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Counterfactual thinking: Study of the focus effect of scenarios and blame ascriptions to victim and perpetrator

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In two different studies we examined the focus effect of a scenario (i.e., the fact that a given character is the protagonist of a story) on two interconnected domains: the generation of counterfactual thoughts and the ascription of blame. It was hypothesised that being the focal agent of a story would not only lead to more counterfactuals centred on him or her, but also to greater ascriptions of blame as it would be easier to imagine how that actor could have behaved differently had he chosen or wanted to, and thus avoided a deleterious outcome. Different negatively-valenced scenarios depicting a certain misfortune such as a mugging were created in which victim, perpetrator or both characters, were the centre of the story. Results showed that placing either victim or perpetrator as the protagonist of a scenario increases the number of counterfactual thoughts centred on that character, but does not necessarily increase the blame attributed to him or her as the perpetrator was always ascribed more blame than the victim, irrespective of who was the protagonist. Study 2's findings replicate those of Study 1 even with a different experimental design, modified materials, and various counterbalancing measures, hence suggesting that being the protagonist enables one to easily consider counterfactual alternatives involving that actor, but does not prevent one from identifying who is rightfully to blame for a given misfortune. The results and their implications were interpreted according to different theoretical perspectives and possible future avenues of research are discussed.

Key-words: Counterfactual thinking, Focus, Mutability, Blame.

INTRODUCTION

Counterfactual thinking – the tendency to imagine alternatives to past events (Kahneman & Miller, 1986; Kahneman & Tversky, 1982; Roese & Olson, 1995a) – is a pervasive and ubiquitous feature of our lives (Roese, 1994).

The publication of theoretical works on the simulation heuristic (Kahneman & Tversky, 1982) and the norm theory (Kahneman & Miller, 1986) gave rise to a multitude of research in the counterfactual field, thereby allowing researchers to delve deeper into this sort of reasoning (Roese & Olson, 1995a).

According to Sherman and McConnell (1995), one of the current topics of interest for researchers pertains to the aspects of reality that are more mutable and, therefore, more available to counterfactual alteration (see Byrne, 2005).

The concept of mutability is central to counterfactual thinking. N'gbala and Branscombe (1995) stated that counterfactual thoughts are "governed by conditions that determine mutability" (p. 140) and Kahneman and Miller (1986) defined the term as the ease with which aspects of

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reality can be mentally altered. In addition, Wells and Gavanski (1989) described a mutation as a "deletion, substitution, or other distortion of an event" (p. 161).

Research has shown, however, that not all events, outcomes or other aspects of reality are equally and easily mutable. In effect, it was proposed by Wells and Gavanski (1989) that "Most events are not either mutable or immutable but instead vary in their degree of mutability" (p. 161). Ruth Byrne (2005), on the other hand, employed the phrase *fault lines of reality* to describe the elements that are more readily mutated.

As a corollary to the ideas outlined above, counterfactual thoughts, although a product of human cognition and imagination (Roese, 2005), are constrained by a series of factors and restrictions concerning not only what is mutated but also the form in which it is mutated (Byrne, 2005; Catellani & Milesi, 2001; Miller & Gunasegaram, 1990). McCloy and Byrne (2000) further expounded on these limitations to counterfactual thinking by claiming that, during our everyday life, we may not have the time or the cognitive capability to consider every possible counterfactual alternative when we interpret a certain event or outcome. As a result, we focus on what is more readily available for mental alteration.

Closely connected to the concept of mutability is that of availability. N'gbala and Branscombe (1995) claim that "availability defines mutability" (p. 140) due to the fact that, in order to imagine alternative, counterfactual worlds, those worlds need to be within reach. In other words, they need to be available. Thus, the greater the perceived mutability of a given event, the greater the availability of counterfactual thoughts or representations of that event (Roese & Olson, 1995b).

A considerable body of research has identified numerous factors that influence the mutability of events and, consequently, the availability of counterfactual representations of those events. For instance, it has been found that counterfactual thoughts tend to focus on exceptional rather than normal events (Kahneman & Miller, 1986) or on actions rather than failures to act (Gilovich & Medvec, 1994). On the other hand, counterfactuals are generated more frequently when an action or behaviour is considered to be controllable or deliberate (Catellani & Milesi, 2001; Girotto, Legrenzi, & Rizzo, 1991; McCloy & Byrne, 2000), when the perceived distance between what actually happened and could or might have happened is diminutive (Kahneman & Tversky, 1982; Kahneman & Varey, 1990) or when the outcome has a negative valence (Davis, Lehman, Wortman, Silver, & Thompson, 1995; Roese & Olson, 1997; Sanna & Turley, 1996).

Counterfactuals also captivate researchers because they are involved in a myriad of psychological phenomena such as causality ascriptions (Wells & Gavanski, 1989; Wells, Taylor, & Turtle, 1987), decisions on monetary compensations to victims of misfortunes (Goldinger, Kleider, Azuma, & Beike, 2003), sympathy for those victims (Miller & Turnbull, 1990), feelings of shame (Niedenthal, Tangney, & Gavanski, 1994), self-guilt (Davis, Lehman, Silver, Wortman, & Ellard, 1996; Sherman & McConnell, 1995), regret (Gilovich & Medvec, 1994; Gilovich & Medvec, 1995; Roese, 2005) or even happiness (Medvec, Madey, & Gilovich, 1995), and blame or responsibility ascriptions (Creyer & Gürhan 1997; Miller & Gunasegaram, 1990).

Of particular interest to this study are the blame or responsibility ascriptions. According to Martins (2003), researchers have been studying the role of counterfactuals on the way people perceive different types of crimes and misfortunes. To that effect, authors frequently employ scenarios in order to examine the role of the aforementioned factors that influence mutability, such as abnormality, on the generation of counterfactual thoughts and on the ascription of blame or responsibility to the agents involved (e.g., Branscombe, Owen, Garstka, & Coleman, 1996; Creyer & Gürhan, 1997; Goldinger et al., 2003; Mandel & Lehman, 1996; Miller & Gunasegaram, 1990; Turley, Sanna, & Reiter, 1995). The scenarios tend to manipulate the normality of the events described (Martins, 2003) by presenting low consistency information about an actor such as a choice of an unusual route home (Branscombe et al., 1996).

Macrae, Milne and Griffiths (1993) also produced research on this topic. Aiming to understand how people perceived and interpreted certain criminal behaviours, the authors designed two experiments. They manipulated the temporal proximity of a crime in the first experiment so that participants either read that a house was burgled on the day before the owners returned from a vacation or a month and a half prior to the owners' return. The second experiment involved the manipulation of the normality of a mugging victim's behaviour after leaving a bar such that participants either read that the victim chose the usual route home or a new route. Macrae and his colleagues found that when an upward (i.e., more desirable) counterfactual alternative was more available, which occurred when the burglary happened the night before the owners' return and when the victim chose a different route than usual, the participants attributed a more severe punishment to the perpetrators, perceived the occurrence as more serious and reported feeling more sympathy towards the victims.

However, the study by Macrae and his colleagues presents a limitation. All the conclusions and interpretations concerning the role of counterfactual thinking on the perception of criminal behaviour can be drawn only indirectly since the authors did not ask the participants to list their counterfactuals after reading the scenarios. Revisiting Macrae and his colleagues, Martins (2003) replicated their second experiment and found no main effect of normality on the dependent measures. Conducting a similar experiment but in which the participants had to list their counterfactuals about the scenario, Martins (2003) again encountred no main effect of normality on the dependent variables. Moreover, the number of counterfactuals listed did not vary according to the normality or abnormality of the events described in the scenario.

Although the study by Macrae et al. (1993) showed that it is possible to feel more sympathy for the victim and recommend harsher punishment for the perpetrator, there are other theoretical contributions supporting a tendency to blame victims for their misfortunes (Roese, 2005). In fact, that tendency is well documented (Howard, 1984; Lerner & Miller, 1978; Miller & Turnbull, 1990) and research has shown that counterfactual thoughts play a role in this attributional process.

Wells et al. (1987) proposed that events whose outcomes are dramatic are prone to evoke counterfactual thoughts. In other words, people often consider what could, might or should have been when interpreting and analyzing those events. Branscombe et al. (1996) stated that: "No event is judged in isolation; human judgement is dependent on what alternative is used as a comparison" (p. 1042) to corroborate what other authors have found: Counterfactual thoughts influence the way we perceive the world around us and the events that unfold (e.g., Creyer & Gürhan, 1997; Miller & Turnbull, 1990; Roese & Olson, 1993; Wells & Gavanski, 1989).

It appears that two factors play an important role in the process of blame ascription to victims of misfortunes. One of the essential elements may be the ease with which counterfactual versions of the victim's actions or behaviours can be generated. Roese (2005) stated that "anything that a victim does that heightens the vividness of counterfactual versions of her behaviour will invite an exaggerated sense of her personal responsibility for the way things turned out" (p. 97), thus lending his support to the proposal that easily imagining the victim acting differently – and, as a result, avoiding what happened – leads people to ascribe more blame to that victim.

The second element was propounded by Kahneman and Tversky (1982) who, through a series of studies, defined what they termed as the *focus rule*. According to the authors, this rule states that focal or central elements of a scenario are more easily mutated and, consequently, counterfactual alternatives to them are more readily available. Kahneman and Miller (1986) expounded on the aforementioned definition by proposing that the mutability of a focal aspect of a scenario increases when one's attention is directed to it and, as a consequence, all aspects to which less attention is given become part of the background, and hence less mutable.

Kahneman and Tversky (1982) first examined the focus rule by presenting to participants a scenario of Mr. Jones who, on a particular day, either leaves work earlier or chooses a different route home. At an intersection, Mr. Jones is instantly killed in an accident when a truck, driven by

an adolescent under the influence of drugs, crashes into his car. One group of participants assumed the role of Mr. Jones's relatives and another group assumed the role of the teenager's relatives for the counterfactual listing task about the events depicted in the scenario. Considering only the first counterfactual from each participant, the authors could assert that the first group listed more counterfactuals concerning Mr. Jones and the second group listed more counterfactuals concerning the teenager, therefore showing how directing the participants' attention to a particular aspect of a story made them focus more on that aspect.

Creyer and Gürhan (1997) conducted two experiments to examine how people interpreted and assessed negative events and hypothesised that directing the participants' attention to an aspect of a scenario (e.g., the protagonist) not only would increase the availability of counterfactual alternatives concerning that aspect but also the guilt ascribed to it. The study used a scenario with two versions: a routine one in which a woman has an accident in common circumstances (i.e., at a busy intersection) when returning home from a grocery store, and an abnormal one in which another woman, also returning home from a gorcery store, had an accident when a piece of an overpass fell and hit her car. Moreover, certain scenarios had additional information about how 40% of drivers fail to wear seatbelts in short trips, in order to manipulate the amount of attention given to the focal actor of the story. The results revealed, on the one hand, that more counterfactual alternatives centred on the driver were generated in the routine condition due to the lack of abnormal circumstances causing all the attention to be directed to the driver. On the other hand, more blame was ascribed to the driver in the routine condition, again owing to the lack of abnormal elements present. In the abnormal conditions of both experiments, the same pattern of results emerged when the information about seatbelts was provided as that put the spotlight on the driver, despite the presence of abnormal elements.

Manipulating the direction of the participants' attention to certain elements was also present in the study by Branscombe and her colleagues (1996). To assess how being exposed to a counterfactual thought (that alters the outcome) or to a semi-factual thought (that fails to alter the outcome) focused on a certain character of a scenario would influence the ascription of blame to that character, the authors created a rape story (Experiments 1 and 2) and a car crash story (Experiment 3 and 4). Participants either watched a videotape of an attorney forming a counterfactual or semi-factual about one of the characters (Experiments 2 and 3) or listed a counterfactual, a semi-factual or both (Experiments 1 and 4) centred on a specific character. Following one of the aforementioned tasks, the participants ascribed blame to one of the characters on a scale that ranged from 0% to 100%. The pattern of results for the counterfactuals was consistent across the four experiments: If a participant focused on a given character and was able to form a counterfactual about their actions, thus altering the outcome, the blame ascribed to that character would increase and, therefore, the blame ascribed to the other character would decrease. The results led Branscombe and her colleagues to conclude that counterfactual focus is essential for the ascription of blame.

The literature cited above endeavoured to show that being a focal agent of a scenario appears to be a determinant key not only for generating more counterfactual thoughts centred on that agent, but also to ascribe more blame to it since it is easier to imagine how the agent could have acted differently and, thus, how they could have avoided the misfortune. Kahneman and Miller (1986) explored this topic to arrive to an important conclusion: The majority of scenarios employed in studies involving crimes or misfortunes focus mainly on the victims, putting them on the forefront and making their actions more mutable, while the perpetrator is neglected to the background, thus reducing the mutability of their behaviours. Kahneman and Miller continued pursuing this train of thought by asking if placing the victim as the protagonist of a story is the key behind the tendency to blame the victims more for what happens to them. The authors questioned further: What if the perpetrator was the protagonist? Would more counterfactuals be generated about him and would more blame be ascribed to him?

Indeed, research on this topic has not manipulated the focus of a scenario in such a way that considers either the victim or the perpetrator as the protagonist. Taking into consideration the aforementioned lacuna propounded by Kahneman and Miller (1986), we aimed to study, in two different experiments, what we termed as the *focus effect* of a scenario (i.e., the fact that a given character is the protagonist) on two interconnected domains: The mutability of a given character's behaviours (i.e., the counterfactual thoughts focused on that character) and the blame ascribed to that character.

It was therefore hypothesised that, if a certain character – either victim or perpetrator – was the protagonist of a scenario, more counterfactuals should be listed and generated centred on that character. On the other hand, if a character was the protagonist, then more blame should be ascribed to them and less blame should be ascribed to the background character because it is easier to imagine how the former could have acted differently and, thus, avoided the misfortune.

Furthermore, we also decided to create scenarios in which both victim and perpetrator would share the spotlight in order to have a baseline-like condition. In this type of scenarios, we expected that both the counterfactuals generated and the blame ascribed would be more focused on the perpetrator. The rationale for this can be found in studies of the mental model theory. According to this theoretical perspective (Johnson-Laird, 1983, 2006), we build mental models upon interpretation of premises or assertions, and each mental model corresponds to an imagined possibility. The research in this field applied to counterfactual thinking (e.g., Byrne, 2005; McCloy & Byrne, 2000) postulated that it is easier to imagine counterfactual alternatives for socially unacceptable controllable actions due to the consideration of two different possibilities when we interpret them: the unacceptable one (e.g., the man robbed a bank) and its contrary – the acceptable one (e.g., the man does not rob a bank). With this type of mental models in mind, we are able to generate counterfactual thoughts more easily because we have more information available in our working memory which can be used to create counterfactual, alternative realities.

The studies included in the present paper share the aforementioned aims and hypotheses above, differing only in terms of methodology. More specifically, Study 1 employed a within-subjects design, whereas Study 2 followed a between-subjects design with slightly re-structured materials and with the application of several counterbalancing measures not present in Study 1 such as the order of the tasks completed by participants. By employing different methodological procedures and maintaining the same type of materials for the most part, we attempted to obtain similar results that would allow us to rule out an array of alternative explanations to our results.

STUDY 1

METHOD

Participants

Seventy-two 12th grade students, 44 female (61.1%) and 28 male (38.9%), aged 16 to 20 years (M=17.69), from a school in Lisbon served as participants for this study.

Design

The experimental design employed for this study consisted of an independent variable – the focus of the scenarios (i.e., who is the protagonist) – victim, perpetrator or both characters – and

several dependent variables or measures concerning the counterfactuals generated and the blame ascribed. As for the former, we defined as dependent variables the number and focus of the counterfactuals generated (i.e., whether the counterfactuals changed the actions of the victim, perpetrator, both characters, or other elements; please see the "Coding the responses" section for more details on this matter). Regarding the latter, we were interested in obtaining the amount of blame ascribed to victim and perpetrator in each scenario.

Additionally, the content of the scenarios varied between car accident, physical assault and mugging for every type of focus (i.e., victim, perpetrator, and both), thus resulting in 9 distinct scenarios. It is important to emphasise at this point that the content or type of the scenarios is not labelled as an independent variable. However, it was a necessary measure to be taken in order to demonstrate that our results were not confined to only one type of misfortune and, thus, could be expanded and generalised to other types of negative outcomes. What is more, asking participants to read scenarios with different contents and protagonists and perform the required tasks for each one allowed us to employ the aforementioned within-subjects design. Although the content of each scenario read by a participant was different, we considered the scenarios as equivalent (see the Materials section), so as to prevent that aspect from becoming a potential confounding variable to our results.

Each participant read three scenarios, each of a different type and with a different focus. An example of this would be reading a car accident scenario with the victim as the protagonist, a mugging scenario with both characters as protagonists, and a physical assault scenario having the perpetrator as the focal agent. Therefore, the design of this experiment is a within-subjects one since participants were assessed more than once. As a result, 3 experimental conditions were created in this Study, resulting from our independent variable "focus of the scenario" (victim, perpetrator or both). Every participant was present in each of the experimental conditions since, as described above, they read 3 scenarios in which all types of focus were manipulated.

Materials

Nine different scenarios were created by presenting each type of story (i.e., car accident, physical assault, and mugging) in three different ways: with the victim as the protagonist, the perpetrator as the protagonist, or both characters as protagonists – the variable "focus of the scenario".

When creating the scenarios, we took care so that certain characteristics or aspects remained the same across all of them. Firstly, in order to prevent possible moral judgements and preconceptions concerning different types of jobs or activities, all characters were presented as college students. Secondly, not only is the outcome the same for all agents (i.e., victim and perpetrator always go to the hospital), but so is the action for which the counterfactual availability is greater: Each character chooses an unusual route home for a certain reason. Lastly, the number of sentences focusing on a specific character was also objectively defined so that scenarios with only one protagonist have 6 sentences mentioning the focal agent and 2 sentences mentioning the secondary agent, whereas scenarios with both victim and perpetrator as protagonists have 6 sentences for each character to allow equal reference of victim and perpetrator.

It is important to note that it was not hypothesised whether the nature of the information we provided about each character would influence the generation of counterfactual thoughts or the ascription of blame as Creyer and Gürhan (1997) did. However, placing a character as a protagonist will undoubtedly and inevitably lead to more information about that character being available to the participant.

Below we present one of the scenarios created for this study – a car accident scenario with the victim as the protagonist (see Appendix A for the translation of all scenarios to English):

Mariana is a college student. Although she always chooses the same route home, on Thursday Mariana decided to go along a shorter one so as to see if she could get home faster. On the way,

Mariana stopped at an intersection because the traffic light was red. After a short wait, the traffic light turned green and Mariana eventually resumed her driving. At that moment, a car was coming towards her from her left. The car did not stop at the red traffic light and was moving at high speed. Mariana tried to brake but there was not enough time and the vehicles collided. Mariana and the driver of the other vehicle were taken to hospital with serious injuries.

Procedure

Before the booklets were distributed amongst the students, it was explained that we were conducting a study to assess how people think and opine about different stories.

In an experimental session, which comprised a single class and lasted for about 15-20 minutes, the students completed several counterfactual generation tasks and blame ascription tasks in the booklets handed out to them. At the end of the session, all participants were duly debriefed.

More specifically, each participant was given a 7-page booklet containing an instructions sheet and the three scenarios.

After reading the instructions sheet and providing basic personal information (i.e., gender and age), each participant read the first scenario and subsequently generated between one to five counterfactual thoughts that occurred to them after reading by completing blanks with the cues "If" and "then" ("Se" and "então" in the original). If the instructions were duly followed, then a counterfactual thought would be generated because each listed thought would always follow the structure of "If... then...". Moreover, it was clearly stated that, for this task, participants did not have to generate 5 counterfactuals for each scenario they would read, but they were asked to provide at least one. This procedure was repeated in the next two scenarios, which appeared in the following two pages of the booklets. As a result, each participant could generate between 3 (one per scenario) and 15 (five per scenario) counterfactuals.

The three scenarios then reappeared, in the same order and in the last 3 pages of the booklets, but this time the participants were required, for each one, to ascribe blame to the victim and perpetrator by circling a number, in accordance to their judgement of the situation, on a Likert scale (1=*Nada culpado – Not to blame –* to 9=*Totalmente culpado – Totally to blame*). Therefore, two blame scales needed to be completed for each scenario: one for the victim and one for the perpetrator.

The reason why we decided to repeat the presentation of the scenarios was twofold: so as the participants would not have to go back and re-read the stories when ascribing blame, on the one hand, and to separate the tasks of counterfactual generation and blame ascription, which involve different types of judgements and attributional processes, on the other hand.

In addition, with the aim of controlling for order effects, the order of presentation of the scenarios in each booklet was counterbalanced.

The Portuguese versions of the dependent measures used, as well as their translations to English, are in Appendix B.

RESULTS

Coding the responses

Prior to the statistical analyses, the counterfactuals generated were subjected to a two-stage coding process. This task was carried out by a single judge, knowledgeable of counterfactuals and the main aims of the experiment. In order to make the processes of codification and data analysis

easier, various sheets were created on which the number and focus of the counterfactuals generated were registered.

In the first stage, the responses were coded according to whether or not they were counterfactual. All thoughts that altered an outcome were classified as such. The second stage involved coding the counterfactuals according to their focus (i.e., the character whose actions or behaviours formed their content): victim (e.g., *"If Rita had not gone through a longer route home in order to unwind a little, then she would never have found Bernardo."*), perpetrator (e.g., *"If Daniel had believed his girlfriend, then none of this would have happened."*) or both when the thought mentioned victim and perpetrator simultaneously (e.g., *"If Bernardo and the girl who was mugged had seen the car coming, then they would not have been hit by the car."*). Certain counterfactuals mentioned other entities or third-party agents and were coded under the designation "others" (e.g., *"If there were not traffic lights on that street, then something much worse could have happened."*).

Counterfactuals generated

Of the 668 thoughts validated for our study, only one was considered non-counterfactual. Therefore, the coding process yielded 667 counterfactual thoughts. Each participant could list between 3 (1 per scenario) and 15 (5 per scenario) counterfactual thoughts. The non-counterfactual thought was excluded from all statistical analyses. On average, 9.26 counterfactuals (*SD*=2.89) were listed per participant.

Concerning the number of listed counterfactuals according to their focus (i.e., victim, perpetrator, both or others), we found empirical evidence that supports one of our hypotheses. Table 1 shows that placing a character as the focal agent of a story leads, on average, to more counterfactuals being generated about that agent. That is true when the victim was the protagonist (*M*=1.60 counterfactuals *versus M*=0.90 when the perpetrator was the protagonist *versus M*=0.01 when both characters were the protagonists) and when the perpetrator was the main character (*M*=2.39 *versus M*=0.26 when the victim was the protagonist *versus M*=0.04 when both characters were the protagonists). On the other hand, when both characters were the protagonists of the story, more counterfactuals were generated about the perpetrator, thus corroborating our prediction (*M*=1.57 *versus M*=0.88 victim-centred counterfactuals *versus M*=0.33 both-centred counterfactuals).

TABLE 1

Mean Number of Generated Counterfactuals Centred on the Victim, Perpetrator, and Both, According to the Focus of the Scenarios (Study 1)

	Focus of the scenario		
	Victim	Perpetrator	Both
Focus of the counterfactual	*M (SD)*	*M (SD)*	*M (SD)*
Victim	1.60 (0.98)	0.26 (0.53)	0.88 (0.80)
Perpetrator	0.90 (0.77)	2.39 (1.12)	1.57 (0.93)
Both	0.01_a (0.12)	0.04_a (0.20)	0.33 (0.53)

Note. *N*=72. Means sharing a common subscript are not statistically different at α=.05, according to the Bonferroni test.

To assess the statistical significance of the data, 3 one-way repeated measures ANOVA, with the focus of the scenario as the within-subjects factor in each one, were conducted on the data presented in Table 1. The analysis revealed that the number of counterfactuals focused on the

victim, $F(2,142)=56.565$, $p<0.001$, $MSE=0.567$, $\eta^2_p=.44$, on the perpetrator, $F(2,142)=49.980$, $p<0.001$, $MSE=0.800$, $\eta^2_p=.41$, and on both characters, Pillai's Trace=0.254, $F(2,142)=11.915$, $p<0.001$, $\eta^2_p=.25$, differs significantly according to the focus of the scenarios.

Following the rejection of the null hypothesis for all the tests above, multiple comparisons were carried out on the data. Regarding the counterfactuals centred on the victim, according to the focus of the scenario, statistically significant differences were found in all comparisons ($p<.001$). The same pattern of results was obtained for the counterfactuals centred on the perpetrator ($p<.001$ for all comparisons). For the counterfactuals centred on both characters, only the comparison between the scenarios with victim as the protagonist and perpetrator as the protagonist did not yield statistically significant differences ($p=.962$, represented by subscript $_a$ in Table 1; $p<.001$ for all the other comparisons).

We also considered the first counterfactual listed by participants in each scenario they read as an alternative way of testing the focus effect of a scenario on the counterfactuals generated. To achieve this end, we were interested not in the mean values of counterfactuals, but rather in the proportions of first counterfactuals according to the focus of the scenario. Table 2 shows the percentages of the first counterfactuals generated in each scenario, organized according to their focus. The table shows that the majority of first counterfactuals generated for the scenarios with the victim as the protagonist were centred on the victim (68%), and the same happened when the perpetrator was the main agent (73.6%). When both characters were the protagonists, however, the majority of first counterfactuals generated did not contemplate them both (12.5%).

TABLE 2

Percentages for the Focus of the First Counterfactual, According to the Focus of the Scenario (Study 1)

Focus of the scenario	Focus of the first counterfactual	%
Victim	Victim	68.00
	Perpetrator	27.80_a
	Both	0.00_b
	Others	4.20
Perpetrator	Victim	2.80
	Perpetrator	73.60
	Both	0.00_b
	Others	23.60
Both	Victim	37.50
	Perpetrator	45.80_a
	Both	12.50
	Others	4.20

Note. $N=72$. Percentages sharing a common subscript are not statistically different at $\alpha=.05$.

With the aim of analysing whether the proportions of first counterfactuals differed significantly according to the focus of the scenarios, three Cochran Q Tests were performed on the data shown in Table 2, one for each focus of the first counterfactuals (i.e., first counterfactuals centred on the victim, perpetrator, and both). For each test, the "success" condition was defined as the focus of the first counterfactual sharing the focus of the scenario in which that counterfactual was generated (e.g., the first counterfactual, pertaining to a scenario in which the victim was the protagonist, being centred on the victim). Due to the extremely low proportions of counterfactuals centred on "others" across the focus of the scenarios, we decided to omit them from this analysis.

The aforementioned *Q* Tests showed the existence of statistically significant differences for the first counterfactuals centred on the victim according to the focus of the scenario, $Q(2)=66.360$, $N=72$, $p<.001$, the first counterfactuals centred on the perpetrator, $Q(2)=32.510$, $N=72$, $p<.001$, and also for the first counterfactuals centred on both characters simultaneously, $Q(2)=18.000$, $N=72$, $p<.001$.

Because we rejected all null hypotheses, we conducted multiple comparisons post hoc to assess the source of the differences encountered. For the first counterfactuals centred on the victim, statistically significant differences were obtained for all pair wise comparisons ($p<.001$). Concerning the first counterfactuals centred on the perpetrator, differences arose when comparing the scenarios with victim as the protagonist and perpetrator as the protagonist ($p<.001$) and the scenarios with the perpetrator as the protagonist and both characters as the protagonists ($p=.002$). Finally, regarding the first counterfactuals centred on both characters simultaneously, we obtained statistically significant differences when comparing the scenario with both characters as the protagonists with the scenario with victim as the protagonist and when comparing the former with the scenario with the perpetrator as the protagonist ($p=.001$ for both comparisons).

Blame ascriptions

Table 3 shows the mean scores for the blame ascribed to the victims and perpetrators of each scenario. The table shows the victim received more blame when both characters were simultaneously protagonists of the story ($M=2.35$), whereas the perpetrator was ascribed more blame when the victim was the protagonist of the story ($M=8.35$). The latter figure appears to contradict our hypothesis that the protagonist of a story would be blamed more as the perpetrator received more blame when the victim was the protagonist. We now turn to the inferential analyses regarding the data in Table 3.

TABLE 3

Mean Scores for the Blame Ascriptions to Victim and Perpetrator, According to the Focus of the Scenario (Study 1)

Focus of the scenario	Agent blamed	*M*	*SD*
Victim	Victim	2.07	1.44
	Perpetrator	8.35	1.05
Perpetrator	Victim	2.13	1.67
	Perpetrator	7.89_a	1.42
Both	Victim	2.31	1.68
	Perpetrator	7.89_a	1.40

Note. $N=72$. Means sharing a common subscript are not statistically different at $\alpha=.05$, according to the Bonferroni test.

A one-way repeated measures ANOVA with the focus of the scenario as the within-subjects factor was performed and yielded no statistically significant differences for the blame ascribed to the victim, thereby showing that manipulating the protagonist of a story did not have a considerable impact on the blame ascribed to the victim, $F(2,142)=0.564$, $p=.570$, $MSE=1.947$, $\eta^2_p=.02$.

As for the blame ascribed to the perpetrator, the focus of the scenario was revealed to be important as statistically significant differences were found through the use of another ANOVA as described above, $F(2,142)=3.679$, $p=.028$, $MSE=1.370$, $\eta^2_p=.05$. The post hoc analysis of the

various means indicated only marginally significant differences between the following pairs of means: scenario with victim as the protagonist *versus* scenario with perpetrator as the protagonist, and scenario with victim as the protagonist *versus* scenario with both agents as the protagonists (p=.053 for both pair wise comparisons).

DISCUSSION

The data for our first study provided empirical and statistical evidence for the presence of a focus effect of the scenarios on the generation of counterfactual thoughts. In other words, when either victim or perpetrator was at the foreground of a story, participants displayed a greater tendency to imagine how they could have acted differently and possibly avoided the misfortunes that befell upon them. When both characters were the protagonists of the story, on the other hand, participants opted to change more the actions of the perpetrator, thereby supporting another of our predictions. Moreover, the results obtained from the Q Tests lent more support to the focus effect of a scenario on the generation of counterfactual thoughts by showing that is also present when only the first counterfactuals are considered.

While these data replicated Kahneman and Tversky's (1982) focus rule, they did not necessarily lead to the participants ascribing greater blame to the main agent. In fact, if we only assess the mean blame values, the perpetrator was, on average, always ascribed more blame than the victim, and either victim or perpetrator were ascribed more blame when they were not the protagonists, or the sole protagonists, of the scenarios: the former was ascribed more blame when both characters were simultaneously protagonists and the latter when the victim was the protagonist. Furthermore, inferential analyses failed to yield statistically significant differences for the blame ascribed to the victim across the focus of the scenarios, thereby showing that manipulating who was the protagonist of the scenario did not have a considerable effect on the blame ascribed to the victim. As for the blame ascribed to the perpetrator, the fact that we has considerably more blamed in the scenario with the victim as the protagonist was responsible for the marginally significant differences found in the multiple comparisons carried out on the data. We will return to this topic in more detail in the General Discussion.

Therefore, it appears that our first study presents a rather paradoxical pattern of results, according to the cited literature and formulated hypotheses: imagining how the protagonist of a story could have acted in a different way and therefore avoid what happened to them, was not sufficient for participants to consider that protagonist as more to blame for the misfortune. This is particularly true for the scenarios in which the victim was the main agent of a story.

STUDY 2

Following the interpretation and discussion pertaining to the data from the previous experiment, we questioned whether several aspects of our experimental design were acting as potential confounds to our results.

Firstly, the task order could be preventing us from fully, and clearly, interpret our results because the participants in the first study always generated counterfactuals before ascribing blame to the victim and perpetrator. Is it reasonable to assume that first thinking about how things could, might or should have been different affects later blame attributions? If we abide by what authors such as Roese (2005) claim, then the answer to the question above would be a sound yes. With that in

mind, we decided to counterbalance the task order in this second study so participants were either asked to first list whatever counterfactual thoughts that came to mind after reading their scenario or were first instructed to ascribe blame to victim and perpetrator of the story they had just read.

Secondly, the within-subjects design we employed in the first experiment also led us to put the results obtained into question. Was there any learning or practice effect involved due to the fact that participants completed both tasks three times and had access to each scenario twice in every booklet they received? Considering that our hypotheses can just as well be tested with a between-subjects design, we opted for that one in preference to a within-subjects one in the present experiment.

Lastly, a careful post hoc analysis of our scenarios showed us that the stories we created were not as equivalent as we had designed them to be. In fact, there was quite a noticeable discrepancy between the degree of control both characters (i.e., victim and perpetrator) had over the different situations. The perpetrators – described as being out of control, violent or aggressive – not only caused the misfortunes which befell upon the victims, but also had more influence over what happened and their own actions. The victims, on the other hand, were unfortunate enough to choose a different path, meet the perpetrators, and even fail to resolve the disputes that arose (e.g., in the assault scenario, the victim tried to explain that he was just talking to a former classmate but his words were in vain). Therefore, whereas the victims could do nothing but suffer whatever the perpetrators did to them, the latter could more or less foresee the results of their actions and had more control and influence over the situations. Literature has already shown how factors such as forseeability are connected to blame ascriptions (e.g., Alicke, 2000) or counterfactual thoughts (e.g., Miller & Turnbull, 1990), which led us to renovate and restructure our scenarios in this new study in numerous aspects such as the factors that enabled (i.e., allowed) or caused the outcome to occur. Further considerations on this topic are included in the Method section.

The second study shared the aims and hypotheses of the first, but it also sought to eliminate a series of alternative explanations to the results obtained in the previous study, related to the methodological issues addressed above.

METHOD

Participants

One hundred and thirty-nine 12th grade students, 90 female (64.7%) and 49 male (35.3%), from a high school in Lisbon aged 17 to 20 years (M=17.57), participated in this study.

Design

Once again, the focus of the scenario (i.e., who was the protagonist of the story – victim, perpetrator, or both) constituted the main independent variable in this study. In accordance with the previous study, we did not label the type or content of the scenario (i.e., mugging or physical assault for this study) as an independent variable but we thoroughly controlled all aspects of the stories (see the Materials section). Moreover, we also considered for this experiment task order as a variable of interest (i.e., whether participants first generated counterfactuals or first ascribed blame after reading the scenario). On the other hand, the dependent variables remained the same as in Study 1. More specifically, we were once more interested in studying, for the generation of counterfactuals, their number and focus. As for the blame ascriptions, the amount of blame ascribed to victim and perpetrator according to the focus of the scenario was the dependent measure of interest.

As a result, this experiment was a 3 (focus of the scenario: victim, perpetrator, both) x 2 (task order: counterfactual generation first, blame ascription first) between-subjects design. All participants were randomly assigned to one of the six experimental conditions in which, for assault and mugging stories, the focus of the scenario and the order of the tasks were varied.

Moreover, for the scenarios in which both victim and perpetrator were the protagonists, we also counterbalanced the order in which each character was mentioned in the story (i.e., some scenarios began with an account of the victim and their actions and others with a description of the perpetrator and their actions) and the order in which the participants ascribed blame so that some first attributed blame to the victim and others first attributed blame to the perpetrator. We opted to do this as a purely control measure because the scenarios explicitly and equally focus on both characters and, therefore, we were interested in ruling out the possibility that always starting these kinds of scenarios by describing the victims and their actions or always ascribing blame to the victim first could be potentially confounding aspects to our data. Table 4 presents the number of participants per condition.

TABLE 4

Frequencies for the Counterbalanced Elements (Study 2)

		Focus of the Scenario					
				Both			
				Character Order & Blame Order			
		Victim	Perpetrator	V/V	V/P	P/V	P/P
Type of Scenario	Task Order	*n*	*n*	*n*	*n*	*n*	*n*
Assault	CF 1st	13	10	4	3	4	3
	BL 1st	11	10	3	3	2	2
Mugging	CF 1st	12	12	4	2	2	4
	BL 1st	12	12	3	3	4	1
Total		48	44	47			

Note. *N*=139. CF 1st=the counterfactual generation task was performed first; BL 1st=the blame ascription task was performed first; V/V=the victim was the first character mentioned in the scenario and the first character to be blamed; V/P=the victim was the first character mentioned in the scenario and the perpetrator was the first character to be blamed; P/V=the perpetrator was the first character mentioned in the scenario and the victim was the first character to be blamed; P/P=the perpetrator was the first character mentioned in the scenario and the first character to be blamed.

Materials

We decided to eliminate the car accident scenario in this experiment as the essence and contents of the story differed in certain ways from the other two scenarios. Thus, we only preserved the mugging and physical assault scenarios, but decided to improve them in order to make them more equivalent.

Alterations to the scenarios notwithstanding, the aforementioned aspects which are equivalent across stories, regardless of their type, were kept in these new versions. They include the fact that all characters are described as college students, the controllable and easily mutable behaviour of choosing an unusual route home, the fact that all perpetrators lost control on those fateful days due to arguments with their significant others, and the negative outcome being the same (i.e., being sent to the hospital with severe injuries).

In addition, the number of sentences mentioning one or both characters was also made equivalent, although in a different ratio than the previous stories. For the re-structured scenarios with only one protagonist (i.e., either victim or perpetrator), 7 sentences refer to the main character and their actions, whereas 2 sentences refer to the secondary agent and their actions. As for the scenarios in which both agents are protagonists, 5 sentences focus on both characters simultaneously as certain pieces of information are similar (e.g., both are college students), 3 sentences are centred on the victim and their actions and 3 other sentences are centred on the perpetrator and their actions. The sentential ratio in the latter scenarios differs considerably from the one for the scenarios in the previous study (i.e., 6 sentences for each character), but such a change was necessary due to the differences in the stories. Moreover, creating sentences that refer to both characters simultaneously also helped to improve the readability of our scenarios. The ratio is the same for the assault and mugging scenarios centred on both characters so that should not be a potential confounding source when analysing the obtained data.

Again, it was not hypothesised whether the different nature of the information provided for each character according to the focus of the scenario would play an important role in the counterfactual generation and blame ascription tasks. Nonetheless, we endeavoured to control this aspect by including similar types of innocuous information in all scenarios, irrespective of the protagonist(s).

Concerning the rest of the alterations to our scenarios, we addressed the matters of whether the victims' and perpetrators' actions were enablers or causes of the different misfortunes, the controllability of those causes and enablers, and the nature of the irrelevant, innocuous information provided concerning victim or perpetrator. In so doing, not only did we make the scenarios more equivalent, eliminating a possible confounding source of results since the causes and enablers were the same across stories, but we also allowed the victim to be on the same level as the perpetrator as far as control and influence over the situation were concerned. Appendix C contains the new scenarios translated to English.

Research has shown that altering a certain antecedent does not prevent people from correctly identifying the cause of a given event (Mandel, 2003; N'gbala & Branscombe, 1995) and more recent studies (Egan, Frosch, & Hancock, 2008; Frosch, Johnson-Laird, & Cowley, 2007) seem to corroborate this argument by showing that not only can participants distinguish between what caused an event to occur and what enabled it to occur, but they can also ascribe more responsibility to the cause and counterfactually mutate the enabler more, except when it is completely uncontrollable. These findings appear to indicate, then, that people respond differently to the various elements involved in a certain outcome.

Concerning the enablers and their degree of controllability, five of them were defined for all scenarios. The first two enablers, one uncontrollable (e.g., the professor missed the last class so the victim left college earlier) and one controllable (the decision to follow a different route home) were the same across stories and their focus and content on either victim or perpetrator depending on who was the protagonist and what type of scenario (i.e., assault or mugging) it was. The third enabler was uncontrollable when the protagonist was the victim as she was approached by the perpetrator and controllable when the perpetrator was the focal agent as he decided to approach the victim. The fourth and fifth enablers were always centred on the perpetrator and victim, respectively, for all scenarios. The former pertains to the perpetrator demanding an apology from the victim in the assault scenario and yanking the victim's purse to get a cigarette in the mugging scenario, whereas the latter concerns the victim's refusal to apologise in the assault story and the victim's choice of yanking her purse herself in the mugging scenario. All enablers are included when the scenario has both characters as protagonists but their order may be counterbalanced as first may appear some related to the victim or the perpetrator, as it is explained in more detail below.

Please note that the perpetrator was still the cause of the misfortunes suffered by the victims. That needed to remain unchanged so there was a clear actor who was the perpetrator and another one who was victimised.

Concerning the scenarios in which both victim and perpetrator are the protagonists, we decided to include an initial section of the story in which the information common to them (e.g., the fact that they are all college students) is presented at the same time and not in separate sentences as in the previous scenarios of this kind. Furthermore, we counterbalanced the order in which each character was mentioned throughout these scenarios such that some stories with both characters as protagonists began describing the victim and others the perpetrator.

On balance, the scenarios maintained the essence of the first ones but were altered in order to make them even more equivalent.

Procedure

As in Study 1, a single experimental session also comprised a single class, but this time lasted for 10-15 minutes.

Before the booklets were given to the participants, it was stated that they would be participating in a study designed to assess how people think and form opinions about different stories. The booklets were then distributed amongst the students, after which they were asked to clearly read the instructions sheet and provide the basic personal details required (i.e., gender and age). Due to the counterbalancing of task order, the instruction sheet varied according to which task came first. In other words, the contents of the instructions were the same as in the previous Study, but the order of the sentences was altered so as to reflect the order of the tasks to be performed.

In this experiment booklets only contained 4 pages since each participant read, and completed the specific tasks, for one scenario only. Because only one story was attributed to each participant, the scenario appeared only once in the booklet, after the instructions sheet. Following the scenario, the counterfactual generation and blame ascription tasks were presented, each on their own page, and according to a specific order (i.e., counterfactual generation first or blame ascription first).

Once again, the participants, after reading the scenario, were instructed to generate counterfactuals that occurred to them and ascribe blame to the victim and perpetrator. The procedures used for counterfactual generation and blame ascription, as well as the instructions provided for each of these tasks, were the same as in Study 1 (see Appendix B).

After all participants were done and the booklets collected, a debriefing session took place in which the true aims of the experiment were clearly explained and all queries answered.

RESULTS

Coding the responses

All thoughts listed by the participants in this study were subjected to a codification process similar to that employed in Study 1. In other words, the thoughts generated were first coded as to whether they expressed a counterfactual reality or not. If the thoughts were, in fact, deemed counterfactual, then they were coded according to their focus (i.e., whether they were centred on the victim, perpetrator, both characters, or "others"). For this codification, the set of criteria adopted in the first study was used. Furthermore, the same judge responsible for coding the responses in the previous experiment was also in charge of coding the responses in the present experiment.

Counterfactuals generated

It is important to note that each participant could generate between 1 and 5 counterfactual thoughts after reading the scenario that was assigned to them. Taking that into consideration, 465 thoughts were listed by all participants and 457 of which were considered to be counterfactual after being coded as described above. As a result, 8 thoughts were not considered to be counterfactual because their content did not pertain to an imagined reality where the outcome would have been different had something else been different as well. The non-counterfactual thoughts were not considered in any of the analyses described below. On average, each participant listed 3.29 (*SD*=1.27) counterfactual thoughts.

Due to the fact that we counterbalanced task order in this experiment in order to rule out the possibility that the results of the previous study could be owed to that aspect, we first analysed whether significant differences could be found between the counterfactuals generated when their task came first in the participants' booklets or when the blame ascription task came first. An independent samples t-test with task order as a between-subjects factor yielded no significant differences, $t(137)=1.477$, $p=.142$, $d=1.48$, between the mean number of counterfactual thoughts generated when their task came first ($M=3.44$) or when the blame attribution task came first ($M=3.12$). Therefore, task order was collapsed for further analyses.

Moreover, since we manipulated the order in which each character was mentioned and in which each character was ascribed blame only for the scenarios with both victim and perpetrator as protagonists, we also analysed whether these factors would influence the counterfactuals generated in these scenarios. Two factorial ANOVAs 2 (Order of Character: victim first or perpetrator first) x 2 (Order of Blame Ascription: victim first or perpetrator first) as between-subjects factors were conducted on the counterfactuals centred on the victim, perpetrator, and both characters (the mean values for the counterfactuals can be found in Table 5), but no statistically significant interactions or main effects were found ($p>.05$ for all tests). As a result, these variables were collapsed for all further analyses pertaining to the scenarios centred on both characters simultaneously.

TABLE 5

Mean Number of Generated Counterfactuals Centred on the Victim, Perpetrator, and Both, According to the Focus of the Scenarios (Study 2)

	Focus of the scenario		
	Victim	Perpetrator	Both
Focus of the counterfactual	*M (SD)*	*M (SD)*	*M (SD)*
Victim	2.29 (1.05)	0.57_a (0.66)	0.83_a (0.76)
Perpetrator	0.54 (0.74)	2.14 (1.17)	1.32 (0.73)
Both	0.06_b (0.25)	0.07_b (0.26)	0.68 (0.76)

Note. $N=139$. Means sharing a common subscript are not statistically different at $\alpha=.05$, according to the LSD test.

Analysing the counterfactuals generated according to the focus of the scenario, we can conclude that we managed to replicate the focus effect for this measure. In other words, placing either victim or perpetrator as the protagonist of a scenario led to significantly more counterfactuals being generated about that protagonist. To arrive at this conclusion, 3 one-way ANOVAs with the focus of the scenario as a between-subjects factor were conducted on the mean number of counterfactuals centred on the victim, perpetrator, and on both actors according to the focus of the scenarios. Table

5 presents the mean values tested. The inferential analyses led us to conclude that there are statistically significant differences for the number of counterfactuals centred on the victim, $F(2,136)=56.465$, $p<.001$, $MSE=40.418$, $\eta^2_p=.45$, on the perpetrator, $F(2,136)=36.321$, $p<.001$, $MSE=29.193$, $\eta^2_p=.35$, and on both characters, $F(2,136)=25.197$, $p<.001$, $MSE=5.895$, $\eta^2_p=.27$, according to the focus of the scenarios.

Pair wise comparisons were once again carried out after the ANOVAs above. Concerning the counterfactuals centred on the victim, significant differences were found between the scenarios with the victim as the protagonist and scenarios with the perpetrator as the protagonist, as well as between the scenarios with the victim as the protagonist and both characters as protagonists ($p<.001$ for both comparisons). As for the counterfactuals centred on the perpetrator, all pair wise comparisons reached statistical significance ($p<.001$). Finally, for the counterfactuals centred on both characters, all post hoc comparisons between the scenarios centred on both characters simultaneously and the scenarios centred on the victim and on the perpetrator, respectively, were statistically significant ($p<.001$).

As in Study 1, we also analysed the first counterfactual each participant generated for the scenario they read. These data, included in Table 6, replicate those of the first study: when the victim was the protagonist of the story, more participants listed first how the victim could have acted differently so the outcome would have been different (81.3%). The same pattern of results was obtained for the perpetrator when he was the main agent of the story (63.6%). Once again, we were interested in the proportion of first counterfactuals according to the focus of the scenario and whether that proportion varied significantly according to whomever was the protagonist of the story (i.e., the focus of the scenario) as an alternative way of examining the focus effect of a scenario on the counterfactuals generated. Therefore, the statistical test employed needs to be appropriate to the type of data being analysed. The adequate test in this case, a Chi-Square test, was performed on the data and revealed that the focus of the first counterfactual generated in a given scenario and the focus of that scenario are not independent, thus providing more evidence of how manipulating the protagonist of the story appears to have an impact on the focus of the counterfactuals generated, $\chi^2(2)=61.359$, $p<.001$, $N=139$. In other words, the character whose actions are first altered counterfactually appears to depend on whether that character is the protagonist of the scenario or not.

TABLE 6

Frequencies and Percentages for the First Counterfactual, According to the Focus of the Scenario (Study 2)

Focus of the Scenario	Focus of the First Counterfactual	%
Victim	Victim	81.3
	Perpetrator	6.2
	Both	2.1
	Others	10.4
Perpetrator	Victim	13.6
	Perpetrator	63.7
	Both	0
	Others	22.7
Both	Victim	21.3
	Perpetrator	63.8
	Both	4.3
	Others	10.6

Note. $N=139$.

Blame ascriptions

Due to the inclusion of task order in this study, we needed to analyse whether it produced any significant effects on the blame ascriptions to victim and perpetrator before we proceeded with the rest of the inferential analyses. To achieve that end, an independent samples t-test with task order as the between-subjects factor was conducted on the blame ascriptions to victim and perpetrator separately. The results showed a lack of statistically significant differences for the blame ascribed both to the victim, $t(137)=1.328$, $p=.186$, $d=1.34$, and to the perpetrator, $t(137)=-1.084$, $p=.280$, $d=-1.11$. The lack of significant effects could be owed to the individual mean blame values. The victim was ascribed more blame when the counterfactual generation task came first ($M=2.71$) than when the blame ascription task came first ($M=2.30$), whereas the reverse pattern was found for the perpetrator ($M=7.85$ when the blame ascription task came first *versus* $M=7.59$ when the counterfactual generation task was the first one to be performed). Therefore, we decided to collapse the task order for the rest of our analyses.

Furthermore, we also analysed whether, for the scenarios centred on both characters simultaneously, the order in which each character is mentioned in the scenario and the order in which each character is ascribed blame have any significant effect. Two factorial ANOVAs 2 (Order of Character: victim first or perpetrator first) x 2 (Order of Blame Ascription: victim first or perpetrator first) as between-subjects factors were performed for the blame ascribed to the victim and for the to the blame ascribed to the perpetrator separately but no statistically significant interactions or main effects were found whatsoever ($p>.05$ for all tests). Therefore, order of character and order of blame ascription were collapsed in further analyses. Please note that this is only applicable to the scenarios in which both victim and perpetrator were protagonists as, according what was described above, these manipulations were only done for these scenarios.

Table 7 presents the mean values for the blame ascriptions to victim and perpetrator, according to the focus of the scenario. Concerning the blame ascriptions to the victim, she was more blamed when both characters were the protagonists of the scenario ($M=2.98$), whereas the perpetrator was more blamed when he was the protagonist of the story ($M=7.93$).

TABLE 7

Mean Scores for the Blame Ascriptions to Victim and Perpetrator, According to the Focus of the Scenario (Study 2)

Focus of the Scenario	Agent Blamed	*M*	*SD*
Victim		2.25	1.495
Perpetrator	Victim	2.32	1.749
Both		2.98	2.111
Victim		7.83	1.136
Perpetrator	Perpetrator	7.93	1.701
Both		7.38	1.410

Note. $N=139$.

In order to test our hypothesis and see whether there were statistically significant differences for the blame ascribed to the victim and perpetrator, respectively, according to the focus of the scenario, two separate one-way ANOVAs with focus of the scenario as a between-subjects factor were performed on the mean values presented in Table 7. As far as the attribution of blame to the victim is concerned, the ANOVA yielded no statistically significant differences, $F(2,136)=2.338$,

p=.100, MSE=7.590, η^2_p=.03 and the same pattern of results was found for the blame ascribed to the perpetrator, F(2,136)=2.021, p=.137, MSE=3.960, η^2_p=.03.

DISCUSSION

The present study shared the aims of the previous one. However, we employed a different experimental design, changed our materials, and applied several counterbalancing measures. In spite of all the methodological changes, we were still able to replicate the results of the first study for the most part. On the one hand, participants focused more on the victim or perpetrator to think about how things could have been different when the victim or the perpetrator was the protagonist of the scenario, respectively. Furthermore, more counterfactuals centred on the perpetrator were obtained for those scenarios in which both agents were the protagonists, again mirroring the data obtained in Study 1.

On the other hand, the perpetrator was, on average, always ascribed more blame than the victim, regardless of focus of the scenario or task order. Moreover, we did not find statistically significant differences for the blame ascribed to the victim or the perpetrator, according to the focus of the scenario, thereby showing that manipulating who was in prominence on a given story was not enough to produce considerable differences in blame ratings. In the previous study, however, the focus of a scenario was found to significantly influence the blame ratings to the perpetrator, whereas in the present study no such statistical significance was obtained. Despite this result, the perpetrator was ascribed, on average, more blame in the scenarios in which he was the protagonist (M_{Victim}=7.83; $M_{\text{Perpetrator}}$=7.93; M_{Both}=7.38).

The contradictory findings resemble, therefore, those of Study 1 (i.e., more counterfactuals centred on the sole protagonist of a story, but not always more blame being ascribed to that protagonist, especially in the case of the victim). We will discuss these data more thoroughly in the General Discussion but this pattern of results appears to corroborate once more the tendency that people are apparently accurate on identifying the cause of a certain event, even if they choose other events to alter counterfactually (e.g., N'gbala & Branscombe, 1995).

For this experiment, we also considered task order as a potential influence on blame ascriptions. However, we were also unable to obtain statistically significant differences for the blame ascriptions to victim or perpetrator as far as this variable was concerned. In other words, having to decide who is more to blame for a given misfortune first or having to generate counterfactual thoughts first did not prevent participants from correctly identifying the perpetrator as the most blameworthy agent in our stories. These data therefore rule out the alternative explanation that the task order employed in the previous study (i.e., counterfactual generation first and blame ascription second) could account for the pattern of results found.

In addition, resorting to the scenarios and their content to interpret the results of the previous study is no longer a viable option because the re-structured materials we employed in the present experiment led to similar patterns of results as in Study 1. As it was described above, we endeavoured to include the same number of enablers and causes, either controllable or uncontrollable, in the new versions of our scenarios to make them more equivalent. We included elements that enabled the misfortune to occur, either uncontrollable (e.g., the victim who went home earlier than usual because a professor was not present to give a lecture) or controllable (e.g., victim and perpetrator alike chose an alternative, unusual route home of their own accord), regardless of character. Nevertheless, the perpetrator was the one who always caused the misfortune to take place (i.e., he physically assaulted or mugged the victim following a brief confrontation).

The present paper aimed to examine the focus effect of a scenario (i.e., the fact that a given character – victim or perpetrator – is the protagonist of a story) on two domains: the generation of counterfactuals and the ascription of blame for a certain misfortune. In order to achieve that end, two studies were designed and conducted.

As a result, two main hypotheses were defined. The first one pertained to the generation of counterfactual thoughts and stated that, if a certain character was the protagonist of a scenario, then participants would generate more counterfactuals centred on that character because the agent would be more salient to the reader (Kahneman & Tversky, 1982).

Generation of counterfactuals

The descriptive and inferential data presented above support the first hypothesis by showing that, as predicted, putting the victim or the perpetrator as the focal agent of a scenario led participants to focus more on whomever the protagonist was when generating and listing their counterfactual thoughts. Therefore, these results replicate once more the focus rule propounded by Kahneman and Tversky (1982).

The counterfactuals listed concerning the scenarios with both characters as protagonists also lent support to one of our hypotheses by revealing the greater tendency to focus on the perpetrator to consider how things could have happened differently. This hypothesis was based, as outlined above, on mental model theory (e.g., Johnson-Laird, 1983, 2006; for a review on mental models and counterfactuals see Byrne, 2005). Research has shown how people can represent two possibilities when interpreting counterfactual statements (e.g., faced with "If he had left home earlier, he would have caught the bus", people imagine the suppositional case: he left home earlier and he caught the bus and the presupposed case: he did not leave home earlier and he did not catch the bus) (Byrne & Tasso, 1999; Santamaría, Espino, & Byrne, 2005).

However, for counterfactuals with a deontic content (i.e., concerned with duties and obligations), people are also able to imagine two possibilities, but of a different kind (e.g., for the assertion "If the nurse had cleaned the blood, she would have had to wear rubber gloves", people imagine the forbidden possibility: she cleaned the blood and did not wear rubber gloves and the permitted one: she cleaned the blood and wore rubber gloves) (Quelhas & Byrne, 2003).

Furthermore, the ability to mentally represent two different possibilities can also be extended to certain types of events or actions, which will consequently enable one to generate counterfactual realities based on those possibilities. McCloy and Byrne (2000), for instance, showed how the perceived social appropriateness or inappropriateness of controllable events or actions can influence their mutability (i.e., socially inappropriate, controllable events are more psychologically mutable). In other words, when a certain deliberate, intentional behaviour does not conform or adhere to a current rule or law, people will interpret such occurrence by considering the forbidden possibility (i.e., what should not be done) and the permitted one and think that the person should have acted in such a way that would respect those norms or laws.

In our scenarios with both characters equally represented as focal agents, participants had access to more than one protagonist, so focus or salience of character was therefore shared and not placed on one single actor. In other words, the focus effect is considerably weakened in this context, so participants needed to find a different strategy to generate their counterfactuals. They could have focused on both characters simultaneously, but they still decided to focus on the perpetrator, the one who committed the deleterious acts, which are apparently more psychologically mutable. As

a result, participants generated counterfactuals focused on the perpetrator and his actions in which they attempted to create an alternative closer to what they thought was more socially acceptable.

Blame ascriptions

The second main hypothesis of our study concerned the ascription of blame. According to it, we predicted that placing a certain character as the protagonist of a scenario would lead participants to ascribe him more blame because the protagonist's salience would facilitate the generation of alternatives as to how that character could have acted differently and, thus, avoided the misfortune had he chosen or wanted to.

However, the data analyses did not corroborate or support our hypothesis as it was shown that being the focal agent of a scenario does not necessarily lead to more blame being ascribed because the perpetrator, on average, was always ascribed more blame than the victim in both studies. Nario-Redmond and Branscombe (1996) claimed that there is a relation between the number of counterfactuals concerning an agent and the degree of responsibility ascribed to it. However, our results indicate that, although being the sole protagonist of a scenario led participants to generate more counterfactuals centred on that agent, that did not exactly lead to more blame being ascribed.

Are there plausible explanations for this pattern of results? We now offer different theoretical explanations: the culpable control model (Alicke, 2000; Alicke, Buckingham, Zell, & Davis, 2008) and the distinction between causal and counterfactual thinking.

Culpable control model

Alicke et al. (2008) applied what has been termed as the *culpable control model* to counterfactual thinking. Through several experiments, the authors concluded that: "By itself, the knowledge that a harmful outcome could easily have been avoided does not predict blame (...) an outcome's mutability influences blame and related judgements when it is coupled with a basis for negative evaluations" (p. 1371). The aforementioned basis is simply a negative judgement, or series of judgements, that one makes about a certain agent when one considers that due to selfishness, malevolence, recklessness or any other, that agent had some degree of control over the harmful outcome. Thus, the authors state that is not only the mutability of events and the availability of counterfactual alternatives that explains why a certain character is ascribed more blame than any other. Rather, it is the interaction between the ease with which one imagines counterfactual alternatives to that character's actions and the negative judgements formed about that character.

This model allows us to explain, despite the greater number of counterfactuals centred on the victim when she was the protagonist, why the perpetrator was still ascribed more blame or why he was ascribed more blame in general. The truth is that the stories made considerably clear the control of the perpetrator over the outcome. Many participants wrote that had the perpetrator not done what he did, the situation could have been avoided. It was, in fact, the perpetrator who committed the acts for which he could be judged and assessed negatively by participants. Consequently, not only was it easy for participants to imagine the perpetrator having acted in a different way had he wanted or tried to, thus avoiding the outcome, it is also possible that they evaluated the perpetrator negatively for what he did.

However, it needs to be stated that participants' judgements about the characters were not manipulated or measured in these studies and, therefore, these conclusions should be considered with care. Nevertheless, there appears to be literature that supports the role a scenario, as well as the potential counterfactual alternatives that it evokes, play in a participant's positive or negative judgements about a character. Macrae and colleagues (1993), for instance, found that participants evaluated the perpetrator more harshly in those stories in which a counterfactual alternative would

be more readily available and Miller and Turnbull (1990) have shown how it is possible to feel more sympathy for victims when people do not consider an agent responsible for a certain misfortune.

Miller, Visser and Staub (2005), on the other hand, found evidence for how counterfactual thoughts can influence the traits we infer in others and the impressions we form of them. Through a series of studies, participants observed 10-year old boys who knew they were being videotaped or were unaware of this fact, solving difficult mathematical questions for which they had little time but had all the answers written on a board behind them. The boys would receive monetary compensation for each correct answer. It follows from this that, should they have wanted to look at the board, they would have correctly answered all the questions and would have received the maximum amount of money possible. However, both boys resisted the temptation to cheat and participants rated the "videotaped" one (i.e., the one who knew the camera was recording his moves) as more dishonest. The authors concluded that the participants imagined the videotaped boy cheating had the camera not been there, and therefore, considered him to be more dishonest than the boy who did not know of the camera's existence and still did not cheat. The fields of trait inference and impression formation (for reviews see Gilbert, 1998 or Uleman, Saribay, & Gonzalez, 2008) can thus aid in our understanding of counterfactual thoughts but little to none empirical evidence exists that connects these two domains. Consequently, this could be a promising future avenue of research.

Causal and counterfactual reasoning

While it was argued that counterfactual and causal reasoning were hand in hand – for Kahneman and Varey (1990) every counterfactual conditional is a causal assertion, and Wells and Gavanski (1989) stated that "For an event to be judged as causal, it must be psychologically mutable" (p. 161) – other authors appear to have found evidence that supports a contradictory stance on this matter.

N'gbala and Branscombe (1995) presented empirical evidence that "people focus on different aspects of events when they simulate or make causal attributions" (p. 139). Therefore, the authors claimed that a mutated event is not always considered as the most causal: altering a certain antecedent in a counterfactual does not prevent one from correctly identifying the cause of the outcome. Mandel (2003) follows the same train of thought and explains that causal reasoning centres on the sufficient causes for an outcome to happen, whereas counterfactual reasoning focuses on the necessary causes which, alone, are not sufficient to bring about an outcome. Several years before, Mandel and Lehman (1996) arrived to a similar conclusion by discovering that counterfactual thoughts involve more preventability ascriptions rather than causal ones because thinking about how things might have been different did not necessarily lead to an alteration of the cause of the event.

Moreover, recent studies (e.g., Egan, Frosch, & Hancock, 2008; Frosch, Johnson-Laird & Cowley, 2007) appear to follow a similar direction to the ones cited in the paragraph above by claiming that, while more counterfactuals are generated for the enablers of a given event (i.e., what allows something to occur), more responsibility or blame is ascribed to the causes of that event because people are able to mentally represent them in a different way and Byrne (2005) had already defended a position akin to this one. In this context, enablers are no more than necessary causes as they can facilitate the occurrence of a given outcome or misfortune, but they are not sufficient, in and of themselves, to cause it. However, should that enabler be removed from the equation, the outcome will not occur, even in the presence of the cause. Consider as an example a situation described in Byrne (2005): lightning hits dry leaves that are scattered on a forest floor, thereby causing a fire to spread. People know that the dry leaves did not cause the forest fire as they can correctly ascribe causality to the lightning. Nonetheless, they can easily think that had

the dry leaves not been there, the forest fire would not have occurred (even in the presence of the lightning).

Using these authors' statements as a framework, it is undeniable that the perpetrator – and his acts – were the sufficient causes for the outcomes to have happened (i.e., just the presence of the perpetrator or his behaviours alone brought about the misfortune) and participants appear to have identified that correctly. Consequently, participants were able to imagine what would have happened differently, say, had the victim chosen a different path, but they were also able to identify the perpetrator as the cause of the outcome and, therefore, the most blameworthy character.

The victims were, in fact, the ones who chose a different route home, met a perpetrator, and were subsequently mugged, physically assaulted or involved in a car accident. All of the victim's actions were purely enablers, factors that made it easier for the misfortune, caused by the perpetrator, to occur. More specifically, if the victim had followed the usual route home, the misfortune would probably not have happened because she would not have met the perpetrator. It appears, then, that the actions of the victims being more of an enabler to the misfortunes, aspect fully controlled in the second study, led to different blame ratings when compared to the perpetrator who was the cause of all the outcomes, because participants were able to distinguish between the two when ascribing blame.

In other words, imagining a different course of action for either victim or perpetrator did not interfere with the attributional process of ascribing blame, so participants were apparently able to easily separate the two and always blame the perpetrator more since he was the actual cause of the misfortune.

CONCLUSIONS

Our experiments do not lend support to studies showing how a victim can be ascribed more blame for their misfortune, especially when a counterfactual alternative is readily available (e.g., Branscombe et al., 1996; Goldinger et al., 2003; Macrae et al., 1993). This paper is nonetheless relevant because it posits that the victim is not always ascribed more blame, even if that victim is the focal agent of a story. Furthermore, the interpretation of results in light of the culpable control model (Alicke, 2000; Alicke et al., 2008) and the causes/enablers dichotomy (e.g., Egan et al., 2008; Frosch et al., 2007; N'gbala & Branscombe, 1995; Mandel, 2003; Wells & Gavanski, 1989) reveals how future studies on this topic shall be useful to further understand this process of blame ascription in connection with counterfactual thought. Moreover, this paper is also relevant because it goes beyond other counterfactual and blame studies by actively and directly manipulating the focus of a scenario in order to examine its effects on the generation of counterfactuals and blame ascribed to victim and perpetrator.

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APPENDIX A

Scenarios used in Study 1

Car accident scenario centred on the victim

Mariana is a college student. Although she always chooses the same route home, on Thursday Mariana decided to go along a shorter one so as to see if she could get home faster. On the way, Mariana stopped at an intersection because the traffic light was red. After a short wait, the traffic light turned green and Mariana eventually resumed her driving. At that moment, a car was coming towards her from her left. The car did not stop at the red traffic light and was moving at high speed. Mariana tried to brake but there was not enough time and the vehicles collided. Mariana and the driver of the other vehicle were taken to hospital with serious injuries.

Car accident scenario centred on the perpetrator

Joana is a college student. On that Thursday, after an argument with her boyfriend due to his jealousy, Joana, shaken, went to her car and drove off towards her house to talk to her sister. Although she always chooses the same route home, Joana decided to go along a shorter one so as to see if she could get home faster. Driving at high speed, Joana did not want to stop when the traffic light at an intersection was red. At that moment, a car resumed its driving on her right. The traffic light was green so this car was able to cross the intersection. Enraged, Joana did not slow down upon seeing the other car and the two vehicles collided. Joana and the driver of the other vehicle were taken to hospital with serious injuries.

Car accident scenario centred on both characters

Mariana is a college student. Although she always chooses the same route home, on Thursday Mariana decided to go along a shorter one so as to see if she could get home faster. Joana is a college student. On that Thursday, after an argument with her boyfriend due to his jealousy, Joana, shaken, went to her car and drove off towards her house to talk to her sister. Although she always chooses the same route home, Joana decided to go along a shorter one so as to see if she could get home faster. On the way home, Mariana stopped at an intersection because the traffic light was red. After a short wait, the traffic light turned green and Mariana eventually resumed her driving. Driving at high speed, Joana did not want to stop when the traffic light at that intersection was red. Enraged, Joana did not slow down upon seeing Mariana's car. At that moment, Mariana noticed Joana's car coming towards her from her left. Mariana tried to brake but there was not enough time and the vehicles collided. Mariana and Joana were taken to hospital with serious injuries.

Physical assault scenario centred on the victim

Ricardo is a college student. Last Friday night Ricardo was at a bar with some friends, where he found an old college classmate with whom he decided to catch up. When he went home, Ricardo decided to go by a different route than usual, thus preferring a livelier street. At one point, Ricardo was approached by a man who accused him of flirting with his girlfriend at the bar. Ricardo tried to explain that she is just a former college classmate. Out of control and not believing in the explanations, the man punched Ricardo in the face. Ricardo fell backwards and hit his head on the sidewalk. The force of the punch caused the man to lose his balance and also hit his head on the sidewalk. An ambulance was quickly called to take them to hospital. Both men suffered serious head injuries.

Physical assault scenario centred on the perpetrator

Daniel is a college student. Last Friday night Daniel was at a bar with his girlfriend and, at some point, when he came outside to use his mobile phone, he felt extremely jealous upon noticing that she was talking cheerfully with a man, which led to a violent quarrel and subsequent separation from his girlfriend. When he went home, Daniel decided to go by a different route than usual, thus preferring a livelier street. At one point, Daniel found the man, approached him, and accused him of flirting with his girlfriend at the bar. The man tried to explain that she is just a former college classmate. Out of control and not believing in the explanations, Daniel punched the man in the face. The man fell backwards and hit his head on the sidewalk. The force of the punch caused Daniel to lose his balance and also hit his head on the sidewalk. An ambulance was quickly called to take them to hospital. Both men suffered serious head injuries.

Physical assault scenario centred on both characters

Ricardo is a college student. Last Friday night Ricardo was at a bar with some friends, where he found an old college classmate with whom he decided to catch up. When he went home, Ricardo decided to go by a different route than usual, thus preferring a livelier street. Daniel is a college student. Last Friday night Daniel was at a bar with his girlfriend and, at some point, when he came outside to use his mobile phone, he felt extremely jealous upon noticing that she was talking cheerfully with a man, which led to a violent quarrel and subsequent separation from his girlfriend. When he went home, Daniel decided to go by a different route than usual, thus preferring a livelier street. At one point, Ricardo was approached by Daniel who accused him of flirting with his girlfriend at the bar. Ricardo tried to explain that she is just a former college classmate. Out of control and not believing in the explanations, Daniel punched Ricardo in the face. Ricardo fell backwards and hit his head on the sidewalk. The force of the punch caused Daniel to lose his balance and also hit his head on the sidewalk. An ambulance was quickly called to take them to hospital. Just like Ricardo, Daniel also suffered a serious head injury.

Mugging scenario centred on the victim

Rita is a college student. Although she always chooses the same route home, last Wednesday evening Rita decided to follow a longer one in order to unwind a little. Crossing a street, Rita is approached by a boy who asks her for a cigarette. Rita never gives cigarettes to strangers so she lies and says she does not have any. Furious and not believing her, the boy abruptly approaches Rita and grabs her purse, running away with it. Rita runs after him in an attempt to recover it. Rita does not notice, therefore, that a car is coming at high speed. The boy also fails to take notice of the car. Both are run over and taken to hospital with serious injuries.

Mugging scenario centred on the perpetrator

Bernardo is a college student. Last Wednesday evening he went to the movies with his girlfriend but the night ended badly due to an argument caused by some text messages from another man he saw on her mobile phone. Although he always chooses the same route home, Bernardo decided to follow a longer one in order to unwind a little. Crossing a street, Bernardo comes across a girl and asks her for a cigarette, to which she replies she does not have any. Furious and not believing her, Bernardo abruptly approaches the girl and grabs her purse, running away with it. The girl runs after him in an attempt to recover it. Bernardo does not notice a car coming at high speed. The girl also fails to take notice of the car. Both are run over and taken to hospital with serious injuries.

Mugging scenario centred on both characters

Rita is a college student. Although she always chooses the same route home, last Wednesday evening Rita decided to follow a longer one in order to unwind a little. Bernardo is a college student. On the same evening he went to the movies with his girlfriend but the night ended badly due to an argument caused by some text messages from another man he saw on her mobile phone. Although he always chooses the same route home, Bernardo decided to follow a longer one in order to unwind a little. Crossing a street, Rita is approached by Bernardo who asks her for a cigarette. Rita never gives cigarettes to strangers so she lies and says to Bernardo she does not have any. Furious and not believing her, Bernardo abruptly approaches Rita and grabs her purse, running away with it. Rita runs after him in an attempt to recover it. Rita does not notice, therefore, that a car is coming at high speed. Bernardo also fails to take notice of the car. Just like Rita, Bernardo is run over and taken to hospital with serious injuries.

APPENDIX B

Dependent Measures used in Studies 1 and 2

Counterfactual generation task (italics represent the original version while the non-italicised text represents the translation)

> "*Quando alguma coisa corre mal, as pessoas muitas vezes imaginam que **se** algo tivesse acontecido de maneira diferente, **então** o resultado também teria sido diferente. Que pensamentos deste tipo lhe ocorrem sobre a história que leu? Escreva por favor nas linhas que se seguem (não necessita preencher todas):* [When something goes wrong, people usually think that **if** something had happened differently, **then** the outcome would have been different as well. Which thoughts of this kind occur to you about the story you just read? Please write on the following blanks (you do not need to fill all the blanks)]:

Se (If)_____,
então (then)_____.

Example of a blame ascription task for a car accident scenario with the victim as the protagonist (italics represent the original version while the non-italicised text represents the translation)

> *"Numa escala de 1 ("Nada culpada") a 9 ("Totalmente culpada") indique, na sua opinião, quão culpada é **Mariana** pelo sucedido (faça um círculo à volta do número escolhido):"* [On a scale from 1 ("Not to blame") to 9 ("Totally to blame") mark, in your opinion, how guilty **Mariana** is for what happened (circle the chosen number)]*:*

Nada culpado *Totalmente culpado*
[Not to blame] *1 2 3 4 5 6 7 8 9* [Totally to blame]

> ***"**Numa escala de 1 ("Nada culpado") a 9 ("Totalmente culpado") indique, na sua opinião, quão culpado é **o condutor do outro carro** pelo sucedido (faça um círculo à volta do número escolhido):"* [On a scale from 1 ("Not to blame") to 9 ("Totally to blame") mark, in your opinion, how guilty **the driver of the other vehicle** is for what happened (circle the chosen number)]*:*

Nada culpado *Totalmente culpado*
[Not to blame] *1 2 3 4 5 6 7 8 9* [Totally to blame]

APPENDIX C

Scenarios used in Study 2

Assault Scenario – Victim as Protagonist

Ricardo is a college student attending college in the town where he is currently living in. Last Friday night Ricardo went with some friends to the most popular bar in town in order to relax. As he was making his back to the table with his drinks, a former high school classmate approached him and they decided to catch up for a little bit. When he went home, Ricardo decided to go by a different route than usual, thus preferring a livelier street. At one point, Ricardo was approached by a man who accused him of flirting with his girlfriend at the bar. Ricardo explained that she was just a former high school classmate. The man did not care for the explanations and demanded an apology. Ricardo, considering that he had not done anything wrong, refused to do so. The man responded by hitting Ricardo with a strong punch, after which he lost balance, and they both ended up falling and hitting their head on the sidewalk. Both men were taken to the hospital with serious head injuries.

Assault Scenario – Perpetrator as Protagonist

Daniel is a college student attending college in the town where he is currently living in. Last Friday night Daniel went with his girlfriend to the most popular bar in town in order to relax. As he was making his back to the table with his drinks, Daniel noticed that she was merrily chatting with a man, which made him jealous and led him to return home by himself. When he went home, Daniel decided to go by a different route than usual, thus preferring a livelier street. At one point, he found that man, approached him and accused him of flirting with his girlfriend at the bar. The man explained that she was just a former high school classmate. Daniel did not care for the explanations and demanded an apology. The man, considering that he had not done anything wrong, refused to do so. Daniel responded by hitting the man with a strong punch, after which he lost balance, and they both ended up falling and hitting their head on the sidewalk. Both men were taken to the hospital with serious head injuries.

Assault Scenario – Victim and Perpetrator as Protagonists (Victim Mentioned First)

Ricardo and Daniel are college students attending college in the town where they are currently living in. Last Friday night they to the most popular bar in town in order to relax; Ricardo went with his friends and Daniel went with his girlfriend. As Ricardo was making his back to the table with his drinks, a former high school classmate, who happened to be Daniel's girlfriend, approached him and they decided to catch up for a little bit. As Daniel, in turn, was making his way back with his drinks, he noticed that she was merrily chatting with Ricardo, which made him jealous and led him to return home by himself. When they went home, Ricardo and Daniel decided to go by a different route than usual, thus preferring a livelier street. At one point, they ended up meeting each other and Ricardo was approached by Daniel who accused him of flirting with his girlfriend at the bar. Ricardo explained that she was just a former high school classmate. Daniel did not care for the explanations and demanded an apology. Ricardo, considering that he had not done anything wrong, refused to do so. Daniel responded by hitting Ricardo with a strong punch, after which he lost balance, and they both ended up falling and hitting their head on the sidewalk. Both men were taken to the hospital with serious head injuries.

Assault Scenario – Victim and Perpetrator as Protagonists (Perpetrator Mentioned First)

Daniel and Ricardo are college students attending college in the town where they are currently living in. Last Friday night they to the most popular bar in town in order to relax; Daniel went with his girlfriend and Ricardo went with his friends. As Ricardo was making his back to the table with his drinks, a former high school classmate, who happened to be Daniel's girlfriend, approached him and they decided to catch up for a little bit. As Daniel, in turn, was making his way back with his drinks, he noticed that she was merrily chatting with Ricardo, which made him jealous and led him to return home by himself. When they went home, Daniel and Ricardo decided to go by a different route than usual, thus preferring a livelier street. At one point, they ended up meeting each other and Daniel approached Ricardo, accusing him of flirting with his girlfriend at the bar. Ricardo explained that she was just a former high school classmate. Daniel did not care for the explanations and demanded an apology. Ricardo, considering that he had not done anything wrong, refused to do so. Daniel responded by hitting Ricardo with a strong punch, after which he lost balance, and they both ended up falling and hitting their head on the sidewalk. Both men were taken to the hospital with serious head injuries.

Mugging Scenario – Victim as Protagonist

Rita is a college student attending college in the town where she is currently living in. Last Wednesday night she was returning home alone after leaving college. She left earlier on that day because the professor of the last lecture failed to show up. As Rita was going back home, she decided to go by a different route than usual, thus preferring a livelier street. Crossing a street, she was approached by a woman who asked her for a cigarette. Rita said she only had one cigarette, so she could not give it away. The woman did not care for the explanations and yanked Rita's purse so she could get the cigarette. Rita resisted and yanked her purse as well. The woman continued to pull the purse with increasing strength, the two lost balance and they both ended up falling, hitting their head on the sidewalk. Both women were taken to the hospital with serious head injuries.

Mugging Scenario – Perpetrator as Protagonist

Joana is a college student attending college in the town where she is currently living in. Last Wednesday night she was returning home with her boyfriend after going to the movies. However, they got in an argument over a few text messages from another girl on his phone and Joana ended up going home alone. As Joana was going back home, she decided to go by a different route than usual, thus preferring a livelier street. Crossing a street, she found a woman and approached her, asking her for a cigarette. The woman said she only had one cigarette, so she could not give it away. Joana did not care for the explanations and yanked the woman's purse so she could get the cigarette. The woman resisted and yanked her purse as well. Joana continued to pull the purse with increasing strength, the two lost balance and they both ended up falling, hitting their head on the sidewalk. Both women were taken to the hospital with serious head injuries.

Mugging Scenario – Victim and Perpetrator as Protagonists (Victim Mentioned First)

Rita and Joana are college students attending college in the town where they are currently living in. Last Wednesday night they were both returning home. Rita was returning home alone after leaving college earlier on that day because the professor of the last lecture failed to show up. Joana, in turn, was returning home with her boyfriend after going to the movies, but they got in an argument over a few text messages from another girl on his phone and Joana ended up going home alone. As they were going back home, Rita and Joana decided to go by a different route than usual, thus preferring a livelier street. Crossing a street, the two ended up meeting each other and Rita was approached by Joana who asked her for a cigarette. Rita said she only had one cigarette, so she could not give it away. Joana did not care for the explanations and yanked Rita's purse so she could get the cigarette. Rita resisted and yanked her purse as well. Joana continued to pull the purse with increasing strength, the two lost balance and they both ended up falling, hitting their head on the sidewalk. Both women were taken to the hospital with serious head injuries.

Mugging Scenario – Victim and Perpetrator as Protagonists (Perpetrator Mentioned First)

Joana and Rita are college students attending college in the town where they are currently living in. Last Wednesday night they were both returning home. Joana was returning home with her boyfriend after going to the movies, but they got in an argument over a few text messages from another girl on his phone and Joana ended up going home alone. Rita, in turn, was returning home alone after leaving college earlier on that day because the professor of the last lecture failed to show up. As they were going back home, Joana and Rita decided to go by a different route than usual, thus preferring a livelier street. Crossing a street, the two ended up meeting each other and Joana approached Rita, asking her for a cigarette. Rita said she only had one cigarette, so she could not give it away. Joana did not care for the explanations and yanked Rita's purse so she could get the cigarette. Rita resisted and yanked her purse as well. Joana continued to pull the purse with increasing strength, the two lost balance and they both ended up falling, hitting their head on the sidewalk. Both women were taken to the hospital with serious head injuries.

Em dois estudos examinámos o efeito de foco de um cenário (i.e., o facto de uma dada personagem ser a protagonista da história) em dois domínios interligados: a geração de pensamentos contrafactuais e a atribuição de culpa. Foi hipotetizado que ser o agente focal de uma história não só levaria a mais contrafactuais centrados sobre esse agente, como também a maiores atribuições de culpa ao mesmo, uma vez que seria mais fácil imaginar como o actor poderia ter agido de outra forma se o tivesse escolhido ou desejado, e assim ter evitado um desfecho negativo. Foram criados diferentes cenários

de valência negativa que descrevem um dado infortúnio tal como um assalto, nos quais vítima, agressor, ou ambas as personagens eram o centro da história. Os resultados mostraram que colocar tanto vítima como agressor como protagonista de um cenário aumenta o número de pensamentos contrafactuais centrados nessa personagem, mas tal não aumenta necessariamente a culpa atribuída visto que o agressor foi sempre mais culpado do que a vítima, independentemente de quem era o protagonista do cenário. Os resultados do Estudo 2 replicaram os do Estudo 1, mesmo com um diferente desenho experimental, materiais modificados e diversas medidas de contrabalanceamento, assim sugerindo que ser o protagonista leva à mais fácil consideração de alternativas contrafactuais envolvendo esse actor, mas isso não impede o observador de identificar quem é verdadeiramente culpado por um dado infortúnio. Os resultados e as suas implicações foram interpretados de acordo com diferentes perspectivas teóricas e são discutidas possíveis futuras vias de investigação.

Palavras-chave: Pensamento contrafactual, Foco, Mutabilidade, Culpa.

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