant	7	8
R_3kIhYuePrJ2GFNr	1	6							
R_z7k7xQgroR1neZH	1	7							
R_1Fb4eaVaDVoBWur	1	5	0	25	0	6	Non - religious	1	5
R_2DND6VKFDvZKEof	1	5							
R_2pPrxrCTsPxEHdi	1	6	0	25	0	6	Non - religious	1	7
R_2pKOHo1xdbwmfqf	1	6	0	20	1	13	Non - religious	3	4
R_2CDmErDmuPqjk55	1	4	1	21	0	12	Catholic	3	4
R_4PJM9VmbTYueznj	1	2	1	19	1	13	Christian	1	4
R_1mxRGlQ2kbpFa4L	1	5	1	20	1	12	Non - religious	3	4
R_BVsAURe1UeiRGHn	1	6	0	19	1	11	Non - religious	1	1
R_2SDBTFLbwbTVZ5I	1	2							
R_2S617TwaLbv92ws	2	2	1	20	1	13	Christian	5	6
R_2SfumpIYnueKQSk	2	7	1	20	1	7	Non - religious	1	8
R_10AFuEstwQXILg9	2	2	1	22	0	13	Non - religious	5	2
R_1dKVO0J6fUcJGJK	2	6	0	21	1	8	Muslim	1	6
R_snd8qFMfUrLCehH	2	6	1	21	1	13	Catholic	7	5
R_3nVlPiWx7u6T1LZ	2	4	0	23	1	2	Protestant	5	3
R_3EFkqMee1WHpTu5	2	6	1	22	1	13	Non - religious	4	5
R_3PzZjftwoJ6LvJO	2	5	0	22	1	3	Hinduist	5	3

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R_3JEFARX9cRczFmP	2	1	0	24	0	8	Protestant	5	3
R_2QzFYwFPkG17j3g	2	4	1	20	1	13	Protestant		
R_3MEUoHUQN9GTvDE	2	6							
R_1opauBEuIiy5pVz	2	2	1	21	1	10	Non - religious	2	2
R_3k5EGyUqzKPa3KD	2	6	1	19	1	8	Non - religious	1	1
R_2wAe9JUoSGciXjw	2	6	1	19	1	12	Protestant	3	5
R_1d5JOhxBZIKN0a1	2	6	0	18	1	1	Non - religious	1	2
R_2xxSZMXtyuJQEOI	2	2	1	20	1	3	Non - religious	1	2
R_PNGidiTcej35Ann	2	2	0	18	0	12	Muslim	1	3
R_1ITzmGZR2uxraMo	3	5	1	22	0	10	Catholic	3	6
R_ukUZQZ6oeahchBT	3	6	0	24	1	11	PNC	2	5
R_39sUpK8U27BYjVT	3	5	1	22	1	10	Catholic	1	7
R_BKst0Fi3ifFHF1D	3	2	1	25		13	PNC	10	0
R_1g5he0xXlZUa4VO	3	3	1	22	1	13	Non - religious	5	3
R_2s5WpGUIr9MXaPm	3	1	0	24	0	7	Non - religious	5	7
R_bqq00TsZjBRji7f	3	1	1	23	0	12	Protestant	7	6
R_dbtI55JIUFYms01	3	6	0	23	1	5	Non - religious	3	2
R_2VQ2RWq0VAySRBZ	3	3							
R_qO9JKgVM4VG1VJv	3	6	1	20	1	13	Christian	5	2
R_3hDB3inhpknMFyu	3	5	0	23	1	13	Christian	5	4
R_2v7f4Cs4RU7DCWa	3	7	0			13	PNC		
R_6EYXaWNsQfOiwxP	3	5	1	26		13	Buddhist	3	5
R_4GfHcp9xLZ1syt3	3	2	1	22	1	4	Buddhist	7	8
R_27k5YZhSKfTt4Ic	3	5							
R_22zyBjB9e7j3u22	3	2							
R_3Gjnycay3XMiQjC	4	6	1	22	1	13	Non - religious	3	6
R_3HGnajRadtZWosZ	4	5	1	21	0	8	Non - religious	5	3
R_1JDxXvFU6uOZ4sJ	4	6	0	20	1	4	Non - religious	3	2

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R_2vddGLHmUWpfnWg	4	1	1	22	0	13	Buddhist	5	4
R_2eXruhId2Hph9jb	4	4	1	21	1	6	Non - religious	7	8
R_3COUJCq170niwQw	4	3	1	24	0	6	Christian	5	4
R_3ssisJBKyWgX39x	4	3	1	22	0	12	Protestant	3	3
R_2Cjn5UkEZ2yQBW6	4	5	1	22	0	1	Christian	5	7
R_1GNu4cFDNDXsNZm	4	2	1	21	1	13	Buddhist	5	4
R_3hlrqqmjVKDWA4v	4	3	1	20	0	6	Non - religious	5	6
R_ymTTRANfblUZhVn	4	2	1	22	1	13	Non - religious	0	4
R_1MTclUmCU5rExij	4	6	0	21	1	6	Protestant	3	4
R_7333RfWo8yQfdaV	4	5							
R_1BQ4ZeqbsWMCoR1	4	6	1	21	1	13	Non - religious	1	4
R_3rMzWiP6zxh3ZZm	4	5	1	21	0	4	Christian	1	8
R_ebQtmCf0voKqy4h	4	5	1	19	1	13	Jewish	3	5
R_VJR0DMDV11ywMIV	4	5							
R_3CCa8hKRhY3Vegb	4	5							

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Appendix No. 5 – Open-ended question responses of professional judges

Response ID	Reasoning	Translation
R_V3zslTzETPkaHGV	la intencion del conductor no es accidentarse ni causar perjuicios, su intencion es movilizar el vehiculo; pese a lo anterior, se le salio de control y se accidento. Actuo con preterintencion.	The driver's intention is neither to get into an accident nor causing prejudices, his intention is to put the vehicle in motion; nonetheless, he lost the control of the vehicle and had an accident. He acted with the intention to cause a lesser harm.
R_1gbuf0o7hfAk1rw	LA REALIZACION DE LA INFRACCION FUE PREVISTA COMO PROBABLE Y SU NO PRODUCCION SE DEJO LIBRADA AL AZAR. ARTICULO 22 C. P. (DOLO EVENTUAL)	The realization of the infraction was predicted as probable and its non-realization was left to chance. Article 22 Penal Code (*dolus eventualis*).
R_VOU2SoMt70EMXlv	La intencion, asi supiera las advertencias sobre la maquina, no era causar el accidente, por lo tanto la intencionalidad desaparece.	The intention, even if he knew the warnings about the vehicle, was not to cause the accident; thus, the intentionality disappears.
R_1GNe37MunxPdaZz	Se trata de una oración coherente, debidamente estructurada y se describe la modalidad del comportamiento, haciendo referencia a "intencionalmente" como "dolo" de querer cometer el hecho.	It is a coherent sentence, properly structured, and it describes the kind of behavior, referring to 'intentionally' as 'intent' of wanting to commit the fact.
R_2THld5yRrbKtyQu	Porque intencionalmente no fue, aunque si conocia que podia ocasionar un accidente, no queria ocasionarlo, queria dar via libre a la obra, pero obvio no poner en riesgo su vida.	Because it was not intentional, although he knew that he could cause an accident, he did not want to do so, he wanted to allow the construction to go, but obviously without endangering his life. The accident was negligent because of his lack of skills.

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	El accidente fue culposo, por su impericia.	
R_2bJj5tzNPVHleoE	El sujeto, actuo deliberadamente, conocia los riesgo y sus limitaciones, y aun cuando recibio una segunda opinion, y advertencia, desestimo el resultado altamente probable, lo cual me indica que no asumio el riesgo -la posibilidad de que realmente causaria el accidente- sabiendo que sus posibilidades de exito eran insignificantes.	The subject acted deliberately, he knew the risks and his limitations, and even when he received a second opinion and warning, he disregarded the highly probable result. This points out to me that he did not assume the risks – and the possibility that he could really cause the accident – knowing that his chances to succeed were insignificant.
R_2E4OBeh9TPJyM28	pues el tomo la decision y determinacion demanejar el buldocer sin tener los conocimientos ni la licencia para ello	Because he took the decision and was determined to drive the bulldozer without having the knowledge or the license to do so.
R_zZuRelyA10AF2tr	fue irresponsable sin tener la pericia y la licencia para ello, no ha debido manejar el bulldozer.	He was irresponsible. Without having the skills and license for it, he was not supposed to drive the bulldozer.
R_a99yQh6WztwNEK5	Estoy parcialmente de acuerdo porque el conductor sabia que al conducir el buldocer podria ocasionar un accidente y aun sabiendolo decidio poner en transito el automotor, aunque su verdadera intension era llevar este a otro lugar de la obra para continuar con el trabajo.	I partially agree because the driver knew that driving the bulldozer could cause an accident and even though he knew this, he decided to start the vehicle, even though his real intention was to move the latter to another place of the construction site in order to continue with the job.
R_2OViO0rXIfTXa0p	estoy parcialmente de acuerdo pues a el se le advirtio la posibilidad de un accidente , el sabia el riesgo que corria y sin	I partially agree as he was warned of the possibility of an accident, he knew the risk he ran, yet he takes the risk and assumes it as his own, without caring about anything else.

	embargo toma el riesgo y lo asume como propio sin importarle nada mas	
R_2c2ebPe5YFj4Cgd	Deja al azar la produccion del resultado	He leaves to chance the production of the result
R_2OJcFPIhgR1xyls	Me muestro en desacuerdo en razon a que el accidente no fue causado intencionalmente por el conductor del buldocer, el director de la obra mas bien lo que hizo fue no preveer lo que pudo haber previsto para no causar ningun dano.	I disagree because the accident was not caused intentionally by the driver of the bulldozer, the contractor did not foresee what he could have anticipated in order to prevent any damage from happening.
R_3fdv3yRC0q6jKIt	Realmente el conductor no era la persona experta, subestimo las dificultades del equipo para trasladarse de un lugar a otro y fue imprudente al manejar la maquinaria, so pretexto de las necesidades de la obra.	Actually the driver was not the expert, he underestimated the difficulties of the equipment for moving from a place to the other, and conducted the vehicle recklessly under the consideration of the construction's needs.
R_wQV5lAAOtSBl0tP	porque con el conocimiento e intencion de conducir el buldocer aun conociendo y pudiendo prevenir el dano, actuando imprudente y negligentemente	Because with the knowledge and the intention of conducting the bulldozer even knowing and being able to prevent the damage, behaving recklessly and negligently.
R_1fkLVQaMUqSxMmj	el conductor del buldocer, quien no era experto en la conduccion del buldocer y quien sabia que la maquina no estaba en condiciones para ser trasladada, no le importo el dano que ya en conocimiento sabia que podia causar. la conclusion es que: inicio una actividad peligrosa	The driver of the bulldozer, who was not an expert in driving the bulldozer and knew that the vehicle was not in conditions for being moved, he did not care about the damage that he knew he could have caused. The conclusion is that: he started a dangerous activity which he knew how it could end up, and even so he decided to undertake it.

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	la cual el sabia como podia terminar y aun asi decidio emprenderla.	
R_1ithrF88NnkWGsg	La palabra intencionalmente refleja un grado de dolo en la accion que no se encuentra presente en los hechos narrados, porque la impericia e imprudencia del jefe de la obra se debe imputar desde el ambito civil y penal en un grado de culpa.	The word 'intentionally' reflects the degree of intent of the action which does not appear in the described events because the lack of skills and negligence of the contractor must be attributed from the civil and penal point of view as a degree of guilt.
R_3qmNEmEx0oqXHZh	Si bien es cierto que fue advertido acerca de la pericia que se necesitaba para la conduccion y las fallas que presentaba el buldocer, el accidente estaba sujeto a una eventualidad ya que podia suceder o no como ocurrio.	Even though it is true that he was warned about the skills necessary for driving and the defects the bulldozer presented, the accident was subject to an eventuality that could happen or not, as it occurred.
R_yrMNCoa2EKa8rhT	Al efectuar la maniobra de conduccion, con conocimiento que desconocia su funcionamiento y habiendo sido advertido era consciente de los riesgos y al efectuarlo, ocasiono intensionalmente el accidente	While carrying out the maneuver of driving, being aware that he did not know how it worked and being warned, he was conscious about the risks and when carrying it out, he caused the accident intentionally.
R_338bGmgGoBgcWhV	el conductor del buldocer no tenia la intension de causar el accidente, sin embargo creyo poder controlar la situacion, conducta culposa que no se asimila al dolo.	The driver of the bulldozer did not have the intention of causing the accident, nevertheless he thought he was able to control the situation, negligent behavior that does not resemble intent.
R_2y17rnr4R9IRfD6	Sabia las condiciones del mismo	He knew the conditions of the bulldozer.

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R_2D0JJboGTi1X3en	Porque si bien el conocia el riesgo que tenia el conducir ese vehiculo y que no se encontraba en capacidad para hacerlo, su intencion que es el objeto de la pregunta, no era ocasionar el siniestro, sino que era otra.	Because even though he was aware of the risk of driving this vehicle and he was not able to do it, his intention, which is the object of the question, was not causing the accident, but rather something else.
R_3iPWKKqRQc3hAwl	Nadie, menos alguien que tiene la calidad de jefe y que conoce sus actividades y responsabilidades se predispone a causar con dolo el accidente, creyo en su capacidad de jefe y paso los limites de prudencia, es decir fue imprudente desde el aspecto de gravedad casi como un dolo pero sin llegar a serlo completamente	Nobody, and even less someone who is the person in charge and who knows his activities and responsibilities would predispose to cause the accident with intent, he believed in his capacity as head [of the construction site] and exceeded the limits of prudence, meaning that he was reckless about the seriousness of the harms almost as it was with intent, but without it being complete.
R_yRcdPer2rZ1aYvf	Porque de manera dolosa y a sabiendas que podia causar una accidente, ya que fue advertido del riegos que implicaba conducir buldocer y que este no se encontraba en optimas condiciones, asumio el riesgo y procedio a conducir el vehiculo, con las consecuencias ya referidas, es decir previo el riesgo y dejo al azar su realizacion, es lo que la doctrina denomina DOLO EVENTUAL	Because with intent and knowing that he could cause an accident, since he was warned about the risks that driving the bulldozer involved and that this was not in optimal conditions, he assumed the risk and proceeded to conduct the vehicle, with the aforementioned consequences, that means in the presence of risk and he left to chance its realization, which is what the discipline refers to as *dolus eventualis*.
R_0HZEmERWToAwwIV	Considero que el conductor del buldoser no tuvo intencion de causar el accidente dado que su objetivo era	I consider that the driver of the bulldozer did not have the intention to cause an accident as his aim was moving the bulldozer to the other side, according to the information

	movilizar el buldoser a otro lado, conforme la información su objetivo no era causar un daño. Sin embargo, no se puede desconocer que se obró con irresponsabilidad o falta de precaución respecto de la actividad que estaba ejerciendo.	his aim was not causing damage. Nonetheless, it is impossible not to acknowledge that he behaved with irresponsibility or lack of precaution in respect to the activity he was carrying out.
R_2dyTOEx4mIB7KAy	Partimos del punto que el CONDUCTOR es el DIRECTOR DE LA OBRA y es su responsabilidad que la misma siga su curso a feliz termino, pero tambien es su responsabilidad que por accion u omision se causen danos. En el caso el conductor como director debio preveer las consecuencias de sus actos, mas aun teniendo en cuenta que un colega le hizo la advertencia que el buldocer podia perder el control.	Starting with the fact that the driver was the contractor and it is his responsibility to ensure the construction will successfully continue its course until the end, but also it is his responsibility when damages are caused by action or omission. In this case, the driver as the director had to foresee the consequences of its actions, even more considering that a colleague warned him that the bulldozer could lose the control.
R_2rGYyH7pyKXZdCh	La accion desplegada no puede considerarse producto de la direccion de la voluntad al fin verificado. Si bien era consciente del peligro, la asuncion de este quedaba en el campo de las probabilidades. El resultado se excluye del objetivo perseguido - conducir el buldocer para llevarlo a otro destino- por eso no hay	The action carried out cannot be considered an intentional product of the will towards the result that occurred. Although he was conscious of the danger, the assumption of the latter remained in the fields of probabilities. The result can be excluded from the pursued objective – driving the bulldozer to carry it to another destination, therefore, there is no directed intent to produce it.

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	intencion dirigida a su produccion.	
R_31aCGhYyrSGsEEm	por que estoy de acuerdo	Because I agree.
R_1Qa8chFYecFoKhl	No hay intencion de lesionar o causar el accidente, teniendo en cuenta que el delito que se cometio en este caso, serian unas lesiones personales culposas, en los delitos culposos no se estudia la figura del dolo, que es conocimiento mas intencion, sino la figura de culposo, que quiere decir que sabiendo el riesgo que se corre en este caso en manejar, o que la actividad de manejar por si sola es de alto riesgo, deja el resultado al azar, violando el deber objetivo de cuidado.	There is no intention to cause damage or the accident, considering that the crime committed in this case, it would be personal negligent damage, within the negligent offences, the intent is not studied, which is knowledge in addition to intention, but rather the figure of negligence, which means that knowing about the risk of driving in this case, or that the activity of driving for itself is extremely risky, he left the result to chance, breaking the objective duty of care.
R_24TWDUFXcs76Ke5	SABIA LO QUE PODIA OCASIONAR Y AUN ASI LO HIZO.	He knew what he could cause and even so he did it.
R_2q7OB1HKo1Wvzaq	El conductor del buldócer sabía, de manera previa, las circunstancias en que se encontraba el vehículo y el hecho de que no tenía la capacitación suficiente para manejarlo; además, se le indicaron las posibles consecuencias de sus actos y, sin importarle, procedió a ejecutar la labor.	The driver of the bulldozer previously knew about the circumstances of the vehicle and, in fact, he did not have enough training to drive it; furthermore, he was warned about the possible consequences of his actions and, without caring about them, he proceeded to carry out the job.
R_2Vg2BtHsat5U0Zy	Su intencion no era causar el accidente, sino trasladar el vehiculo.	His intention was not causing the accident, rather to move the vehicle

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R_2xW4l2fYxmn5JvM	Nadie quiere ocasionar intencionalmente un accidente en el cual va a quedar lesionado	Nobody wants to intentionally cause an accident in which they would get injured.
R_273DzezA6x0jt0k	porque pudo preveer que podia ocurrir.. pero su intencion no estab encaminada directamente a que ocurriera.	Because he could foresee that it could happen, but his intention was not directly steered towards what happened.
R_3lyPNraMYaQuIve	La intencion del conductor nunca estuvo dirigida a ocasionar el accidente. Una cosa es representarse mentalmente las posibles consecuencias y asumirlas; y otra, encaminar su intencion a proporcionar lesiones.	The driver's intention was never directed to causing the accident. One thing is mentally representing the possible consequences and assuming them; another one is directing one's intention towards causing injuries.
R_1Fy11uO2drh4dSm	Al conocer el riesgo de la actividad, la asumio conscientemente a pesar de las advertencia	Knowing the risk of the activity, he carried it out consciously, despite the warnings.
R_2wMRCV8XYV8xRf2	El conductor no tenia conocimiento especifico para operar la maquina y fue informado de los riesgos que conllevaba manejarla, el cual asumio y resulto en el desenlace narrado.	The driver did not have specific knowledge to start the vehicle and he was warned about the risks involved in driving it, which he assumed and resulted in the described outcome.
R_3gOAc7hbcE9hEQZ	Porque el conductor efectivamente ocasiono el accidente pues estando advertido de lo que podia ocurrir si conducia el bulldozer en las condiciones en que estaba, efectivamente lo hizo pero no puede afirmarse que lo hizo intencionalmente pues el conductor previo que podia evitar las	Because the driver indeed caused the accident even when warned about what could have happen if he drove the bulldozer in its actual conditions, indeed he did it, but it cannot be stated that he did it intentionally since the driver could previously avoid the consequences derived from its behavior.

	consecuencias que de su conducta se derivaron.	
R_12mOkKefO2fiRcx	Segun la legislacion colombiana la conducta podia senalarse como realizada con (1) culpa con representacion o con (2) dolo eventual. Y ambas posibilidades implican la intencionalidad del agente.	According to the Colombian legislation, the behavior could be considered as being carried out with (1) conscious guilt or with *dolus eventualis*. Both possibilities involve the agent's intentionality.
R_2c5A11luxVjWbB0	No fue su intencion producir el dano, pero conociendo el riesgo que podria conllevar decidio llevar a cabo la accion.	It was not his intention to cause the accident, but knowing the risk that might have been carried, he decided to carry out the action.
R_0lEgeqcPI3Sn4qZ	Este es un ejemplo claro de la llamada "culpa con representacion". Si bien es valido afirmar que el conductor no tenia la voluntad de causar el dano antijuridico, tambien lo es que conocedor del mismo, decidio ejecutar la accion, dejando librado al azar que se causara o no dicho dano.	This is a clear example of what is known as "conscious guilt". Although it is valid stating that the driver was not willing to carry out the anti-juridical damage, it is also valid that the he knew about it, he decided to carry out the action, leaving to chance the possibility that that damage would happen or not
R_ODugGbvqzOsXa7v	A sabiendas de su inexperiencia en el manejo de este tipo de vehiculos, decidio hacerlo, dejo al azar el resultado danino. El resultado es atribuible a su responsabilidad porque era perfectamente previsible.	Knowing he was inexperienced in driving this kind of vehicles, he decided to do it, he left to chance the damaging result. The result is attributable to his responsibility as it was perfectly foreseeable.
R_V3hKJwx2OAZ6YAp	no se cuenta con suficientes elementos para considerar la pericia del conductor ni si su intencion era causar un accidente.	There are not enough elements to consider the driver's skills, neither if his intention was causing the accident.

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R_cYowl8oA1OlAwrD	no fue intencional	It was not intentional.
R_1eS3zHY4EfwHIHz	Fue imprudente. Por lo inexperto no debio ejecutar ese acto. Intencion no tuvo.	He was imprudent. Since he was inexperienced, he should not have carried out the action.
R_123iQTzFTtYepRS	Dejo el resultado librado al azar	He left the result to chance.
R_25ZrcJpzc9vjWvt	No deseaba la realizacion del accidente, pero tenia conocimiento de lo que podia acontecer, no acepto las advertencias, por eso es responsable del accidente, obro con dolo eventual en razon de no importarle si ocurria o no el accidente.	He did not wish the realization of the accident, but he had knowledge of what could happen, did not accept the warnings, therefore he is responsible of the accident, acted with *dolus eventualis* considering he did not care if the accident occurred or not
R_1eM1j6ja0h30avh	Quiso hacerlo y lo hizo	He wanted to do it and did it
R_2qlTXsXj47pXRV3	el conductor no tenia la intencion de ocasionar el accidente, sin embargo, fue imprudente, confio en su pericia y en que podia conducir el buldocer sin ningun contratiempo. el conductor fue irresponsable, pero obro con culpa no con dolo.	The driver did not have intention of causing the accident, however, he was reckless, trusted his skills and that he could drive the bulldozer without issues. The driver was irresponsible, but he acted with negligence not intent
R_3rPvWTBgVbqlJMR	Quien conducia el buldozer sabia y conocia su impericia, ademas asi se lo advirito su companero en la obra, sin embargo, testarudamente decidio movilizarlo	Who was driving the bulldozer knew his lack of skills, besides he was warned by his construction co-worker, nevertheless, he stubbornly decided to move it
R_3GvuqsM5eEPIAxQ	LA INTENCION ERA MOVER EL BULDOCER, NO OCASIONAR ACCIDENTE	The intention was to move the bulldozer, not to cause the accident
R_2U4tyfqZ1dGWw9c	La intencion del conductor era mover el buldocer para quitar el	The intention of the driver was to move the bulldozer to take that obstacle of the way, even if he

	obstaculo de la via, si bien actuo con impericia, no era su intencion ocasionar el accidente.	acted without having the skills, it was not his intention to cause the accident
R_2tzivxgasfAEy5U	el conductor ocasiona intencionalmente el el infortunio ya que el debia de prever que como consecuencia de sus actos ya que el no es un conductor experto, podria causar un accidente, y este fue negligente siendo este ultimar uno de los factores generadores de culpa, el cual son la negligencia impericia e imprudencia; amplia mente desarrollado en nuestra jurisprudencia.	The driver caused intentionally the accident considering he should have predicted it as a consequence of his actions since he was not an expert driver, he could cause an accident, and he negligent being the latter one of the factors that generate guilt, which are negligence, lack of skill and recklessness; broadly developed in our jurisprudence
R_2pLV3MWXFtwTXCi	A pesar de mostrar previamente una indiferencia respecto del eventual resultado dañino que sucedio y actuo de manera totalmente imprudente, el conductor nunca condujo el buldozer para obtener ese resultado fatal.	Even when previously showing indifference towards the potential harmful result that occurred and when acting recklessly, the driver never drove the bulldozer to obtain such fatal result.
R_33dkO4HJLzRXAdw	En el momento en que el conductor decidio manejar el buldocer, no tenia la intencion, el dolo, la voluntad de causar la muerte de los tripulantes del vehiculo.	In the moment the driver decided to drive the bulldozer, he did not have the intention, the will to cause the death of the passengers of the vehicle
R_3QLVSTpdSfZcy3z	Porque actuo con intencion pese que se le advirtio las consecuencias de sus actos	Because he acted with intention even if he was warned about the consequences of his acts

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R_2TF3cW2jLWYNDnz	Porque se trata de un homicidio doloso pero con dolo eventual.	Because it is an intentional homicide but with *dolus eventualis*
R_2wv0SgYPQrfKalD	EL CONDUCTOR DEL BULDOCER, QUIEN SE ENCONTRABA REALIZANDO UNA ACTIVIDAD PELIGROSA, AUSMIO LA NO OCURRENCIA DEL SINIESTRO AL AZAR, AUNQUE NO ERA SU INTENCION ORIGINARLO, EN MI CONCEPTO, ACTUO EN CALIDAD DE DOLO EVENTUAL, AL DEJAR LA SITUACION ACONTECIDA AL AZAR EN SU NO OCURRENCIA, SIN HABERSE FIJADO COMO PROBABLE EL RESULTADO FINALMENTE OCURRIDO, POR SU IMPERICIA E INEXPERIENCIA EN LA LABOR DESARROLLADA.	The driver of the bulldozer, who was performing a dangerous activity, assumed the non-occurrence of the randomized sinister, although it was not his intent to originate it, in my concept, he acted with *dolus eventualis*, by leaving the occurrence of the situation to randomness, without the confirmation of the likely the result finally occurred, by its lack of skill and inexperience in the developed activity.
R_DUJT64aFEPz1Q1b	Es un delito culposo	It is a negligent crime
R_1P04UrdPqDncNBY	Si bien el conductor ocasiono el accidente no se puede afirmar que su intencion estaba dirigida a dicho resultado, su voluntad era no causar traumatismo ni retraso en la obra, pero ello lo llevo a cometer la imprudencia de conducir el vehiculo que sumado a su estado y falda objetiva de cuidado por parte del	Even if the driver caused the accident it cannot be stated that his intention was directed towards that result, his will was to not cause delays in the construction, but that lead him to commit the negligence of driving the vehicle that, in addition to its state and the lack of objective care duty from the contractor ended in tragedy

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	director de la obra termino en tragedia	
R_3Rn1ecgl8X679dF	El resultado no provino de la intencion dolosa de causar dano, sino del actuar imprudente y negligente del conductor del buldocer, quien creyo equivocadamente que podiaa conducir tal vehoculo sin inconvenientes.	The result did not come from the intention of causing harm, but from the reckless and negligent act of the driver of the bulldozer, who mistakenly believed that he could drive such vehicle without inconvenience.
R_33pD7C5DN1zJJXj	Dado el debate entre si el derecho debe ser deontologico u ontologico opté por la opcion causalista - en detrimento del funcionalismo o normativismo- por considerar que es la opción más razonable para censurar el comportamiento bajo examen.	Given the debate between whether the law should be deontological or ontological I opted for the causalist option - in detriment of functionalism or normativism -, considering it the most reasonable option to censor the behavior under examination.
R_u2l1vGSiIWhEFtD	No habia mas opcion	There was no other option
R_TcFKaFFXkaJy4X7	Un buldocer es una vehiculo de gran tamaño que le es complejo maniobrar intensionalmente, pues su peso le impide este tipo de acciones, sin embargo no se descarta dicha opción, pero literalmente esta operacion no es muy dable en una escala de 100	A bulldozer is a vehicle of great size that is complex to drive intentionally, since its weight normally impedes this type of actions, nevertheless that option is not discarded, but literally this operation is not doable on a scale of 100
R_e37inOxIFHgu71n	Las razones que soportan mi decision de estar parcialmente en desacuerdo se basan en que es un accidente culposo, puesto que efectivamente causo los	The reasons that support my decision of partially disagreeing are based on the negligence of the accident, considering that he effectively caused the damages, in this case the death of the driver and the damage of the vehicle, however

	daños, en este caso la muerte del conductor y el daño del vehiculo, no obstante el reconocio que no sabia conducir ese tipo de maquinaria y aun asi desarrollo la actividad, que por su ejecucion es normalmente peligrosa.	he recognized that he did not know how to drive that type of machinery and even so he developed the activity that is normally dangerous.
R_Oa2N0R5Pt7wBvG1	La intension del conductor no fue la de ocasionar el accidente, a pesar de haber actuado sin el deber objetivo de cuidado.	The driver's intention was not to cause the accident, even when acting without an objective care duty.
R_88kDGsh3s1Hr74l	Si bien el no tenia la intencion de ocasionar el accidente, su actuar fue intencionalmente negligente, la negligencia le hace responsable de los daños ocasionados, un daño de este tipo en las condiciones tipograficas descritas era previsible, y el consciente tomo la decision de su actuar negligente.	Even if he did not have the intention to cause the accident, his acting was intentionally negligent, negligence makes him responsible of the damages caused, a damage of this kind in the described typographical conditions was predictable and he consciously made the decision of his negligent act.
R_1Hc4IizHXIpeB8l	pues conocia de los riesgos que implicaba el poner en transito el vehiculo y de antemano se le habia advertido dicha situacion, sin embargo, presto caso omiso ala misma.	Because he knew the risks that implied driving the vehicule and he was warned about that situation before, nonetheless, he did not attend such warning.

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Appendix No. 6 - Open-ended question responses of law students

Response Id	Reasoning
R_3Gjnycay3XMiQjC	He knew the risks, he said he didn't care about that
R_2S617TwaLbv92ws	He did not know that there was a car I think and most people do not intentionally cause an accident
R_3plLSxZ3Cb2kWMj	He accepted to (maybe) Harm people, even though he had a warning that it was dangerous.
R_1ITzmGZR2uxraMo	He knew the risks that were at stake, but didn't really care. He accepted the risk that an accident could happen.
R_2SfumpIYnueKQSk	Even though the contractor was warned about the possibility of an accident and was not licensed to drive this vehicle, he still continued on with his actions, being fully aware of the possible consequences. This is neglect in the fullest of the definition.
R_39sUpK8U27BYjVT	He said that He did not care, so he was ignoring the possible consequences on purpose. But I don't think that he wanted this to actually happen.
R_6txTvnmQZvdT5sd	He was aware of the risk but didn't care at all
R_10AFuEstwQXILg9	he accepted the very apparent chance that him driving the bulldozer without adequate training, combined with the technical issues the bulldozer was experiencing, would result in an accident, but he never seemed to actually intent for such an accident to happen. therefore i wouldn't say he intentionally caused the accident, he merely accepted the consequences of his actions.
R_3HGnajRadtZWosZ	It was not his intent to kill people, however confronted with the risk he still proceeded. You might ask how fully he realised the risk and consequences. If he knew these fully, I would argue that he has accepted the risk and consequences and had intended to proceed an action that included (the risk of) killing
R_1JDxXvFU6uOZ4sJ	The driver was warned about the risks, he had no license to drive the bulldozer and knew he could cause an incident. He didn't care about this and drove off therefore I think he intentionally caused this even though he didn't really wanted to kill those people
R_BKst0Fi3ifFHF1D	Because the driver was ignorant of his actions
R_2vddGLHmUWpfnWg	It was not his intent to cause the accident, it was his intent to move the bulldozer from one position to the other.
R_1dKVO0J6fUcJGJK	He was fully aware of the risk he was taking. The man told him people could die, it was a matter of luck that the injuries were not that serious. The fact that he knew he

	could cause people's deaths and stil chose to drive the bulldozer made me decide to agree with the statement.
R_snd8qFMfUrLCehH	De driver neglected and ignored the possible dangers of driving a bulldozer while he did not have any expertise of how to drive such a vehicle. By saying that he doesn't care that it could go wrong, he took for granted that he might injure people because of his irresponsible behaviour. Therefore one can say that the driver intentionally caused the accident.
R_1g5he0xXlZUa4VO	His intentions weren't aimed at causing the accident, hence not intentional. However he didn't really care about the consequences, so somewhat disagree
R_AumAmclvKe5ZoGJ	The driver was warned before driving the bulldozer that accidents could happen, so in some way, I do agree that he could have prevented it but didn't
R_2eXruhId2Hph9jb	It has been teached to me that intentional acts include acts in which you take a known risk, but I personally don't believe that taking a risk can be put at the same level of having intentions.
R_3nVlPiWx7u6T1LZ	He didn't do it intentionally, he did in unintentionally, but still, due to lack of thought on the consequences, you can kinda say he did it intentionally, in the sense that he accepted the possible consequences of injury, death or damages.
R_2s5WpGUIr9MXaPm	It wasn't his intention to cause the accident, he did take the risk.
R_3EFkqMee1WHpTu5	Because he was told that there were risk but he couldn't care less. Of course he did not want to causa an accident but by driving it himself he took the risk and accepted that it would be possible to crash.
R_3COUJCq170niwQw	He initially said that he wouldn't care if someone got injured or even worse. But in my opinion it's no proof he actually wanted to cause an accident as this one.
R_3ssisJBKyWgX39x	He did not fully intend to cause an accident but when the risk of that accident was pointed out to him, he knew the existence of the risk and therefore should not have driven the bulldozer.
R_2Cjn5UkEZ2yQBW6	He knew there was a danger in driving it, he also knew he was not experienced in driving it and he was explicitly warned. so yes, he did take the risk and accepted the risk. however, he didn't plan on this to happen, so its not a "strongly agree" but just a "somewhat agree".
R_3PzZjftwoJ6LvJO	He consciously accepted the chance that people could get hurt by driving the bulldozer. This follows mainly from his reply to the employee who told him that accidents could occur, with fatal outcomes.

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R_qQm8rCw32sYQla1	He could have forseen the accident.
R_bqq00TsZjBRji7f	The driver never meant to cause an accident. The intention of the driver was to move the bulldozer. Although the driver took a risk by not being a licensed drive, he never wanted to cause any accident.
R_dbtI55JIUFYms01	The drive of the bulldozer knew that he wasn't qualified to drive such a machine AND he knew that the machine wasn't allright technically. Therefore he must have known that riding with that bulldozer was very risky and that the chance to cause an accident was quite high. This can be equated to 'intentionally' in my opinion.
R_1GNu4cFDNDXsNZm	He took the possible consequences for granted, but he didn't go on the road to be causing an accident
R_WcJadtDB1doxnCV	While the contractor had no intention of causing an accident that could've resulted in his own death ('i only care about moving the bulldozer') he was warned about the possible dangers and thus he had conditional intent (dolus eventualis) which is the weakest form of intent
R_3hlrqqmjVKDWA4v	Although the driver did state that he did not care about the safety of third parties, there is no further evidence that there was the intention of killing them. However I would state that there could be a lesser harsh form of intention, which we call 'voorwaardelijk opzet'. By driving the bulldozer the driver took for granted the change he lost control and he would hurt people in the process.
R_ymTTRANfblUZhVn	He did do it, but he didn't do on purpose. He didn't mean to kill the driver.
R_Rn6xZRpLIlW0L8R	It was his intention to move the bulldozer to the other side of the buildingsite. Nobody has the intention to cause an accident (if it was it is intention, it isn't an accident anymore).
R_3JEFARX9cRczFmP	He did not have the intention to cause any accident.
R_1MTclUmCU5rExij	The driver was informed that the bulldozes wasn't in a fit state for transit, and that driving the bulldozer could lead to serious injury or death of people on the construction site. He stated that the didn't care about all that. In that sense, his action was intended. However, he caused the death of people outside of the construction area. Therefore, I selected 'Agree' and not 'Strongly agree'.
R_2QzFYwFPkG17j3g	I don't believe he did it completely intentional, but he accepted a certain risk, because he knew he wasn't fully capable of driving the bulldozer and he knew that the bulldozer had some technical problems.
R_z7k7xQgroR1neZH	The driver got warned by his collegeagues about the consequenses of the fact that the machine was not in

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	proper technical condition. The driver knew that something bad could happen but he did not care.
R_1Fb4eaVaDVoBWur	It wasn't intentional in the sense that he actually caused the accident (e.g. he barreled through a fence on purpose), but he accepted the high possibility of causing one whilst ignoring the advice from his colleague.
R_qO9JKgVM4VG1VJv	Well he didnt mean to hurt anyone, he just said he didnt care when he got the warning. This leads me to believe it was reckless behaviour, which is still culpa (I think, dont remember completely)
R_3MEUoHUQN9GTvDE	
R_2pPrxrCTsPxEHdi	The Driver, was aware of the dangers, thought about them and concluded that he only cared about getting the bulldozer away. The end result was not 'his wish' or 'reason' to drive the bulldozer but he accepted the reasonable possibility and therefore also accepted the outcome.
R_1BQ4ZeqbsWMCoR1	He was careless and not qualified to operate the bulldozer.
R_3rMzWiP6zxh3ZZm	I consider criminal negligence like that nearly equal to intentional action.
R_1opauBEuIiy5pVz	He had no intention of causing an accident whatsoever, besides that I think that he was thinking mostly about the risks for himself when he said he did not care
R_2CDmErDmuPqjk55	Intentionally a strong term to use, the driver knew he did not know how to drive the machine, nonetheless he decided to drive it. It would constitute for conditional intent at best, for him to know that something could have happened and decided to act anyways
R_3k5EGyUqzKPa3KD	The driver was aware of the consequences of his actions, but nevertheless took the risk and did it.
R_2wAe9JUoSGciXjw	He was aware of the risk of malfunction and causing an accident in which people might get injured. He took the risk anyway.
R_4PJM9VmbTYueznj	He did not intend for the bulldozer to crash and thereby cause an accident. However, he did disregard the warnings from his colleague.
R_1d5JOhxBZIKN0a1	It might not have been direct intention. However, he was aware of the risk, as his colleague pointed them out for him, and he kept on with his negligent action nonetheless. To this extent, he intentionally caused an accident.
R_6EYXaWNsQfOiwxP	I'd call it recklessness rather than intention but as it indicates fault the statement is somewhat valid nonetheless
R_1mxRGlQ2kbpFa4L	He did not want and intend to cause the accident, but he was very clearly and explicitly warned that it was a possibility and went ahead anyway - the acceptance of the

	risk means that did not mind (therefore can be argued to be intentional) if there was an accident in the end
R_BVsAURe1UeiRGHn	He had no prior experience with driving the bulldozer and was warned that accidents will most probably happen. He knowingly assumed the risk and even implied that "he does not care".
R_ebQtmCf0voKqy4h	This can be considered conditional intent: the driver knew the risks and did not care about them.
R_4GfHcp9xLZ1syt3	He didn't do it intentionally but he agreed to bear the consequences because he possessed the knowledge it might be dangerous
R_2xxSZMXtyuJQEOI	I think that he did not want the result because it was not his main purpose, but when he thought about the posibility of it happening he did not care.
R_22zyBjB9e7j3u22	He did not have the intention to create an accident, moreover his aim was to finish the construction work in time. The accident was a result of him being imprudent rather than he intentionally creating the accident.
R_PNGidiTcej35Ann	The driver did not have the objective of causing the accident, nor did he hope to do so to achieve any other goal.