ORIGINAL ARTICLE
IN MORAL PSYCHOLOGY

Promoting cross-culture research on moral decision-making with standardized, culturally-equivalent dilemmas: The 4CONFiDe set

Cinzia Cecchetto[1], Raffaella Ida Rumiati[2], Valentina Parma[1]

Affiliations:

[1] Ph.D., SISSA - International School for Advanced Studies, Neuroscience Area, Trieste, Italy
[2] Ph.D., Professor, SISSA - International School for Advanced Studies, Neuroscience Area, Trieste, Italy and ANVUR - Agenzia Nazionale della Valutazione del sistema Universitario e della Ricerca, Roma, Italy

Corresponding author:

Cinzia Cecchetto, PhD, Neuroscience Area, SISSA - International School for Advanced Studies, Via Bonomea, 265, 34100 Trieste, Italy, e-mail: cinzia.cecchetto@uni-graz.at

Abstract

Introduction: Moral dilemmas are a common tool in moral decision-making research. However, they are often hardly comparable across languages and cultures. Here, we propose a methodology to adapt, convert and test moral dilemmas in languages different from English, by outlining the process followed for the creation of the comprehensive 4CONFiDe set.
Methods: To evaluate cultural effects, English and Italian versions of the 4CONFiDe were evaluated by English-native speakers proficient in Italian, and Italian-native speakers proficient in English (Study 1). To assess the contribution of the four conceptual factors used by Christensen et al. to the levels of arousal, valence and familiarity experienced with each dilemma, an independent group of Italian native speakers (n = 112) completed the 4CONFiDe set (Study 2).
Results: Both linear mixed models and Bayesian statistics confirmed that moral choices were made irrespective of participants' native language and dilemmas' version, suggesting that the translation was culturally-representative. Moreover, they showed that the proposed dilemmas were perceived by participants with different degrees of arousal, pleasantness and familiarity based on some of the conceptual factors and that three of the four conceptual factors (Personal force, Intentionality and Evitability) determined participants' moral choices.
Conclusions:Standardized, culturally-equivalent moral dilemmas provide researchers with a tool that allows further developments of the field.

KEY WORDS: Cross-culture; descriptive ratings; inter-individual differences; moral dilemmas; moral decision-making.

Riassunto

Introduzione: I dilemmi morali sono uno strumento largamente utilizzato nell'ambito della ricerca sulla presa di decisione morale, tuttavia le diverse culture in cui la ricerca viene svolta e le diverse lingue in cui i dilemmi vengono usati rendono questi studi difficilmente comparabili tra loro. In questo studio proponiamo una nuova metodologia per adattare, convertire e verificare i dilemmi morali presentati in lingue diverse dall'inglese. A questo scopo abbiamo delineato in maniera dettagliata il processo che ha portato alla creazione di una raccolta di dilemmi, chiamata 4CONFiDe.
Metodi: Per esaminare gli effetti culturali le versioni inglese ed italiana dei dilemmi compresi nel 4CONFiDe sono state valutate da madrelingua inglesi con un'ottima padronanza dell'italiano e da madrelingua italiani con un'ottima padronanza dell'inglese (Studio 1). Per determinare il contributo di ciascuno dei quattro fattori concettuali proposti da Christensen et al. ai livelli di attivazione fisiologica, valenza e familiarità percepiti in ciascun dilemma, abbiamo chiesto ad un nuovo gruppo di partecipanti madrelingua italiani (n = 112) di rispondere ai dilemmi del 4CONFiDe (Studio 2).
Risultati: Sia i modelli lineari misti che la statistica Bayesiana hanno confermato che le scelte morali non sono state influenzate dalla lingua madre dei partecipanti o dalla lingua in cui sono stati presentati i dilemmi, suggerendo che la traduzione dei dilemmi 4CONFiDe rappresenta le diverse culture oltre che le diverse lingue. Inoltre, le analisi hanno mostrato che i dilemmi proposti venivano percepiti con diversi gradi di attivazione fisiologica, valenza e familiarità seguendo alcuni dei quattro fattori concettuali e che tre di questi fattori (Forza Personale, Intenzionalità ed Evitabilità) hanno influito significativamente sulle decisioni morali prese dai partecipanti.
Conclusioni: Questa raccolta di dilemmi morali standardizzati ed equivalenti in diverse culture può diventare un utile strumento per lo sviluppo dello studio sulla scelta morale.

TAKE-HOME MESSAGE

A methodology to adapt and test moral dilemmas in languages different from English is hereby outlined. Moral choices to dilemmas of the 4CONFiDe set were made irrespective of participants' native language and dilemmas' version, they were not influenced by arousal, pleasantness and familiarity of dilemmas but they changed based on personal force, intentionality and evitability.

Competing interests - none declared.

Cite this article as: Cecchetto C, Rumiati RI, Parma V. Promoting cross-culture research on moral decision-making with standardized, culturally-equivalent dilemmas: The 4CONFiDe set. J Health Soc Sci. 2017;2(2):173-194

DOI 10.19204/2017/prmt5

Received: 21/03/2017 Accepted: 28/04/2017 Published: 15/07/2017

INTRODUCTION

Research on moral decision-making has been flourishing in cognitive psychology and neuroscience and moral dilemmas have become a standard methodology [1]. Such a methodology has mostly been developed in English, limiting the study of moral behaviours across languages and cultures. Attempts to provide moral dilemmas in languages other than English are present, however no standard methodology has been proposed on how to translate and compare these dilemmas in two or more languages. Here, we will describe how moral dilemmas are built (section 1) and we will consider the features of moral dilemmas as conceptualized in published sets, namely four conceptual factors shown to significantly modulate the choice of utilitarian and deontological responses beyond personal tendencies (section 2). Next, we will critically discuss the pros and cons of the formulation of such dilemmas, particularly in light of methodological flexibility (sections 3-5), and we will propose a methodology that allows to translate and test the equivalence of dilemmas created in English into a different language (here, Italian), and test the main features of the translated dilemmas and their effects on moral choice.

Moral dilemmas

Moral dilemmas are hypothetical short stories that offer two morally conflicting alternatives among which a decision maker is expected to choose. Often the dilemmas are variations of the classical Trolley dilemma, developed by Foot [2], in which a runaway trolley is about to run over five people and kill them. Such a negative consequence can be prevented by switching a lever, which will turn the trolley onto a sidetrack: in this event, the trolley will run over and kill one person. Presented with this dilemma, most people would decide to redirect the trolley to save the highest number of people. This choice is considered utilitarian because, even though the action chosen will cause the death of one person, it will prevent a greater number of victims. Another classical variation of the Trolley dilemma is the Footbridge dilemma [3], in which a runaway trolley is about to run over five people and kill them. In this case, pushing a man over a bridge can prevent the trolley to run over the five people. Very few people would decide to push the man, letting the trolley kills the five. This choice is considered deontological, because deontology imposes that individual's rights ought not to be infracted, even though doing so serves a greater good [4].

Criticisms have been raised against these sacrificial types of stories because they are considered unrealistic and unrepresentative of the moral situations people can face (e.g, [5, 6]). Even though we recognize that sacrificial moral dilemmas present some limitations, we consider moral dilemmas a useful and legitimate experimental method to shed light on the psychological and neural processes underlying moral decision-making. Indeed, rather than being unrealistic per se, the majority of moral dilemmas used has a low likelihood of occurrence. This becomes evident when thinking, for instance, about natural disasters or terrorist attacks which took place in the last years: they are not common events, yet they are real and plausible occurrences. Furthermore, it is preferable from an experimental perspective that moral dilemmas represent events with low probability of occurrence that participants are unlikely to have previously experienced [7]. This allows researchers to evaluate moral choices without the confounding effect of different levels of experience across participants.

In the effort of improving the robustness and reliability of findings inferred by the use of moral dilemmas [1, 8, 9], researchers must carefully consider how dilemmas are built and presented to control how they affect moral decision-making. Indeed, in previous studies some of the stories featured could not be considered dilemmatic (e.g., a story featuring a child killing his grandmother for not buying him a gift can hardly be considered a dilemma [10]); or the linguistic features and the type of request to which participants were called to answer were inconsistent across dilemmas within the same set and across different sets

[5, 8, 10]. Although subsequent research has acknowledged and overcome several of these shortcomings, some of them remain unaccounted for.

Conceptual factors

One of the most used set of dilemmas (n = 60) [11, 12] was created around the concept of the proximity of harm, introduced by Greene and colleagues [11], which defined dilemmas as 'personal' when three criteria are met: a) The violation is likely to cause serious bodily harm; b) the harm must happen to a person or a group of people; and c) the harm is not the result of a deflection of an existing threat. Following this conceptualization, trolley-like dilemmas are considered impersonal and footbridge-like dilemmas personal. However, in this first formulation, the definition of personal/impersonal dilemmas has been greatly criticized [8, 9, 13, 14]. To overcome these criticisms, the concept of personal force has been redefined to allow clearer categorization as 'the force [that] directly impacts the other person is generated by the agent's muscles, or when the agent pushes another one with one's hands or with a rigid object' (e.g., [9, 15, 16]). To overcome the criticalities of the Greene's set, Moore et al. [9] developed their own set of dilemmas based on the personal/impersonal distinction, as well as on three further conceptual factors: a) Self-other beneficent, in which the decision maker's life is at risk (Self-beneficial) or not (Other-beneficial); b) Evitability, in which the sacrificed life would be lost in any case (Inevitable) or not (Avoidable); and c) Intentionality, in which sacrificing some lives is intended to save a greater number of people (Instrumental), or it is just an unintended consequence (Incidental).

Recently, Carmona-Perera and colleagues [17] created a shorter and standardized version of the Greene's dilemmas set to allow and to facilitate the applicability of moral dilemmas in clinical settings: the resulted Brief Moral Decision-Making Questionnaire was centered around the personal/impersonal distinction [17].

The instrumental/incidental factor has been used by Lotto and colleagues [18] to develop a set of 60 moral dilemmas in Italian. Centered on the concepts of intentionality and benefit of the harm, this set is constituted by 'instrumental dilemmas', which describe killing one individual as an intended means, and 'incidental dilemmas' ('accidental' in [1]), which describe killing one individual as an unintended consequence of saving others. In half of the dilemmas, the respondent's life is at risk, in the other half the respondent is not going to be harmed [18].

To date, the largest dilemma set that reconciles all these different perspectives has been realized by Christensen et al. [13], with 46 dilemmas simultaneously inspired to all four conceptual factors: personal/impersonal (Personal Force) or incidental/instrumental (Intentionality) distinction to the self/other benefits (Benefit Recipient) and avoidable/inevitable (Evitability) structures. Christensen et al. [13] collected normative data about arousal and valence, and showed that people's moral judgment is sensitive to all four factors.

Structural formulation

Beyond the inclusion of different conceptual factors, the word choice and structure used in formulating the dilemmas can influence the way participants respond. This aspect has been controlled only in the three most recent dilemma sets [9, 13, 18], but it has not been taken into account in the one that is used the most [11, 12]. Although an agreement on how such a standardization should occur has yet to be reached, scholars have already highlighted three caveats. First, to be compared, all dilemmas should contain the same amount of information. This means that each description of the situation needs to be controlled at least for:

- the *antecedent situation*. If, for instance, a footbridge-like dilemma describes the man on the bridge as a serial killer, more people are likely to decide to push and kill him to save the individuals first designated to be invested by the trolley [15, 19];
- the *language*. It has been proved that the

use of specific wording can affect moral decisions; for example, it has been demonstrated that people are more inclined to choose utilitarian and deontological actions, respectively when the word 'to kill' or 'to save' are emphasized (e.g., [20]); people's judgment of actions are affected by some adjective such as 'wrong', 'inappropriate', 'forbidden', 'blameworthy' [21], and the use of colourful or plain language can affect moral choices both at behavioural and neural level [8]).

- the *trade-off*. In the Greene's dilemma set [11] different kinds of moral transgressions, with different levels of emotional involvement (such as stealing, lying or killing) were presented. To avoid carry-over effect between dilemmas, the most recent dilemma sets used the same moral transgression (killing and letting die) across dilemmas [9, 13, 18, 22];
- the *decision maker's perspective*. There is evidence showing that writing the dilemma in the protagonist's perspective or in the third person – emphasizing the decision maker's observer role – leads to different neural, cognitive and emotional mechanisms (e.g., [15, 23]).

Furthermore, the way the decision maker is asked to answer should be consistent within the same dilemma set and across sets to allow for direct comparison of the results. The question can be introduced as a judgment (*'Is it wrong to…?'* or *'Is it acceptable to...?'*; [11, 12, 19, 24–27]) or as a choice (*'Would you...?'*; [28–31]). These two types of questions tap onto two different cognitive processes [32], and, often, they give rise to different answers [33]: Judging an action implies to evaluate the situation from an allocentric perspective, while choosing to act in some way needs to picture oneself in that situation and consider all the possible consequences of that action. It has been demonstrated that participants can choose actions they judge as morally wrong [33, 34], that participants usually choose more utilitarian answers when they asked to make moral decisions in virtual reality task compared to the moral judgments analogues [35, 36], and that the emotional investment of choosing to act against moral rules is more intense than that in judging someone else's immoral actions [31, 33].

Lastly, the previous suggestions should be implemented in dilemmas with similar word counts, to avoid differences in trial length across experimental conditions [8, 9].

Translation and cultural interpretation

Since dilemmas have been tested only in the language spoken by the participants of a given study, to date there is no evidence of how a particular set can generalize across languages, countries and cultures. This is a major drawback for the moral decision-making research for two main reasons. Firstly, the language in which a question is posed has been found to alter moral decision processes [37, 38], and secondly, the same moral issues may induce opposite views depending on the participants' cultural background [39–41]. Furthermore, the globalization process forces us to make moral decisions that go beyond our cultural boundaries (see e.g. [42–44]). Therefore, moral research should promote the use of experimental stimuli that allow for comparability across languages, countries and cultures, using moral dilemmas that are transferable across languages and have similar cultural meanings. The empirical study of this aspect, however, has been partly neglected by researchers. The only attempt to mitigate this issue is represented by the work by Christensen et al. [13], who provide a set of dilemmas translated in 6 languages (English, French, Spanish, German, Danish, and Catalan). However, these authors neither directly compared the dilemma across languages, nor did they evaluate them in the same language across different cultures.

Methodological flexibility

Moral decision-making is typically investigated through dilemmas described in lengthy written texts. This tends to reduce the possible number of trials that can be presented to a participant before she experiences fati-

gue, especially considering that each dilemma cannot be repeated. More importantly, the length of each dilemma may challenge both the use of functional magnetic resonance imaging and event-related potentials (ERP) techniques in moral research (see also [18] for a similar argument). In fact, the respondent needs a certain amount of time to read each dilemma, thus reducing the possibility of disentangling reading from the other processes simultaneously occurring (e.g., emotional processing). We believe that this significantly affects the sequence of events, from the presentation of the moral dilemma to the communication of a moral decision. The linguistic standardization particularly comes in handy to this purpose, as demonstrated by Lotto et al. [18]. They were the first to create a set of 60 moral dilemmas for which Italian normative values for arousal, valence, decision time and acceptability were provided. Moreover, they introduced a neat separation between the presentation of the scenario, confined in one slide, followed by the presentation of two alternative choices, each presented on a separate slide. Participants were required to make the choice only when a 'decision slide' appeared following the presentation of the second choice. This trial structure makes this set suitable for neuroimaging and ERP studies, in that it allows to untangle the dilemma processing from the choice-related decisions, thus facilitating the attribution of the associated neural correlates to each of these mental processes.

None of the available moral dilemma sets simultaneously account for all aspects that are argued to modulate moral choices. Even in the dilemma set proposed by Christensen et al. [13], which to date represents the most complete attempt in terms of considered conceptual factors and standardization efforts, some of the above-mentioned issues remain unaccounted for. More specifically: a) some of the scenarios proposed were not realistic (e.g., 'Burning building' dilemma see supplemental material of [13]); b) the four conceptual factors were not clearly traceable in each dilemma (e.g., 'Orphanage a and b' dilemmas); c) even though the set has been translated in six languages, the reliability of this translations has not been tested; and d) different dilemmas have different lengths (e.g., 169 versus 93 words).

Therefore, the aim of the present experimental work is to propose a methodology to adapt, convert (Study 1) and test (Study 2) moral dilemmas in languages different from English. First, we generated a new dilemma set, with equivalent English and Italian translations including all four conceptual factors, presented in a controlled linguistic formulation and suitable for imaging applications. The newly developed 4CONFiDe set (4 Conceptual Factors Dilemmas) was tested with native English and native Italian speakers to evaluate translation and cultural adaptation issues (Study 1). We expect that if the moral choices are consistent within participants, irrespective of their native language, then the new moral dilemma set is accurately translated and conveys the same cultural meaning. Second, we assessed on a new group of Italian adult participants the main features of the translated dilemmas (personal force, intentionality, benefit recipient and evitability) on arousal, valence and familiarity and their effect on moral choices (Study 2).

MATERIALS AND METHODS

Participants voluntarily took part to Study 1 and Study 2 by responding to web surveys. The use of web surveys could raise concerns about the motivation of the participants and the accuracies of the responses compared to the classical pen-and-paper methods; however, recent studies have indicated that results from web-based surveys replicate those obtained from traditional methods [7, 45–47]. The protocol was approved by SISSA Ethics Committee in observance of the latest release of the Helsinki Declaration and, informed written consent was obtained from each participant. All measures, manipulations and exclusions in Study 1 and Study 2 have been disclosed.

Conceptual factors

We propose here a revised set of moral dilemmas, 4CONFiDe set, constituted by 52 moral dilemmas selected from two previously standardized sets (i.e., [13, 18]). The 4CONFiDe set is an attempt to create a continuum between the previous literature focused on the personal/impersonal distinction [9, 11, 12, 16, 17, 19, 28, 48, 49] and the literature focused on the intentionality of the action [7, 8, 18, 30, 50]. Moreover, the 4CONFiDe set considers two further factors that have been showed to influence moral choices: benefit recipient [9, 13, 51] and evitability [7, 9, 13]. Therefore, each dilemma of the 4CONFiDe set is categorized as: a) personal or impersonal; b) incidental or instrumental; c) self-beneficial or other-beneficial; d) avoidable death or inevitable death (see Conceptual factors paragraph for the description of each category). Please, refer to Table 1SI in Supplemental material for the complete list of dilemmas.

Structural formulation

We revised the existing dilemmas and created the new ones according to the following working points:

1. the antecedent situation: as to avoid the moral choice to be unbalanced using tendentious specifies – which can make some of the people described in the scenario expendable - we made sure that the characters involved in each scenario were all neutrally described and that no situational antecedents can made the person in a position to be sacrificed.
2. the language used: following [8, 13, 21] directions, we ensured the use of both the word *kill* and the word *save* at the end of each scenario, as to specify the consequences of the moral choice to be chosen, moreover we removed from all dilemmas colourful language and words such as 'wrong', 'inappropriate', 'forbidden', 'blameworthy';
3. trade-off: all dilemmas were homogeneous in the moral transgression outlined. Indeed, the moral choice is between *killing* a person to save a number of people. To avoid additional confounders, we maintained the number of individuals involved in each scenario [5-10; 11-50; 100-150 and 'thousands' of people) consistent with those proposed by (13)] in relation to the plausibility of the dilemma;
4. the decision maker's perspective: all dilemmas were designed in first person to emphasize the involvement of the decision maker;
5. question: to emphasize the consequences of the choice made by the decision maker, we included a direct question in the form of *'Do you… So that…'* (in Italian *'Fai questo… così che…'*). Participants could select one of four options: 'I certainly do it', 'I do it', 'I do not do it' and 'I certainly do not do it'. Simple present tense has been used to highlight the concreteness of the described situations and to make participants more convinced about the consequences of their choices. A four-point scale represents an attempt to capitalize on the advantages of two response methods previously used, while [18] it utilized a binary yes/no response to the question *'Would you do it?'* [13] and used a seven point-Likert scale to the question *'Do you… So that…'*. The dichotomic choice is more realistic and it forces the respondents to make clear decisions, but it does not give the opportunity to measure the degree of certainty. On the other hand, the Likert scale allows to uncover the degree of conflict experienced by the decision-maker, but an odd-point scale increases the chance that respondents choose the halfway point, that does not suggest a preference for either utilitarian or deontological choices;
6. word count: we homogenized the word count as well as reading time across dilemmas (English dilemmas: M = 138.17, SD = 13.66; Italian dilemmas: M = 122.11, SD = 12.68). Please refer to Table 1SI for details.

Translation of dilemmas

We included 52 moral dilemmas adapting them from the sets proposed by [13] and [18]. Dilemmas were revised based on the

criteria listed in the Structural formulation paragraph to create the English version of each dilemma. Afterwards, the English version was translated into Italian by an Italian native speaker, proficient in English. Since the direct translation often does not guarantee content equivalence in the translated text (often problems related to translation quality or to comparability of the meaning in different cultures occur), the back-translation process is a well-accepted instrument to validate the translation [52, 53]. To this aim, the translated dilemmas were then presented to an English native speaker proficient in Italian for the back-translation to English [52].

Methodological flexibility

To apply the 4CONFiDe set to imaging studies, dilemmas were designed to allow for the separation of the dilemma processing from choice-related processes, as proposed by Lotto et al. [18]. Therefore, each dilemma is composed of three paragraphs, where the first paragraph describes the situation, the second the problem, and the last one poses the question. Dilemmas should be presented in two different slides, with the first slide (called 'scenario screen') containing the first two paragraphs, the second slide (called 'question screen') containing the third paragraph with the question.

Data analysis

Differently from the majority of previous studies, we used mixed-effects models to analyse our data (see [54] for an exception). Indeed, different studies have shown a relationship between inter-individual differences, such as emotional awareness [55], empathy [50, 55, 56], emotion regulation [31], but also working memory and executive control [9]. Mixed-effects models with participants as *random effect* allow accounting for this variability across individuals.

RESULTS

Study 1 – Evaluation of translation and cultural adaptation of 4CONFiDe set

Methods

Participants

A total of 28 volunteers, consisting of 11 English native speakers proficient in Italian (9 females; Age, M = 33.27, SD = 10.84; Education, M = 17.27, SD = 2.65) and 17 Italian native speakers proficient in English (13 females; Age, M = 28.05, SD = 7.53; Education, M = 17.52, SD = 2.53) were recruited through email invitations. The two groups were matched for Gender (χ^2 (1) = 0.11, P = .73), Age (W = 126.5, P = 0.12, [95% CI - 0.99 to 9.00]), and Education (W = 91.0, P = 0.91, [95% CI 2.99 to 2.00]).

Stimuli

The dilemmas were presented in two separate surveys through Google Forms. Each survey was composed by two sessions of 26 Italian and 26 English dilemmas, for a total of 52 dilemmas per session. Dilemmas were presented in a random order within each session, as black-colored text (font: Calibri, size: 24) against a white background. The beginning of each session presented English or Italian instructions, in accordance with the language of the session.

Procedure

After giving their approval to take part in the study, each participant received by email both survey links within a two-week timeframe. For each survey, participants completed a series of questions about personal data (age, gender, education level, nationality). Moreover, they rated their proficiency level of Italian and English languages. All participants have lived among native speakers, in Italy or in an English-speaking country, for a period of time longer than 2 years. Finally, they answered to 52 moral dilemmas: the instructions were similar to those proposed by Christensen et al. [13]: *"In the following test, you will read a series of short stories about difficult interpersonal situations, similar to those that you could see on the news every day or may watch in a movie. For each of the difficult situations a solution will be*

proposed. You have to decide whether or not you would act as suggested. Do not linger too much for thinking but try to identify yourself with the characters of the stories".

Data analysis

Between-group comparisons were performed using the Wilcoxon-test for continuous variables (age and education) and the Chi-Square test for categorical variables (gender and dilemmas' languages). Linear Mixed Models (LMM) were fitted and analysed using R (version 2.10.1; http://www.r-project.org/) using the *multinom function* (nnet package, https://cran.r-project.org/web/packages/nnet/nnet.pdf) and the *glmer function* (lme4 package, http://cran.r-project.org/web/packages/lme4/index.html). To avoid a warning of non-convergence, an optimizer (bobyqa) was applied [57]. Estimates on the choice between utilitarian and deontological responses were based on an adaptive Gaussian Hermite approximation of the likelihood with 10 integration points. Multinomial logistic regressions on a four-point scale [58] and LMM on dichotomized answers [59] were performed with Subject as a random factor. The first type of analysis was performed to evaluate if the four-point scale proposed is sensitive to the effects of the above-mentioned factors on the four types of choice. As baseline choice, we defined the third point 'I do not do this'. Wald test was used to obtain z scores and p values of regression coefficients. LMM on dichotomized answers was performed to allow for comparisons with the studies that use dichotomous answers. Both models were theoretically based and they included group, dilemma language, gender, personal force, benefit recipient, intentionality and evitability as predictors and participants as random effect. To predict the likelihood of our hypothesis (a difference between the English native speakers and Italian native speakers, and difference between English and Italian dilemmas versions), Bayesian statistics were applied on the four-point scale answers (see Supplemental Material for Bayesian results). Bayesian statistics determine potential differences between groups (as LMM) but they also provide evidence towards determining conclusions about a 'no group difference' as well as informing us on whether inconclusive evidence exists (i.e., data are not informative enough to provide support for either a difference or no difference between groups [60]). To verify the reliability of the translation between group cultures and languages for each dilemma, Chi-square tests were performed on the answers of each dilemma between the Italian and English native speaker groups and between the Italian and English dilemma versions. Finally, for testing the internal consistency of dilemmas, Cronbach's alpha test was applied on the four-point scale answers of native English and Italian native speakers for the Italian version of the dilemma set.

Results

Response certainty depends on conceptual and cultural factors

The likelihood of choosing the 'I certainly do not do this' option increases when the harm was personal, the receivers of the benefit were other people, when the harm was intentional and when participants were males. The likelihood of choosing the strong utilitarian choice 'I certainly do it' increases for males, when the harm was impersonal, the benefits were extended to the respondent himself and the harm was intentional. Being an Italian native speaker increases the likelihood of choosing the utilitarian 'I do this' as compared to the deontological option 'I do not do this' ($P < 0.001$; see Table 1).

Table 1. Summary of multinomial logistic regression on moral decisions for Study 1.

	Coef.	*SE*	*z value*	*P value*	*95% CI*	
Factors					*Lower*	*Upper*
I certainly do it						
Intercept	-2.42	0.22	-10.97	< **0.001**	-2.856	-1.990
Group *(Italian)*	-0.25	0.14	-1.80	0.072	-0.532	0.023
Gender *(Male)*	2.14	0.15	14.18	< **0.001**	1.840	2.431
Dilemma language *(Italian)*	0.06	0.14	0.45	0.649	-0.206	0.331
Personal Force *(Impersonal)*	0.50	0.14	3.51	< **0.001**	0.217	0.766
Intentionality *(Instrumental)*	0.08	0.14	0.61	< **0.001**	-0.194	0.372
Benefit Recipient *(Self)*	0.59	0.14	4.15	< **0.001**	0.313	0.873
Evitability *(Inevitable)*	0.24	0.14	1.73	0.083	-0.031	0.521
I do it						
Intercept	-0.06	0.13	-0.46	0.647	-0.325	0.202
Group *(Italian)*	-0.33	0.09	-3.49	< **0.001**	-0.512	-0.143
Gender *(Male)*	0.67	0.12	5.43	< **0.001**	0.429	0.914
Dilemma language *(Italian)*	0.06	0.09	0.66	0.508	-0.119	0.239
Personal Force *(Impersonal)*	0.37	0.09	3.95	< **0.001**	0.186	0.551
Intentionality *(Instrumental)*	-0.43	0.09 -	4.52	< **0.001**	-0.616	-0.243
Benefit Recipient (Self)	0.20	0.09	2.19	< **0.001**	0.022	0.391
Evitability *(Inevitable)*	0.21	0.09	2.27	0.002	0.029	0.397
I certainly do not do it						
Intercept	-0.38	0.15	-2.49	0.013	-0.682	-0.082
Group *(Italian)*	-0.14	0.11	-1.35	0.176	-0.354	0.064
Gender *(Male)*	0.31	0.14	2.14	< **0.001**	0.028	0.592
Dilemma language *(Italian)*	0.09	0.10	0.85	0.395	-0.114	0.290
Personal Force *(Impersonal)*	-0.13	0.11	-1.27	< **0.001**	-0.343	0.073
'I do not do it' is the baseline outcome						

Dichotomizing moral choice removes cultural/language differences

Five predictors reached statistical significance (see Table 2): the likelihood of choosing the utilitarian options increased incrementally when participants were males, when the dilemma was impersonal, the benefit receiver included the respondent (self-benefit) and when death was inevitable. Otherwise, the likelihood of choosing the utilitarian options decreased when harm was intentional (instrumental dilemmas).

Comparisons per groups and languages for single dilemmas and internal consistency

Chi-square tests revealed a difference betwe-

Table 2. Summary of linear mixed effects model on moral decisions for Study 1.

	ß	*SE*	*z value*	*P value*	*ß exp*	*95% CI*	
Fixed effects						*Lower*	*Upper*
Intercept	-0.79	0.41	-1.92	0.055	0.452	0.201	1.017
Group *(Italian)*	-0.31	0.49	-0.63	0.531	0.734	0.278	1.934
Gender *(Male)*	1.26	0.59	2.14	**0.032**	3.514	1.113	11.095
Dilemma language *(Italian)*	0.03	0.08	0.38	0.700	1.033	0.874	1.222
Personal Force *(Impersonal)*	0.55	0.09	6.25	**<0.001**	1.727	1.455	2.050
Intentionality *(Instrumental)*	-0.51	0.09	-5.68	**< 0.001**	0.600	0.503	0.716
Benefit Recipient *(Self)*	0.47	0.09	5.35	**< 0.001**	1.600	1.347	1.901
Evitability *(Inevitable)*	0.31	0.08	3.59	**< 0.001**	1.371	1.155	1.629

Note: *ß* = estimate; *SE* = standard error; *CI* = confidence interval.

en the two groups for the dilemma number 14 ('Rescue 911 b'; χ^2 (1) = 9.62, *P* = .02) and for dilemma number 23 ('Bus Plunge a'; χ^2 (1) = 11.28, *P* = .01), in both dilemmas English native speakers gave more utilitarian responses compared to Italian native speakers. Please refer to Table 3SI at Supplemental Material for a summary of results, which include no other significant differences between the English and Italian versions of dilemmas.

Cronbach's alpha test was applied on the answers of native English and Italian native speakers for the Italian dilemma set revealing that $\alpha = 0.96$, which suggests high consistency among the proposed dilemmas.

Discussion

The analyses disclosed that moral choices are influenced by the four conceptual factors even when presented in a foreign language, in accordance with the findings from [13]. Although this result is in contrast with previous studies, showing that participants provide more utilitarian judgements when the dilemma is posed in a foreign language ([37, 38] but see [61] for a contrasting result), a recent study has shown that the foreign-language effect is present when participants are highly proficient in the foreign (L2) language [62]. On the other hand, the lack of foreign-language effect in our results can suggest that the cultural adaptation of the dilemmas, reflected through the back-translation process, successfully reduced the differences presented in the dilemmas across languages. However, the analysis of the four choices revealed a cultural effect: indeed, being Italian native speakers increased the probability of choosing the utilitarian answer 'I do this' respectively to the deontological option 'I do not do this', supporting the hypothesis that moral choices can be affected by cultural/linguistic backgrounds [39, 41]. Although one might argue that this result simply reflects a preference of English native speakers for the passive option (i.e., 'I do not do this'), the fact that this culture effect is not replicated by the dichotomized choice analysis may suggest otherwise.

The relationship between language and moral choice has been tested not only for the whole dilemma set but also, singularly, for each dilemma. Even though two dilemmas (13 and 22, both included in previous analyses) showed significantly higher rate of utilitarian choices from English native speakers compared to Italian native speakers, no dilemma showed differences in moral choices between the two language versions. This might indicate that even translations of dilemmas 13 and 22 are valid.

Study 2 – Arousal, valence, familiarity ratings and moral choices of the 4CONFiDe set

To evaluate the effects of the translation, in Study 2, we aimed at exploring whether arousal, valence, familiarity ratings and moral choices are affected by the four conceptual factors (Personal force, Benefit Recipient, Intentionality and Evitability). Although normative data for arousal and valence of the dilemmas were provided by [18] and [13], this is the first time that a moral dilemma set with dilemmas including all four conceptual factors is assessed in Italian. Additionally, we collected ratings also for familiarity to evaluate whether participants had previously encountered the scenarios described, since it has been suggested that being familiar or present personal attachment to the details could influence the moral choice [7].

Methods

Participants

A total of 112 Italian native speakers (70 women) volunteered to the Study 2 web survey. The survey was promoted through online forums, social networks, and word of mouth. Upon responding to the invite, participants were automatically directed to two equivalent versions of the survey (version A or version B). Each version was composed by 26 dilemmas of the 52 dilemmas composing the 4CONFiDe set. Sixty-four participants completed survey A (41 women; Age, M = 30.44 years, SD = 5.96; Education, M = 18.11 years, SD = 2.39; aka Group A), while 48 participants completed survey B (aka Group B; 28 women; Age, M = 29.87 years, SD = 5.59; Education, M = 17.83 years, SD = 2.35). Given that the two groups are matched for Gender (χ^2 (1) = 0.38, P = .54), Age (W = 1570, P = 0.87, [95% CI -2.00 to 1.99]) and Education (W = 1392, P = 0.37, [95% CI -3.18 to 3.37]), data will be collapsed.

Stimuli

Two surveys were created and presented through Google Forms. Each version of the survey lasted about one hour and it was composed by 26 dilemmas presented in random order. The two versions were created in such a way that dilemmas were counterbalanced across the four conceptual factors. Participants completed only one survey to increase compliance. If no differences between characteristics of the two groups will emerge, the data will be collapsed. Each dilemma was presented as a black ink text (font: Calibri, size: 24) against a white background.

Procedure

Participants answered socio-demographic questions (age, gender, education level and nationality) and 26 moral dilemmas. Instructions given to participants included the instructions of Study 1 plus the request to answer to three additional questions per dilemma: 'How arousing/pleasant/familiar is the dilemma?'. Participants answered using a 7-point likert scale (1 = not at all arousing/unpleasant/not at all familiar, 7 = highly arousing/pleasant/highly familiar); as in [13].

Data analysis

Between-group comparisons were performed using Wilcoxon and Chi-square for continuous and categorical variables, respectively. T-tests were performed for each rating between the average value of each dilemma and the neutral or middle point (3.5 for valence rating and familiarity) or the baseline point (0 for arousal) to test whether the rating value is significantly different from the neutral or baseline value. LMM were performed for the four dependent variables: arousal, valence, familiarity and choice. For each dependent variable, an initial model was built up that included all main effects and second-level interactions as fixed effects; higher-level interactions were not considered not to affect the sensitivity of the analysis. For these initial models, the intercept of groups and participants was entered as a random effect. The initial models were progressively simplified by removing stepwise non-significant fixed

effects until the deletion of any additional effect caused a significant loss of fit to the model [59, 63–65] as tested by a Chi-square test (*Anova* function). Recommended confidence intervals for estimator values were generated using bootstrapping procedure with 5000 replications [66]. To predict the likelihood of our hypothesis (arousal, valence and familiarity are affected by the four moral conceptual factors), Bayesian statistics were applied on the four-point scale answers (see Supplemental Material for Bayesian results).

Results

Ratings are significantly different compared to the neutral and baseline points

T-tests on arousal, valence and familiarity ratings against the neutral or baseline values revealed that valence ratings are significantly unpleasant compared to the neutral point (t (102) = -27.03, P < .0001, [95% CI 1.87 to 3.50]), more arousing (t (102) = 44.99, P <.0001, [95% CI 3.35 to 3.66]) and less familiar than the middle point (t (102) = -31.89, P <.0001, [95% CI -1.61 to -1.82]).

Arousal variance is explained by conceptual factors alone, valence and familiarity variance also by participants' education and gender

The values of arousal are reported in Table 3SI. For arousal ratings (overall M = 3.50, SD = 1.93), the best model was the one including only the four conceptual factors as fixed effects, interaction between personal force and benefit recipient, personal force and evitability, intentionality and benefit recipient (χ^2 (1) = 111.44, P < 0.0001). After Bootstrapping, all significant contrasts survived except for the predictor benefit recipient alone and in interaction with personal force (see Table 3). The likelihood of rating a dilemma as more arousing increased when the dilemma was personal, when the death was avoidable and when the death was instrumental; moreover, the likelihood of rating a dilemma as less arousal increased when the dilemmas presented both the characteristics of self-beneficial and instrumental harm. On the other hand, ratings reflected increased arousal when the dilemmas were at the same time inevitable death (in which the sacrificed life would be lost in any case) and impersonal.

For valence ratings (overall M = 1.87, SD = 1.43), the best model included education, gender, personal force, intentionality, evitability, and the interactions personal force*evitability, personal force*intentionality and intentionality*gender as fixed factors (χ^2 (2) = 44.82, P < 0.0001). After bootstrapping, four predictors emerged as significant. The likelihood of rating a dilemma as less pleasant increased when participants had higher education and were female. Moreover, the likelihood of rating a dilemma as more pleasant increased when the dilemmas were impersonal and death was inevitable, and less pleasant when death was intentional and raters were females (see Table 4 and Figure 2).

For familiarity ratings (overall M = 1.80, SD = 1.30), the best model included the interactions between personal force*gender, benefit recipient*intentionality, and evitability*intentionality as fixed factors (χ^2 (3) = 20.65, P = 0.0001). Four variables resulted significant after bootstrapping: the likelihood of rating the dilemmas as less familiar increased when the respondent was female, when the respondent benefitted of the decision (self-benefit) and with the dilemmas that presented combinations of intentional harm and inevitable death. On the other hand, familiarity seemed to increase when the dilemmas were instrumental and the respondent was not harmed (self-beneficial; see Table 5 and Figure 3).

Table 3. Summary of the best linear mixed effects models on arousal ratings for Study 2. Higher *ß* values indicate higher arousal ratings.

Arousal Ratings	*ß*	*SE*	*z value*	*P value*	*ß exp*	*95% CI*		*BootMean*	*Percent.*	
Fixed effects						*Lower*	*Upper*		*2.5%*	*97.5%*
Intercept	2.98	0.27	10.91	< 0.001	19.750	11.557	33.752	**3.276**	**2.544**	**4.112**
Personal Force *(Impersonal)*	-1.65	0.21	-7.90	< 0.001	0.191	0.127	0.289	**-1.739**	**-2.500**	**-1.066**
Intentionality *(Instrumental)*	0.87	0.17	5.20	< 0.001	2.387	1.720	3.312	**0.922**	**0.454**	**1.405**
Benefit Recipient *(Self)*	0.16	0.22	0.70	0.484	1.172	0.750	1.831	0.175	-0.501	0.869
Evitability *(Inevitable)*	-1.65	0.18	-9.25	< 0.001	0.191	0.134	0.271	**-1.747**	**-2.404**	**-1.155**
Personal Force*Benefit Recipients *(Impersonal, Self)*	0.53	0.23	2.29	0.022	1.697	1.080	2.667	0.559	-0.131	1.249
Personal Force*Evitability *(Impersonal, Inevitability)*	2.06	0.24	8.57	< 0.001	7.857	4.903	12.590	**2.171**	**1.446**	**2.983**
Benefit Recipients*Intentionality *(Self, Instrumental)*	0.90	0.22	-3.94	< 0.001	0.407	0.260	0.636	**-0.955**	**-1.647**	**-0.304**

Note: *ß* = estimate; SE = standard error; CI = confidence interval; z value, P value, *ß* and 95% CI were obtained from LMM model; Percentile CI's estimated with 5000 bootstrap replications.

Table 4. Summary of the best linear mixed effects models on valence ratings for Study 2. Shorter *ß* values indicate less pleasant ratings.

Valence Ratings	*ß*	*SE*	*z value*	*P value*	*ß exp*	*95% CI*		*BootMean*	*Percent.*	
Fixed effects						*Lower*	*Upper*		*2.5%*	*97.5%*
Intercept	4.14	1.30	3.19	0.001	62.901	4.927	803.026	**4.49**	**1.740**	**7.432**
Education	-0.23	0.07	-3.09	0.002	0.794	0.686	0.919	**-0.25**	**-0.413**	**-0.094**
Gender *(Female)*	-1.37	0.37	-3.71	< 0.001	0.254	0.123	0.523	**-1.50**	**-2.269**	**-0.737**
Personal Force *(Impersonal)*	0.21	0.18	1.18	0.238	1.24	0.868	1.769	0.23	-0.286	0.744
Intentionality *(Instrumental)*	-0.17	0.19	-0.90	0.370	0.843	0.580	1.225	-0.191	-0.729	0.354
Evitability *(Inevitable)*	0.36	0.14	2.63	0.009	1.439	1.067	1.888	0.39	-0.035	0.829
Personal Force*Evitability *(Impersonal, Inevitable)*	-1.31	0.20	-6.48	< 0.001	0.271	-0.182	-0.402	**-1.38**	**-2.028**	**-0.752**
Personal Force*Intentionality *(Impersonal, Instrumental)*	0.49	0.20	2.43	0.015	1.635	1.099	2.433	0.52	-0.082	1.125
Intentionality*Gender *(Instrumental, Female)*	-0.62	0.20	-3.04	0.002	0.540	0.363	0.803	**-0.65**	**-1.215**	**-0.084**

Note: *ß* = estimate; SE = standard error; CI = confidence interval; z value, P value, *ß* and 95% CI were obtained from LMM model; Percentile CI's estimated with 5000 bootstrap replications.

Table 5. Summary of the best linear mixed effects models on familiarity ratings for Study 2. Higher *ß* values indicate higher familiarity ratings.

Familiarity Ratings	*ß*	*SE*	*z value*	*P value*	*ß exp*	*95% CI*		*BootMean*	*Percent.*	
Fixed effects						*Lower*	*Upper*		*2.5%*	*97.5%*
Intercept	-0.10	0.36	-0.27	0.786	0.906	0.444	1.850	-0.11	-0.907	0.689
Gender *(Female)*	-1.27	0.44	-2.91	0.004	0.280	0.120	0.661	**-1.37**	**-2.268**	**-0.470**
Personal Force *(Impersonal)*	-0.00	0.15	-0.00	0.997	0.999	0.738	1.354	-0.001	-0.442	0.460
Benefit Recipient *(Self)*	-0.59	0.16	-3.63	< 0.001	0.551	0.340	0.760	**-0.64**	**-1.150**	**-0.139**
Intentionality *(Instrumental)*	0.26	0.17	1.55	0.120	1.301	0.933	1.813	0.27	-0.240	0.748
Evitability *(Inevitable)*	0.16	0.16	0.96	0.335	1.170	0.850	1.612	0.16	-0.289	0.615
Personal Force*Gender *(Impersonal, Female)*	0.51	0.20	2.54	0.011	1.661	1.122	2.460	0.54	-0.086	1.151
Benefit Recipient*Intentionality *(Self, Instrumental)*	0.70	0.21	3.36	< 0.001	2.011	1.338	3.021	**0.75**	**0.098**	**1.425**
Intentionality*Evitability *(Instrumental, Inevitable)*	-0.55	0.21	-2.65	0.008	0.577	0.384	0.866	**-0.575**	**-1.151**	**-0.019**

Note: *ß* = estimate; SE = standard error; CI = confidence interval; z value, P value, *ß* and 95%CI were obtained from LMM model; Percentile CI's estimated with 5000 bootstrap replications.

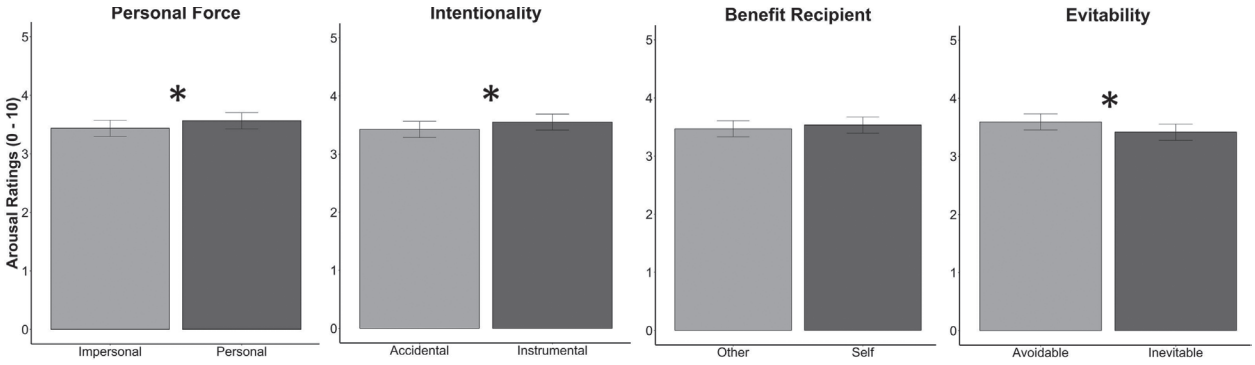

Figure 1. Arousal ratings distribution per conceptual factors. Error bars represent CI of LMM model. Significant differences ($P < 0.05$) are indicated via *.

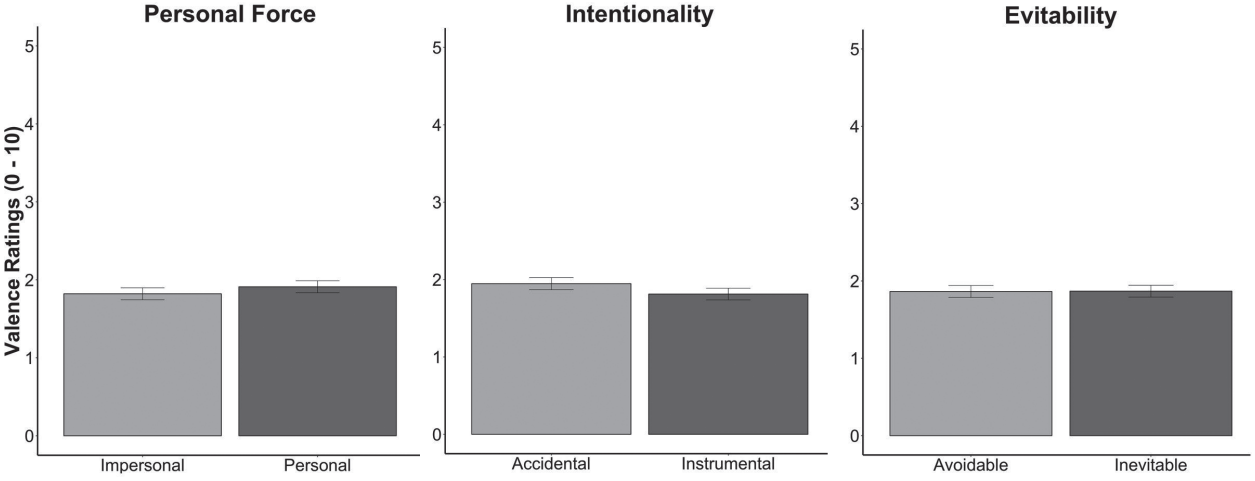

Figure 2. Valence ratings distribution per conceptual factors. Error bars represent CI of LMM model. Significant differences ($P < 0.05$) are indicated via *.

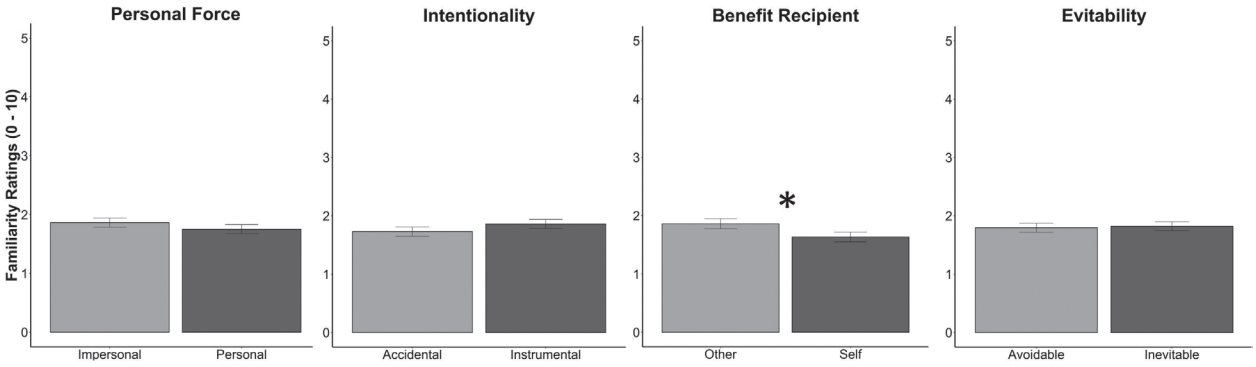

Figure 3. Familiarity ratings distribution per conceptual factors. Error bars represent CI of LMM model. Significant differences ($P < 0.05$) are indicated via *.

Moral choices are affected by gender, personal force and intentionality factors

The initial model for the analysis of moral choices included besides age, gender, education and the four conceptual factors also arousal, valence and familiarity ratings. However, the resulted best model included as predictors only gender, personal force, interaction benefit recipient*intentionality, and evitability (χ^2 (1) = 6.72, P = 0.009). Four variables reached the significance level after bootstrapping: the likelihood of choosing utilitarian responses decreased in female respondents, with personal or instrumental or avoidable death dilemmas (see Table 6 and Figure 4).

Table 6. Summary of linear mixed effects model on moral choices for Study 2. Higher *ß* values indicate higher rates of utilitarian responses.

	ß	*SE*	*z value*	*P value*	*ß exp*	*95% CI*		*BootMean*	*Percent.*	
Fixed effects						*Lower*	*Upper*		*2.5%*	*97.5%*
Intercept	0.45	0.21	2.10	0.035	1.566	1.031	2.380	**0.49**	**0.014**	**0.965**
Gender *(Female)*	-0.72	0.22	-3.22	0.001	0.487	0.314	0.754	**-0.78**	**-1.232**	**-0.326**
Personal Force *(Impersonal)*	0.44	0.08	5.12	< 0.001	1.549	1.310	1.831	**0.46**	**0.239**	**0.682**
Intentionality *(Instrumental)*	-0.87	0.13 -	6.82	< 0.001	0.419	0.326	0.538	**-0.91**	**-1.289**	**-0.545**
Benefit Recipient *(Self)*	0.04	0.14	0.31	0.756	1.043	0.798	1.363	0.04	-0.340	0.432
Evitability *(Inevitable)*	0.25	0.08	2.88	0.004	1.280	1.082	1.513	**0.26**	**0.036**	**0.484**
Benefit Recipient*Intentionality *(Self, Instrumental)*	0.45	0.17	2.60	0.009	1.568	1.117	2.200	0.47	-0.020	0.955

Note: *ß* = estimate; SE = standard error; CI = confidence interval; z value, P value, *ß* and 95%CI were obtained from LMM model; Percentile CI's estimated with 5000 bootstrap replications.

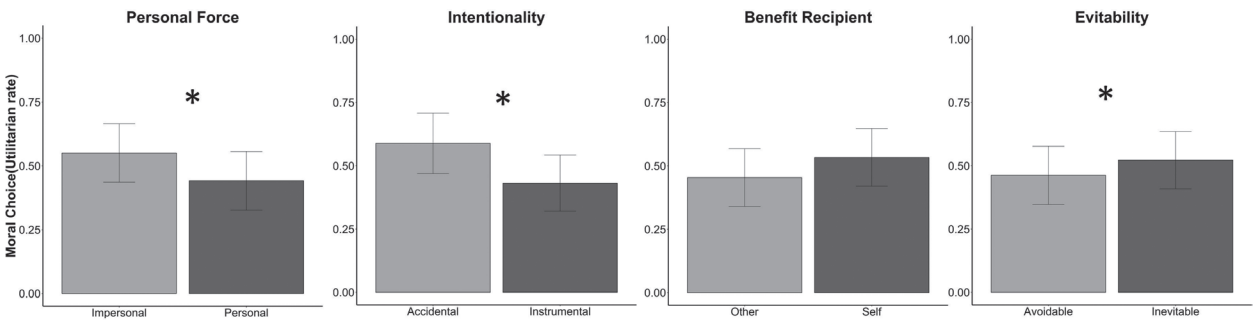

Figure 4. Utilitarian response rates distribution per conceptual factors. Error bars represent CI of LMM model. Significant differences ($P < 0.05$) are indicated via *.

Discussion

In Study 2, we assessed for the first time the arousal, valence and familiarity ratings of a moral dilemma set with dilemmas including all four conceptual factors translated in Italian. First, arousal ratings are directly predicted by the four conceptual factors, and not by socio-demographic variables, as, instead, occurs for valence and familiarity ratings. Arousal ratings tended to be higher when the harm was described as personal (compared to impersonal) and instrumental (compared to incidental). However, when the harm of the victim could have been avoided, the impersonal dilemmas were rated as highly arousing; similarly, when the harm was intentional the dilemmas were rated as more arousing if the decision maker was not among the beneficiaries. This result is only partially in line with previous studies [13, 18]. Lotto et al. [18], that considered only intentionality and benefit recipient factors and found that both affected arousal ratings: incidental dilemmas and other beneficent dilemmas were rated as more arousing than instrumental and self-beneficial dilemmas. Christensen et al. [13], who took the four conceptual factors into account, showed that arousal ratings depend on personal force, benefit recipient factors and by the interaction of intentionality with benefit recipient.

Second, dilemmas are rated as unpleasant, as the average ratings suggests. Specifically, dilemmas were considered more negative when the respondents were females as well as when they were higher educated. Valence is also explained by the interaction of intentionality with gender: females rated as more negative dilemmas where the harm is instrumental (compared to incidental). This finding is in contrast with both [13, 18] who found no significant main effects for intentionality factors but only for benefit recipient [18]; self-beneficial dilemmas were rated as more unpleasant that other beneficial dilemmas and for personal force and benefit recipient factors ([13] here again self-beneficial dilemmas were rated as more unpleasant than other beneficial dilemmas, while personal dilemmas were rated as more unpleasant than impersonal). Only [13] found a significant interaction between intentionality factor and personal force and benefit recipient factors.

Moreover, in contrast with previous studies [13, 18], here we also provided the data for dilemma familiarity. Importantly, all dilemmas were rated by our participants as unfamiliar suggesting that their experience with the scenario was limited. Familiarity ratings are explained by gender (females rated dilemmas as less familiar compared to males), and benefit recipient (dilemmas were less familiar when the respondent benefited of the choice alone) and by some interactions: dilemmas are rated as more familiar the harm is intentional and the respondent benefited from the choice or death was avoidable. We believed that this information is important to confirm the validity of this set of dilemmas, since respondents to a moral task should be all at the same level of knowledge when are presented to the dilemmas for not biasing the choices [7].

To our knowledge, this is the first time that the effect of arousal, valence and familiarity ratings was considered on the moral choice. At variance with our expectations, moral choices were not predicted by these ratings. This result may be influenced by the limited variance in ratings across participants, such as in the case of valence (SD = 1.43; on a total of 7 points). Furthermore, self-reports may not be reliable indicators of the participants' reactions to the dilemmas. Although not specific to the ratings, this hypothesis would be in line with what found by [18], who revealed a dissociation between what the participants perceived in terms of moral acceptability and how they decided to behave: indeed, people consider more acceptable to kill someone to save others when their own life is not at risk, but when they are asked how they would act they are more likely to save themselves.

Except for arousal ratings, gender was found to affect both ratings and moral choices. Females usually produced less utilitarian

choices in line with previous evidence ([18, 26] but only partially with [13]) and rated the dilemmas as less pleasant and familiar.

In line with several previous studies [9, 11, 13, 24, 25, 28, 43, 49, 67], we confirm that (healthy) participants are more prone to give deontological answers when moral dilemmas are described as personal (physical contact involved in the harm).

Similarly, participants made more utilitarian decisions when the action of killing one person is an unintended consequence of saving others (incidental dilemmas), compared to when it is an intended means to save others (instrumental dilemmas; [7–9, 13, 16, 18, 19, 30] but see [29], for a negative result). This conceptual factor is based on the *principle of double effect*, which states that it is acceptable to harm someone for the greater good only if the harm comes as a side effect of the action (e.g., [2]).

Finally, consistent with what was found by [9] and [13], our analysis revealed that it is more probable that participants decide to act in an utilitarian way when the person killed by the harmful action is going to die anyway compared to when she is not.

DISCUSSION AND CONCLUSIONS

In the present study, we suggested a methodology to adapt, convert and test moral dilemmas in languages different from English. After the description of how moral dilemmas are built including the main features of moral dilemmas as conceptualized in published sets, we have defined the formulation of such dilemmas. Based on the described structure, we have proposed a moral dilemma set designed around four moral conceptual factors and suitable for imaging applications and that is comparable between English dilemmas version (the scientific reference language) and the Italian dilemmas version (participants native language). Finally, the main features of the translated dilemmas have been tested together with their effects on moral choice.

We suggest that this methodology should be considered as a standard procedure for future studies in which moral dilemmas will be presented in languages different from English.

In Study 1, we showed that participants' native language and that in which the dilemmas were written did not influence moral decisions, indicating that the same meaning was decoded across translations. The back-translation procedure was used to ensure that the same meaning of dilemmas was transferable across languages. Study 2 confirmed that the proposed dilemmas were perceived by participants with different degrees of arousal, pleasantness and familiarity based on some of the conceptual factors and that three of the four conceptual factors (Personal force, Intentionality and Evitability) and the interaction of some of them with benefit recipient factor determined participants' moral choices.

Moreover, when LMM with participants as random effect were used, we found that inter-individual differences have a remarkable effect on moral decisions. Other studies too have suggested the existence of a link between moral decisions and inter-individual differences, such as empathy (e.g., [50, 55]), emotion regulation [31] but also working memory and executive control [9]. Future research should standardly take inter-individual differences into account.

Finally, even though the moral dilemmas inserted in the 4CONFiDe set have been rigorously revised to provide reliability of the results some considerations are needed. First, some dilemmas ('Modified Crying Baby'; 'Orphanage'; 'Cinderblock'; 'Bus plunge'; 'Modified Rowboat'; 'Tycoon') refer to the presence of newborn, children and young adults. These dilemmas were presented in the dilemma set proposed by [13], however, the analysis of arousal rating of Study 2 showed that the involvement of these sensible subjects increases the variability of arousal between these dilemmas and dilemmas involving only adults (Wilcoxon test: $W = 824630$, $P < 0.001$): future reasearchers should be aware

of this internal variability. Second, since some dilemmas sounded more plausible with a greater number of individuals involved (i.e. 'Preventing Cholera' and 'Nuclear reactor') while others did not (i.e., 'Modified Transplant' and 'Bus plunge'), the number of individuals involved in each dilemma is not balanced across dilemmas (e.g., ten couples of dilemmas in the 5-10 category, five couples of dilemmas in the 11-50 category, two couples of dilemmas in the 100-150 category, and four couples of dilemmas in the thousands of people category). This could be a confounding factor that needs to be considered when selecting these stimuli for future research. We maintained such differences, though, to allow for comparability across dilemma sets. However, we would like to point out that although the presence of these confounding variables the internal consistency of the dataset (tested on the Cronbach's alpha test applied to the answers of two separate samples of participants, native English and Italian native speakers; $\alpha = 0.96$) was high. Third, dilemmas were designed in a way that the affirmative responses were always the utilitarian options. In an effort to standardize the dilemmas and increase the consistency across items, we did not insert different versions of the question. This procedure is very common in moral dilemmas studies (e.g., [13, 25, 30]), however it could have introduced a bias toward one option. If possible, future studies should consider counterbalancing the direction of the question.

In conclusion, here we provided a revised set of 52 moral dilemmas selected from the previous standardized sets [13, 18] and based on four conceptual factors. The proposed set has been designed to be suitable for imaging experiments with dilemmas being controlled for confounding factors and for transferability across languages. We believe that these procedures should be adopted in future studies on moral decision-making that want to promote the use of experimental stimuli that allow for comparability across cultures, and methodologies.

References

1. Christensen JF, Gomila A. Moral dilemmas in cognitive neuroscience of moral decision-making: A principled review. Neurosci Biobehav Rev. 2012;36(4):1249–1264.
2. Foot P. Theories of ethics. Oxford: Oxford University Press; 1967.
3. Thomson J. Aristotle: Ethics. Harmondsworth, UK: Penguin; 1976.
4. Kant I. The moral law: Groundwork of the metaphysic of morals. UK: Psychology Press; 2005.
5. Kahane G, Everett JA, Earp BD, Farias M, Savulescu J. 'Utilitarian'judgments in sacrificial moral dilemmas do not reflect impartial concern for the greater good. Cognition. 2015;134:193–209.
6. Kahane G. Sidetracked by trolleys: Why sacrificial moral dilemmas tell us little (or nothing) about utilitarian judgment. Soc Neurosci. 2015(ahead-of-print):1–10.
7. Hauser M, Cushman F, Young L, Kang-Xing Jin R, Mikhail J. A dissociation between moral judgments and justifications. Mind Lang. 2007;22(1):1–21.
8. Borg JS, Hynes C, Van Horn J, Grafton S, Sinnott-Armstrong W. Consequences, action, and intention as factors in moral judgments: An fMRI investigation. J Cogn Neurosci. 2006;18(5):803–817.
9. Moore AB, Clark BA, Kane MJ. Who shalt not kill? Individual differences in working memory capacity, executive control, and moral judgment. Psychol Sci. 2008;19(6):549–557.
10. Rosas A, Koenigs M. Beyond "utilitarianism": Maximizing the clinical impact of moral judgment research. Soc Neurosci. 2014;9(6):661–667.
11. Greene J, Nystrom L, Engell A, Darley J, Cohen J. The neural bases of cognitive conflict and control in moral judgment. Neuron. 2004;44(2):389–400.

12. Greene J, Sommerville R, Nystrom L, Darley J, Cohen J. An fMRI investigation of emotional engagement in moral judgment. Science (New York, NY). 2001;293(5537):2105–2108.
13. Christensen JF, Flexas A, Calabrese M, Gut NK, Gomila A. Moral Judgment Reloaded: A Moral Dilemma validation study. Front Psychol. 2014;5:607.
14. Mikhail J. Universal moral grammar: Theory, evidence and the future. Trends Cogn Sci. 2007;11(4):143–152.
15. Royzman EB, Baron J. The preference for indirect harm. Soc Justice Res. 2002;15(2):165–184.
16. Greene JD, Cushman FA, Stewart LE, Lowenberg K, Nystrom LE, Cohen JD. Pushing moral buttons: The interaction between personal force and intention in moral judgment. Cognition. 2009;111(3):364–371.
17. Carmona-Perera M, Caracuel A, Pérez-García M, Verdejo-García A. Brief Moral Decision-Making Questionnaire: A Rasch-derived short form of the Greene dilemmas. Psychol Assess. 2015;27(2):424.
18. Lotto L, Manfrinati A, Sarlo M. A new set of moral dilemmas: norms for moral acceptability, decision times, and emotional salience. J Behav Decis Mak. 2014;27(1):57–65.
19. Cushman F, Young L, Hauser M. The Role of Conscious Reasoning and Intuition in Moral Judgment: Testing Three Principles of Harm. Psychol Sci. 2006;17.
20. Petrinovich L, O'Neill P. Influence of wording and framing effects on moral intuitions. Ethol Sociobiol. 1996;17(3):145–171.
21. O'Hara RE, Sinnott-Armstrong W, Sinnott-Armstrong NA. Wording effects in moral judgments. Judgm Decis Mak. 2010;5(7):547.
22. Trémolière B, Bonnefon J-F. Efficient kill–save ratios ease up the cognitive demands on counterintuitive moral utilitarianism. Pers Soc Psychol Bull. 2014;40(7):923–930.
23. Boccia M, Dacquino C, Piccardi L, Cordellieri P, Guariglia C, Ferlazzo F, et al. Neural foundation of human moral reasoning: an ALE meta-analysis about the role of personal perspective. Brain Imaging Behav. 2016:1–15.
24. Valdesolo P, DeSteno D. Manipulations of emotional context shape moral judgment. Psychol Sci. 2006;17(6):476–477.
25. Moretto G, Làdavas E, Mattioli F, Di Pellegrino G. A psychophysiological investigation of moral judgment after ventromedial prefrontal damage. J Cogn Neurosci. 2009;22(8):1888–1899.
26. Fumagalli M, Ferrucci R, Mameli F, Marceglia S, Mrakic-Sposta S, Zago S, et al. Gender-related differences in moral judgments. Cogn Process. 2010;11(3):219–226.
27. Pastötter B, Gleixner S, Neuhauser T, Bäuml K-HT. To push or not to push? Affective influences on moral judgment depend on decision frame. Cognition. 2013;126(3):373–377.
28. Koenigs M, Young L, Adolphs R, Tranel D, Cushman F, Hauser M, et al. Damage to the prefrontal cortex increases utilitarian moral judgements. Nature. 2007;446(7138):908–911.
29. Waldmann MR, Dieterich JH. Throwing a bomb on a person versus throwing a person on a bomb intervention myopia in moral intuitions. Psychol Sci. 2007;18(3):247–253.
30. Sarlo M, Lotto L, Manfrinati A, Rumiati R, Gallicchio G, Palomba D. Temporal dynamics of cognitive-emotional interplay in moral decision-making. J Cogn Neurosci. 2012;24(4):1018–1029.
31. Szekely RD, Miu AC. Incidental emotions in moral dilemmas: The influence of emotion regulation. Cogn Emot. 2014(ahead-of-print):1–12.
32. Sood S, Forehand M. On self-referencing differences in judgment and choice. Organ Behav Hum Decis Process. 2005;98(2):144–154.
33. Tassy S, Oullier O, Mancini J, Wicker B. Discrepancies between judgment and choice of action in moral dilemmas. Front Psychol. 2013;4.
34. FeldmanHall O, Mobbs D, Evans D, Hiscox L, Navrady L, Dalgleish T. What we say and what we do: the relationship between real and hypothetical moral choices. Cognition. 2012;123(3):434–441.

35. Francis KB, Howard C, Howard IS, Gummerum M, Ganis G, Anderson G, et al. Virtual Morality: Transitioning from Moral Judgment to Moral Action? PloS One. 2016;11(10):e0164374.

36. Patil I, Cogoni C, Zangrando N, Chittaro L, Silani G. Affective basis of judgment-behavior discrepancy in virtual experiences of moral dilemmas. Soc Neurosci. 2014;9(1):94–107.

37. Costa A, Foucart A, Hayakawa S, Aparici M, Apesteguia J, Heafner J, et al. Your morals depend on language. PloS One. 2014;9(4):e94842.

38. Cipolletti H, McFarlane S, Weissglass C. The moral foreign-language effect. Philos Psychol. 2016;29(1):23–40.

39. Ahlenius H, Tännsjö T. Chinese and Westerners respond differently to the trolley dilemmas. J Cogn Cult. 2012;12(3–4):195–201.

40. Bussani M, Infantino M. Tort law and legal cultures. Am J Comp L. 2015;63:301–332.

41. Cowell JM, Lee K, Malcolm-Smith S, Selcuk B, Zhou X, Decety J. The development of generosity and moral cognition across five cultures. Dev Sci. 2016 May 4. doi: 10.1111/desc.12403. [Epub ahead of print].

42. O'Neill P, Petrinovich L. A preliminary cross-cultural study of moral intuitions. Evol Hum Behav. 1998;19(6):349–367.

43. Moore AB, Lee NL, Clark BA, Conway AR. In defense of the personal/impersonal distinction in moral psychology research: Cross-cultural validation of the dual process model of moral judgment. Judgm Decis Mak. 2011;6(3):186.

44. Wang Y, Deng Y, Sui D, Tang Y-Y. Neural correlates of cultural differences in moral decision making: a combined ERP and sLORETA study. Neuroreport. 2014;25(2):110–116.

45. Baron J, Siepmann M. Techniques for creating and using Web questionnaires in research and teaching. Psychological Experiments on the Internet. 2000:235–265.

46. Patil I, Silani G. Alexithymia increases moral acceptability of accidental harms. J Cogn Psychol. 2014;26(5):597–614.

47. Kraut R, Olson J, Banaji M, Bruckman A, Cohen J, Couper M. Psychological research online: report of Board of Scientific Affairs' Advisory Group on the Conduct of Research on the Internet. Am Psychol. 2004;59(2):105.

48. Shenhav A, Greene J. Integrative moral judgment: dissociating the roles of the amygdala and ventromedial prefrontal cortex. J Neurosci. 2014;34(13):4741–4749.

49. Greene JD, Morelli SA, Lowenberg K, Nystrom LE, Cohen JD. Cognitive load selectively interferes with utilitarian moral judgment. Cognition. 2008;107(3):1144–1154.

50. Sarlo M, Lotto L, Rumiati R, Palomba D. If it makes you feel bad, don't do it! Egoistic rather than altruistic empathy modulates neural and behavioral responses in moral dilemmas. Physiol Behav. 2014;130:127–134.

51. Bloomfield P. Morality and Self-interest. Oxford: Oxford University Press; 2007.

52. Brislin RW. Back-translation for cross-cultural research. J Cross Cult Psychol. 1970;1(3):185–216.

53. Sperber AD. Translation and validation of study instruments for cross-cultural research. Gastroenterology. 2004;126:S124–S8.

54. Pletti C, Lotto L, Buodo G, Sarlo M. It's immoral, but I'd do it! Psychopathy traits affect decision-making in sacrificial dilemmas and in everyday moral situations. Brit J Psychol. 2016.

55. Patil I, Silani G. Reduced empathic concern leads to utilitarian moral judgments in trait alexithymia. Front Psychol. 2014;5.

56. Gleichgerrcht E, Young L. Low levels of empathic concern predict utilitarian moral judgment. PloS One. 2013;8(4):e60418.

57. Powell MJ. The BOBYQA algorithm for bound constrained optimization without derivatives. Cambridge NA Report NA2009/06. Cambridge: University of Cambridge; 2009.

58. Hilbe JM. Logistic regression models. UK: CRC Press, Taylor & Francis Group; 2009.

59. Faraway JJ. Extending the linear model with R: generalized linear, mixed effects and nonparametric regression models. UK: CRC press, Taylor & Francis Group; 2005.

60. Dienes Z. How Bayes factors change scientific practice. J Math Psychol. 2016;72:78–89.

61. Chan YL, Gu X, Ng JCK, Tse CS. Effects of dilemma type, language, and emotion arousal on utilitarian vs deontological choice to moral dilemmas in Chinese–English bilinguals. Asian J Soc Psychol. 2016;19(1):55–65.

62. Čavar F, Tytus AE. Moral judgement and foreign language effect: when the foreign language becomes the second language. J Multilingual Multicultural Dev. 2017:1–12.

63. Crepaldi D, Che W-C, Su I, Luzzatti C. Lexical-semantic variables affecting picture and word naming in Chinese: A mixed logit model study in aphasia. Behav Neurol. 2012;25(3):165–184.

64. Wehling EI, Wollschlaeger D, Nordin S, Lundervold AJ. Longitudinal changes in odor identification performance and neuropsychological measures in aging individuals. Neuropsychology. 2016;30(1):87.

65. McLean RA, Sanders WL, Stroup WW. A unified approach to mixed linear models. Am Stat. 1991;45(1):54–64.

66. Efron B, Tibshirani RJ. An introduction to the bootstrap. UK: CRC press; Chapman & Hall/CRC. 1994.

67. Greene JD. Dual-process morality and the personal/impersonal distinction: A reply to McGuire, Langdon, Coltheart, and Mackenzie. J Exp Soc Psychol. 2009;45(3):581–584.

Supplemental Results

Study 1

Bayesian statistics applied on the four-point scale answers

To further determine the reliability of our results, we applied Bayesian statistics which, beyond determining potential differences between groups (as LMM), also provide evidence towards determining conclusions about a 'no group difference' as well as informing us on whether inconclusive evidence exists (i.e., data are not informative enough to provide support for either a difference or no difference between groups; Dienes, 2016). Importantly, Bayesian analyses allow to predict the likelihood of our hypothesis (a difference between the English native speakers and Italian native speakers, and difference between English and Italian dilemmas versions).

Results were obtained with the JASP software (Love et al., 2015) by applying Bayesian ANOVA on the moral decision (four-point scale) with groups, moral dilemmas version and gender of participants as factors to evaluate whether a difference between groups, dilemmas versions and gender of participants was evident on the moral decision. Moreover, another Bayesian ANOVA was applied on the four-point scale with the four moral conceptual factors as factors. The two Bayesian ANOVA were performed separately to increase the clarity of the results. Participants were included as random factor. As a commonly accepted rule, a Bayes Factor (BF) value = 1 indicates no evidence of a difference, whereas BF between 3 and 10 indicates moderate evidence of difference between groups. BF comprised between 1 and 3 provides anecdotal evidence.

Results from the Bayesian ANOVA on the four-point scale indicate that there is no evidence of a difference between the English and Italian-native speakers and between dilemmas versions. An anecdotal difference between females and males is retrieved.

Bayesian ANOVA

Models	BF_{10}	% error
Null model (incl. Participants)	1.000	
Group	0.280	3.580
Dilemma language	0.042	2.666
Group + Dilemma language	0.011	1.059
Gender	1.679	1.247
Group + Gender	0.455	2.426
Dilemma language + Gender	0.071	2.747
Group + Dilemma language + Gender	0.018	2.876

Note. All models include Participants.

In contrast, when we evaluate the moral conceptual factors on the four-point scale of moral decision we obtain strong evidence that models including one or more conceptual factors were preferred to the null model.

Bayesian ANOVA

Models	BF_{10}	% error
Null model (incl. ID)	1.000	
Personal_force	4.837e +10	1.414
Intentionality	2.091e +8	1.804
Personal_force + Intentionality	3.750e +15	1.315
Benefit_recipient	6.446e +13	2.331
Personal_force + Benefit_recipient	5.984e +24	1.611
Intentionality + Benefit_recipient	5.876e +19	2.916
Personal_force + Intentionality + Benefit_recipient	5.286e +27	1.921
Evitability	1233.791	1.554
Personal_force + Evitability	3.045e +14	3.749
Intentionality + Evitability	3.169e +12	2.992
Personal_force + Intentionality + Evitability	1.558e +20	2.007
Benefit_recipient + Evitability	2.671e +14	2.686
Personal_force + Benefit_recipient + Evitability	7.256e +25	2.112
Intentionality + Benefit_recipient + Evitability	1.716e +21	2.796
Personal_force + Intentionality + Benefit_recipient + Evitability	3.555e +29	14.365

Note. All models include Participants.

These results confirm the LMM analysis and support the hypothesis that moral choices were made irrespective of participants' native language and dilemmas' version, but that they are shaped by the four moral conceptual factors proposed by Christensen et al. 2014 also in the Italian translation.

Study 2

Bayesian statistics applied on arousal, valence and familiarity ratings

To further determine the reliability of our results on arousal, valence and familiarity ratings, we applied Bayesian statistics, which allow to predict the likelihood arousal, valence and familiarity ratings are affected by the four moral conceptual factors.

Results were obtained as for Study 1 with the JASP software (Love et al., 2015) by applying Bayesian ANOVA on arousal, valence and familiarity ratings. Two separated Bayesian ANOVA were performed for each ratings to increase the clarity of the results: the first Bayesian ANOVA included gender and education of participants; the second Bayesian ANOVA included personal force, intentionality, benefit recipient and evitability. Participants were included as random factor.

Results from the Bayesian ANOVAs on the arousal ratings indicate that there is no evidence of a difference between the females and males and in respect of education but there is strong evidence of differences for the four conceptual factors.

Bayesian ANOVA: Arousal

Models	BF_{10}	% error
Null model (incl. Participants)	1.000	
Gender	0.232	0.486
Education	0.104	4.469
Gender + Education	0.028	5.259

Note. All models include Participants.

Bayesian ANOVA: arousal

Models	BF_{10}	% error
Null model (incl. Participants)	1.000	
Personal_force	4.837e +10	1.414
Intentionality	2.091e +8	1.804
Personal_force + Intentionality	3.750e +15	1.315
Benefit_recipient	6.446e +13	2.331
Personal_force + Benefit_recipient	5.984e +24	1.611
Intentionality + Benefit_recipient	5.876e +19	2.916
Personal_force + Intentionality + Benefit_recipient	5.286e +27	1.921
Evitability	1233.791	1.554
Personal_force + Evitability	3.045e +14	3.749
Intentionality + Evitability	3.169e +12	2.992
Personal_force + Intentionality + Evitability	1.558e +20	2.007
Benefit_recipient + Evitability	2.671e +14	2.686
Personal_force + Benefit_recipient + Evitability	7.256e +25	2.112
Intentionality + Benefit_recipient + Evitability	1.716e +21	2.796
Personal_force + Intentionality + Benefit_recipient + Evitability	3.555e +29	14.365

Note. All models include Participants.

Results from the Bayesian ANOVAs on the valence ratings indicate that there is evidence of a difference between the females and males; moreover the second Bayesian ANOVA indicates that models including interactions are preferred to the main effects models. Data provides evidence that conceptual factors interact with each other in shaping the valence of dilemmas.

Bayesian ANOVA: valence

Models	BF_{10}	% error
Null model (incl. Participants)	1.000	
Gender	56.304	1.203
Education	0.290	0.387
Gender + Education	9.844	1.042

Note. All models include Participants.

Bayesian ANOVA: valence

Models	BF_{10}	% error
Null model (incl. Participants)	1.000	
Personal_force	0.124	1.962
Intentionality	0.633	0.998
Personal_force + Intentionality	0.198	1.851
Benefit_recipient	0.243	1.100
Personal_force + Benefit_recipient	0.029	2.209
Intentionality + Benefit_recipient	0.274	2.015
Personal_force + Intentionality + Benefit_recipient	0.088	1.954
Evitability	0.046	1.149
Personal_force + Evitability	0.006	2.398
Intentionality + Evitability	0.029	2.533
Personal_force + Intentionality + Evitability	0.009	2.375
Benefit_recipient + Evitability	0.010	1.873
Personal_force + Benefit_recipient + Evitability	0.001	2.904
Intentionality + Benefit_recipient + Evitability	0.013	11.245
Personal_force + Intentionality + Benefit_recipient + Evitability	0.004	4.795
Personal_force + Evitability + Personal_force * Evitability	1.220e+13	20.671
Personal_force + Intentionality + Evitability + Personal_force * Evitability	3.410e+13	9.964
Personal_force + Intentionality + Personal_force * Intentionality + Evitability + Personal_force ✻ Evitability	5.984e+12	3.668
Personal_force + Benefit_recipient + Evitability + Personal_force * Evitability	1.122e+12	3.287
Personal_force + Intentionality + Benefit_recipient + Evitability + Personal_force * Evitability	6.383e+12	3.854
Personal_force + Intentionality + Personal_force * Intentionality + Benefit_recipient + Evitability + Personal_force * Evitability	1.460e+12	5.579

Note. All models include Participants.

Results from the Bayesian ANOVAs on the familiarity ratings indicate an anecdotal difference between females and males; moreover the second Bayesian ANOVA indicates that models including interactions are preferred to the main effects models. These data provide evidence that conceptual factors interact with each other in shaping the familiarity of dilemmas.

Bayesian ANOVA: familiarity

Models	BF_{10}	% error
Null model (incl. Participants)	1.000	
Gender	1.392	2.091
Education	0.076	0.756
Gender + Education	0.088	1.440

Note. All models include Participants.

Bayesian ANOVA: familiarity

Models	BF_{10}	% error
Null model (incl. Participants)	1.000	
Personal_force	0.457	1.100
Intentionality	2.295	0.898
Personal_force + Intentionality	5.741	3.726
Benefit_recipient	0.057	3.271
Personal_force + Benefit_recipient	0.026	2.148
Intentionality + Benefit_recipient	0.106	1.639
Personal_force + Intentionality + Benefit_recipient	0.249	2.987
Intentionality + Benefit_recipient + Intentionality * Benefit_recipient	6.519	2.126
Personal_force + Intentionality + Benefit_recipient + Intentionality * Benefit_recipient	13.632	4.731
Evitability	0.051	0.840
Personal_force + Evitability	0.025	3.109
Intentionality + Evitability	0.108	1.833
Personal_force + Intentionality + Evitability	0.261	3.436
Benefit_recipient + Evitability	0.003	1.971
Personal_force + Benefit_recipient + Evitability	0.002	3.127
Intentionality + Benefit_recipient + Evitability	0.006	9.848
Personal_force + Intentionality + Benefit_recipient + Evitability	0.012	3.200
Intentionality + Benefit_recipient + Intentionality * Benefit_recipient + Evitability + Benefit_recipient * Evitability	1.085e+10	3.106
Personal_force + Intentionality + Benefit_recipient + Intentionality * Benefit_recipient + Evitability + Benefit_recipient * Evitability	1.947e+10	48.746
Intentionality + Benefit_recipient + Evitability + Intentionality * Evitability + Benefit_recipient * Evitability	8.843e+7	13.971
Intentionality + Benefit_recipient + Intentionality * Benefit_recipient + Evitability + Intentionality * Evitability + Benefit_recipient * Evitability	1.616e+9	13.100

Note. All models include Participants.

Supplemental Material

Table 1SI. Summary of dilemmas.

N° Dilemma	Name Dilemma	Personal Force	Intentionality	Benefit Recipient	Evitability	English Word Count	Italian Word Count
1	Burning Building (a)	Personal	Instrumental	Self	Avoidable	116	105
2	Burning Building (b)	Impersonal	Incidental	Self	Avoidable	128	114
3	Modified Crying Baby (a)	Personal	Incidental	Self	Avoidable	146	147
4	Modified Crying Baby (b)	Impersonal	Incidental	Self	Avoidable	139	134
5	Modified Submarine (a)	Personal	Incidental	Self	Avoidable	150	118
6	Modified Submarine (b)	Impersonal	Incidental	Self	Avoidable	150	116
7	Shark Attack (a)	Personal	Instrumental	Self	Avoidable	132	119
8	Shark Attack (b)	Impersonal	Instrumental	Self	Avoidable	148	129
9	Orphanage (a)	Personal	Instrumental	Self	Inevitable	147	128
10	Orphanage (b)	Impersonal	Instrumental	Self	Inevitable	149	138
11	Preventing Cholera (a)	Personal	Instrumental	Self	Avoidable	154	125
12	Preventing Cholera (b)	Impersonal	Instrumental	Self	Avoidable	149	129
13	Rescue 911 (a)	Personal	Instrumental	Self	Inevitable	141	122
14	Rescue 911 (b)	Impersonal	Instrumental	Self	Inevitable	153	140
15	Space Station (a)	Personal	Incidental	Self	Inevitable	158	122
16	Space Station (b)	Impersonal	Incidental	Self	Inevitable	159	128
17	Nuclear reactor (a)	Personal	Instrumental	Self	Inevitable	124	115
18	Nuclear reactor (b)	Impersonal	Incidental	Self	Inevitable	135	124
19	Cinderblock (a)	Personal	Instrumental	Self	Inevitable	119	110
20	Cinderblock (b)	Impersonal	Instrumental	Self	Inevitable	130	109
21	Cliffhanger (a)	Personal	Instrumental	Self	Inevitable	143	131
22	Cliffhanger (b)	Impersonal	Instrumental	Self	Inevitable	137	126
23	Bus plunge (a)	Personal	Incidental	Self	Inevitable	155	134
24	Bus plunge (b)	Impersonal	Incidental	Self	Inevitable	143	128
25	Modified Transplant (a)	Personal	Instrumental	Other	Avoidable	114	90
26	Modified Transplant (b)	Impersonal	Instrumental	Other	Avoidable	113	106
27	On the waterfront (a)	Personal	Incidental	Other	Avoidable	151	139
28	On the waterfront (b)	Impersonal	Incidental	Other	Avoidable	158	129
29	Modified vaccine Test (a)	Personal	Incidental	Other	Avoidable	128	120
30	Modified vaccine Test (b)	Impersonal	Incidental	Other	Avoidable	135	116

31	Modified Footbridge	Personal	Instrumental	Other	Avoidable	106	85
32	Modified Trolley	Impersonal	Incidental	Other	Avoidable	130	108
33	Nobel Prize (a)	Personal	Instrumental	Other	Avoidable	139	127
34	Nobel Prize (b)	Impersonal	Instrumental	Other	Avoidable	151	134
35	Bike week (a)	Personal	Instrumental	Other	Avoidable	136	119
36	Bike week (b)	Impersonal	Instrumental	Other	Avoidable	130	111
37	Modified Euthanasia (a)	Personal	Instrumental	Other	Inevitable	155	134
38	Modified Euthanasia (b)	Impersonal	Instrumental	Other	Inevitable	169	146
39	Modified Fumes (a)	Personal	Incidental	Other	Inevitable	117	110
40	Modified Fumes (b)	Impersonal	Incidental	Other	Avoidable	136	128
41	Modified Rowboat (a)	Personal	Instrumental	Other	Inevitable	135	126
42	Modified Rowboat (b)	Impersonal	Incidental	Other	Inevitable	145	132
43	Mine Shaft (a)	Personal	Instrumental	Other	Inevitable	131	111
44	Mine Shaft (b)	Impersonal	Incidental	Other	Inevitable	133	112
45	Tycoon (a)	Personal	Instrumental	Other	Inevitable	133	119
46	Tycoon (b)	Impersonal	Instrumental	Other	Inevitable	137	130
47	Enemy Spy (a)	Personal	Instrumental	Other	Inevitable	129	114
48	Enemy Spy (b)	Impersonal	Instrumental	Other	Inevitable	142	122
49	Missile (a)	Personal	Instrumental	Other	Avoidable	119	111
50	Missile (b)	Impersonal	Instrumental	Other	Avoidable	122	108
51	Bomb in the Bank (a)	Personal	Incidental	Self	Inevitable	144	134
52	Bomb in the Bank (b)	Impersonal	Incidental	Self	Inevitable	142	138

Table 2SI. Summary of Chi-square tests comparisons between English and Italian native speakers for each dilemma.

N° Dilemma	Dilemma name	Comparison between English and Italian native speakers		Comparison between dilemma versions	
		X^2	*p*	X^2	*p*
1	Burning Building (a)	3.66	0.31	3.95	0.27
2	Burning Building (b)	5.12	0.16	0.40	0.94
3	Modified Crying Baby (a)	2.27	0.52	1.91	0.59
4	Modified Crying Baby (b)	1.89	0.59	1.49	0.68
5	Modified Submarine (a)	3.19	0.36	0.81	0.85
6	Modified Submarine (b)	0.89	0.83	0.69	0.87
7	Shark Attack (a)	3.00	0.39	1.62	0.65
8	Shark Attack (b)	4.24	0.24	1.05	0.79
9	Orphanage (a)	0.54	0.91	0.48	0.92
10	Orphanage (b)	4.86	0.18	0.38	0.94
11	Preventing Cholera (a)	6.84	0.08	3.53	0.32
12	Preventing Cholera (b)	0.78	0.85	0.39	0.94
13	Rescue 911 (a)	6.49	0.09	0.51	0.92
14	Rescue 911 (b)	**9.62**	**0.02**	2.51	0.47
15	Space Station (a)	3.82	0.28	1.02	0.79
16	Space Station (b)	2.03	0.56	0.78	0.85
17	Nuclear reactor (a)	2.61	0.45	0.78	0.85
18	Nuclear reactor (b)	1.70	0.63	0.65	0.88
19	Cinderblock (a)	1.67	0.64	1.93	0.59
20	Cinderblock (b)	0.75	0.86	1.25	0.74
21	Cliff-hanger (a)	2.53	0.47	1.35	0.72
22	Cliff-hanger (b)	7.41	0.06	0.23	0.97
23	Bus plunge (a)	**11.28**	**0.01**	2.50	0.47
24	Bus plunge (b)	4.82	0.18	7.56	0.06
25	Modified Transplant (a)	2.17	0.54	0.89	0.83

26	Modified Transplant (b)	1.00	0.80	2.06	0.56
27	On the waterfront (a)	0.65	0.72	0.08	0.96
28	On the waterfront (b)	3.99	0.26	1.80	0.61
29	Modified vaccine Test (a)	0.69	0.87	1.57	0.66
30	Modified vaccine Test (b)	0.93	0.82	2.14	0.54
31	Modified Footbridge	6.33	0.09	1.78	0.62
32	Modified Trolley	0.95	0.81	3.27	0.35
33	Nobel Prize (a)	0.94	0.81	0.42	0.93
34	Nobel Prize (b)	1.98	0.58	1.92	0.59
35	Bike week (a)	0.99	0.80	1,95	0.58
36	Bike week (b)	1.59	0.66	1.31	0.73
37	Modified Euthanasia (a)	3.79	0.28	2.19	0.53
38	Modified Euthanasia (b)	1.58	0.66	0.38	0.94
39	Modified Fumes (a)	1.55	0.67	0.10	0.99
40	Modified Fumes (b)	0.57	0.90	3.22	0.36
41	Modified Rowboat (a)	2.32	0.51	0.99	0.80
42	Modified Rowboat (b)	3.79	0.28	1.95	0.58
43	Mine Shaft (a)	2.06	0.56	1.33	0.72
44	Mine Shaft (b)	3.49	0.32	1.69	0.64
45	Tycoon (a)	2.96	0.39	0.39	0.94
46	Tycoon (b)	3.72	0.29	2.69	0.44
47	Enemy Spy (a)	3.43	0.33	0.82	0.84
48	Enemy Spy (b)	4.70	0.19	2.34	0.50
49	Missile (a)	1.68	0.64	5.19	0.16
50	Missile (b)	2.33	0.50	0.74	0.86
51	Bomb in the Bank (a)	0.31	0.96	<0.001	1.00
52	Bomb in the Bank (b)	0.62	0.89	0.13	0.99

Note: X^2 = Chi-square; $p = p$ value.

Table 3SI. Normative data for arousal, valence, familiarity ratings and utilitarian choices for the Italian 4CONFiDe dilemma set.

N° Dilemma	Dilemma Name	Valence		Arousal		Familiarity		Utilitarian response rate	
		M	SD	M	SD	M	SD	M	SD
1	Burning Building (a)	1.41	0.77	4.14	1.68	1.67	1.20	0.34	0.48
2	Burning Building(b)	1.56	1.07	3.58	1.82	1.58	1.01	0.69	0.47
3	Modified Crying Baby (a)	1.35	0.98	4.83	1.73	1.67	1.19	0.17	0.38
4	Modified Crying Baby (b)	2.77	2.11	3.56	2.14	1.34	1.03	0.16	0.37
5	Modified Submarine (a)	2.41	1.49	2.80	1.74	1.38	0.83	0.77	0.43
6	Modified Submarine (b)	1.90	1.57	3.65	1.90	1.58	1.18	0.69	0.47
7	Shark Attack (a)	1.42	0.89	4.02	1.80	1.47	0.91	0.34	0.48
8	Shark Attack (b)	2.06	1.56	3.19	1.92	1.50	1.15	0.46	0.50
9	Orphanage (a)	2.42	2.18	3.60	2.18	1.63	1.28	0.23	0.42
10	Orphanage (b)	1.69	1.25	3.17	2.15	2.94	2.02	0.23	0.43
11	Preventing Cholera (a)	1.58	1.11	3.94	2.04	1.75	1.21	0.69	0.47
12	Preventing Cholera (b)	2.36	1.59	2.78	1.96	1.92	1.29	0.77	0.43
13	Rescue 911 (a)	1.47	0.96	2.98	2.01	2.80	1.72	0.41	0.50
14	Rescue 911 (b)	1.48	1.11	3.98	1.88	1.60	1.09	0.73	0.45
15	Space Station (a)	2.06	1.67	3.31	1.84	1.60	1.03	0.81	0.39
16	Space Station (b)	1.55	0.97	3.84	1.82	1.59	1.12	0.80	0.41
17	Nuclear reactor (a)	2.73	1.90	2.77	1.84	1.64	1.10	0.50	0.50
18	Nuclear reactor (b)	2.02	1.51	3.19	1.88	1.58	1.18	0.90	0.31
19	Cinderblock (a)	1.56	1.05	3.79	1.70	1.50	1.03	0.69	0.47
20	Cinderblock (b)	1.41	0.92	3.88	1.69	1.67	1.10	0.78	0.42
21	Cliffhanger (a)	1.75	1.10	2.95	1.92	2.77	1.89	0.34	0.48
22	Cliffhanger (b)	1.48	1.03	3.90	1.90	1.44	0.90	0.52	0.50
23	Bus plunge (a)	2.38	2.16	3.83	2.06	1.69	1.26	0.50	0.51
24	Bus plunge (b)	1.28	0.79	4.38	1.87	1.59	1.06	0.53	0.50
25	Modified Transplant (a)	1.83	1.46	4.22	1.85	2.00	1.33	0.05	0.21
26	Modified Transplant (b)	1.60	1.14	3.90	2.03	1.90	1.31	0.17	0.38

27	On the waterfront (a)	1.69	0.92	3.81	1.61	1.67	1.18	0.66	0.48
28	On the waterfront (b)	3.06	1.93	1.81	1.45	1.44	0.92	0.58	0.50
29	Modified vaccine Test (a)	1.79	1.35	4.06	1.87	2.08	1.38	0.58	0.50
30	Modified vaccine Test (b)	2.50	1.59	3.11	1.96	2.41	1.42	0.83	0.38
31	Modified Footbridge	1.80	1.14	3.83	1.69	2.00	1.39	0.05	0.21
32	Modified Trolley	1.40	0.87	3.79	1.91	1.48	0.95	0.65	0.48
33	Nobel Prize (a)	2.25	1.63	3.15	1.73	2.02	1.47	0.38	0.49
34	Nobel Prize (b)	1.56	0.94	3.94	1.70	2.25	1.60	0.31	0.47
35	Bike week (a)	1.54	1.05	3.98	1.62	1.69	1.13	0.48	0.50
36	Bike week (b)	1.83	1.13	2.80	1.77	2.53	1.52	0.33	0.47
37	Modified Euthanasia (a)	1.52	1.13	4.09	1.98	1.39	0.73	0.59	0.50
38	Modified Euthanasia (b)	1.73	1.32	3.65	1.82	1.60	1.16	0.69	0.47
39	Modified Fumes (a)	2.44	1.69	2.89	2.06	1.63	1.15	0.38	0.49
40	Modified Fumes (b)	1.88	1.48	3.33	1.87	1.58	0.96	0.67	0.48
41	Modified Rowboat (a)	2.59	2.03	3.38	2.16	1.31	0.85	0.20	0.41
42	Modified Rowboat (b)	1.29	0.74	4.15	2.05	1.63	1.23	0.54	0.50
43	Mine Shaft (a)	2.08	1.71	3.08	1.92	1.40	0.76	0.52	0.50
44	Mine Shaft (b)	1.61	1.06	2.77	1.79	2.34	1.73	0.42	0.50
45	Tycoon (a)	1.96	1.25	2.90	1.65	2.04	1.35	0.15	0.36
46	Tycoon (b)	1.66	1.12	3.72	1.64	1.77	1.23	0.14	0.35
47	Enemy Spy (a)	2.08	1.60	4.06	1.96	1.75	1.36	0.73	0.45
48	Enemy Spy (b)	2.63	1.80	2.94	1.99	1.63	1.02	0.77	0.43
49	Missile (a)	1.58	0.96	3.73	1.78	1.59	1.08	0.56	0.50
50	Missile (b)	1.77	1.45	3.71	1.83	1.79	1.13	0.77	0.42
51	Bomb in the Bank (a)	1.90	1.60	3.04	1.89	1.46	0.87	0.71	0.46
52	Bomb in the Bank (b)	1.63	1.12	2.61	1.83	2.42	1.64	0.63	0.49

Note: 1 = Utilitarian option.

4CONFIDe moral set: English version

1) Burning Building (a): Personal, Instrumental, Self, Avoidable
You and five other people are trapped in a burning building. There is only one emergency exit through which all of you could escape, but it is blocked by burning debris. Another injured person is about to crawl through a hole at the bottom of the exit door. You and the five people behind you do not have time to do the same.

If you use the injured person to break down the debris you will be able to escape. You will certainly kill him, but you will save yourself and the five people behind you.

Do you use the injured person to break down the blockage so you and the five other people can escape?

2) Burning Building (b): Impersonal, Incidental, Self, Avoidable
You and five other people are trapped in a burning building. There is only one emergency exit through which all of you could escape, but it is blocked by burning debris. Another injured person is about to crawl through a hole at the bottom of the exit door. You and the five people behind you do not have time to do the same.

If you activate the emergency system it will release foam which will put out the fire. However, the foam will suffocate the injured person. This will kill him, but you and the five people behind you will be saved.

Do you put out the fire by activating the emergency system, which will smother the injured person, so you and the five other people can escape?

3) Modified Crying Baby (a): Personal, Incidental, Self, Avoidable
Enemy soldiers have taken over your village and will kill all civilians above the age of two. You and ten neighbours are hiding in two rooms of the cellar of a large house. You can hear the voices of soldiers who have come to search the house for valuables. Your baby begins to cry loudly. The crying will attract the attention of the soldiers, who will spare your baby's life, but will kill you and the other refugees in both rooms.

If you put your hand over its mouth the crying will be absorbed, but your baby will not be able to breathe. You will kill him, but you will save yourself and the other ten neighbours.

Do you put your hand over your baby's mouth, which will leave it without air, to absorb the crying so the soldiers won't find you and the ten neighbours?

4) Modified Crying Baby (b): Impersonal, Incidental, Self, Avoidable
Enemy soldiers have taken over your village and will kill all civilians above the age of two. You and ten neighbours are hiding in two rooms of the cellar of a large house. You can hear the voices of soldiers who have come to search the house for valuables. Your baby begins to cry loudly. The crying will attract the attention of the soldiers, who will spare your baby's life, but will kill you and the other refugees in both rooms.

If you activate a noisy boiler it will cushion the crying, but it will become uncomfortably hot. The heat will be mortal for your baby, but it will save you and the ten neighbours.

Do you cushion the crying by activating the noisy boiler which will asphyxiate the baby, so they won't find you and the ten neighbours?

5) Modified Submarine (a): Personal, Incidental, Self, Avoidable
You are a crewmember on a submarine traveling under a large iceberg. An explosion has damaged the ship, injured several crewmembers and collapsed the only access between the upper and lower decks of the ship. You and ten survivors are in the upper section, which does not have enough oxygen for all of you to survive until you reach the surface. One single crewmember is lying unconscious in the lower section, where there is enough oxygen.

If you push the emergency access hatch between the sections of the ship it will allow oxygen in the upper section. However, the hatch will fall down on the crewmember in the lower section. You will kill him, but you will save yourself and the ten survivors.

Do you push the hatch, which will fall on the crewmember below, to let in the air so you and the ten survivors will get enough oxygen?

6) Modified Submarine (b): Impersonal, Incidental, Self, Avoidable
You are a crewmember on a submarine traveling under a large iceberg. An explosion has damaged the ship, injured several crewmembers and collapsed the only access between the upper and lower parts of the ship. You and ten survivors are in the upper section, which does not have enough oxygen for all of you to survive until you reach the surface. One single crewmember is lying unconscious in the lower section, where there is enough oxygen.

If you push an emergency button, a hatch between the sections of the ship will be released and will allow the oxygen in the upper section. However, the hatch will fall on the crewmember in the lower section and kill him, but it will save you and the ten survivors.

Do you push the button, which will make the hatch fall down on the crewmember, so you and the ten survivors get enough oxygen?

7) Shark Attack (a): Personal, Instrumental, Self, Avoidable
You and ten divers are part of an U.N. team who is deactivating anti-ship mines from World War II. One team member has hurt himself and the blood in the water has attracted several sharks. You have an underwater rifle but only one harpoon. The bleeding diver is swimming towards the last protective cage and will reach it before you and the others. The sharks, following the blood, are coming too close for you and the other divers to escape.

If you shoot at the injured diver you will kill him and the sharks will stop to eat him, but you will save yourself and the ten divers.

Do you shoot at the injured diver letting the sharks eat him, so you and the other ten divers can reach the protective cage?

8) Shark Attack (b): Impersonal, Instrumental, Self, Avoidable
You and ten divers are part of an U.N. team who is deactivating anti-ship mines from World War II. One team member has hurt himself and the blood in the water has attracted several sharks. You have an underwater rifle but only one harpoon. The bleeding diver is swimming towards the last protective cage and will reach it before you and the others. The sharks, following the blood, are coming too close for you and the other divers to escape.

If you detonate one of the mines by means of a remote control, it will kill the injured diver and the sharks will stop to eat him. Then, you and the ten divers will be saved.

Do you let the sharks eat the injured diver by detonating the mine next to him with a remote control, so you and the other ten divers can reach the protective cage?

9) Orphanage (a): Personal, Instrumental, Self, Inevitable
You work in an orphanage that hosts ten orphans in a war swept country. Rebels have taken over the government. They kill who does not support their regime and they conduct an ‘ethnic cleansing’ genocide campaign to eliminate a particular ethnic group. You and the ten children of the orphanage did not support the rebellion and you also have one child of this ethnic group in your orphanage. There is no way for you and the children to escape.

If you smother the child of the pursued ethnic group to death with a pillow while he is sleeping, the soldiers will believe that you support their regime. You will kill the child, but you will save yourself and the remaining ten children.

Do you smother the child making the soldiers believe you are supporting their regime, so they will spare your and the other ten children’s life?

10) Orphanage (b): Impersonal, Instrumental, Self, Inevitable
You work with a nurse in an orphanage that hosts ten orphans in a war swept country. Rebels have taken over the government. They kill who does not support their regime and they conduct an 'ethnic cleansing' genocide campaign to eliminate a particular ethnic group. You and the ten children of the orphanage did not support the rebellion and you also have one child of this ethnic group in your orphanage. There is no way for all of you to escape.

If you order a nurse to give the child of the pursued ethnic group a lethal overdose of sleeping pills, the soldiers will believe that you support their regime. This will kill the child, but it will save you, the nurse and the remaining ten children.

Do you make the soldiers believe you are supporting their regime ordering the nurse to give that one child an overdose, so they will spare your and the other ten children's life?

11) Preventing Cholera (a): Personal, Instrumental, Self, Avoidable
You are a Peace Corps health-worker volunteering in a rural African village. A man has been infected with the cholera bacterium that is extremely contagious, incurable, and almost always deadly. This man is still alive which means he must be immune to the bacterium. He wrongly believes that your health center can cure his disease completely. You know that if he enters the village he will pass the virus to 100 innocent people who, unlike him, will die.

If you shoot him with the gun of the health center you will prevent him from spreading the virus to you and the rest of the village. You will kill him, but you will save yourself and the 100 inhabitants of the village.

Do you shoot the man preventing him from entering the village, so he won't spread the virus to you and the 100 inhabitants?

12) Preventing Cholera (b): Impersonal, Instrumental, Self, Avoidable
You are a Peace Corps health-worker volunteering in a rural African village. A man has been infected with the cholera bacterium that is extremely contagious, incurable, and almost always deadly. This man is still alive which means he must be immune to the bacterium. He wrongly believes that your health center can cure his disease completely. You know that if he enters the village he will pass the virus to 100 innocent people who, unlike him, will die.

If you warn the village council they will shoot him to prevent him from spreading the virus to you and the rest of the village. This will kill him, but it will save you and the 100 inhabitants of the village.

Do you prevent the man from entering the village by warning the village council so they shoot him, so he won't spread the virus to you and the 100 inhabitants?

13) Rescue 911 (a): Personal, Instrumental, Self, Inevitable

You are a doctor alone in a rescue helicopter during a devastating flood. You have rescued eight critically injured people and you are keeping them alive. Suddenly, the pilot notifies you of a problem in the engine and gives the order that the helicopter needs to release weight or it will crash and you will all die. You cannot abandon the helicopter because the wounded need your help and the heavy medical equipment is bolted down.

If you throw off one of the injured people, you will release enough weight to keep the helicopter in the air. You will kill him, but you will save yourself and the eight people on board.

Do you throw one of the injured people off the helicopter releasing weight, so you and the eight persons on board will be able to stay in the air?

14) Rescue 911 (b): Impersonal, Instrumental, Self, Inevitable

You are a doctor alone in a rescue helicopter during a devastating flood. You have rescued eight critically injured people and you are keeping them alive. Suddenly, the pilot notifies you of a problem in the engine and gives the order that the helicopter needs to release weight or it will crash and you will all die. You cannot abandon the helicopter because the wounded need your help and the heavy medical equipment is bolted down.

If you order the pilot to release the cable by which the last rescued person is ascending, you will release enough weight to keep the helicopter in the air. This will kill him, but it will save you and the eight people on board.

Do you release weight by ordering the pilot to release the cable by which the last person is ascending, in order to keep you and the eight people on board in the air?

15) Space Station (a): Personal, Incidental, Self, Inevitable

You are an engineer on the international space station ISS. A fire breaks out in the cargo bay. The automatic fire safety system would open the outer door of the cargo bay, letting the oxygen out and putting out the fire. It only works when the inner portal is sealed, but one mechanic is still in the cargo bay. He doesn't have the time to take off the bulky space suit, which will get him stuck in the inner portal, causing the fire to spread and to kill you all.

If you manually close the portal the emergency system will be activated and it will put out the fire. This will suck the mechanic into space and you kill him, but you will save yourself and the other ten astronauts.

Do you put out the fire by manually sealing the inner portal, which will suck the mechanic into space, so the fire won't reach you and the ten astronauts?

16) Space Station (b): Impersonal, Incidental, Self, Inevitable
You are an engineer on the international space station ISS. A fire breaks out in the cargo bay. The automatic fire safety system would open the outer door of the cargo bay, letting the oxygen out and putting out the fire. It only works when the inner portal is sealed, but one mechanic is still in the cargo bay. He doesn't have the time to take off the bulky space suit, which will get him stuck in the inner portal, causing the fire to spread and to kill you all.

If you push a button, the portal will close activating the emergency system which will put out the fire. This will suck the mechanic into space and kill him, but it will save you and the remaining ten astronauts.

Do you put out the fire pushing the button which seals the inner portal, sucking the mechanic into space, so the fire won't reach you and the ten astronauts?

17) Nuclear reactor (a): Personal, Instrumental, Self, Inevitable
You are an inspector of a nuclear power plant. The plant foreman and you are visiting the facility when one of the supply conduits overheats. The emergency coolant system fails to activate, and a chain reaction which will result in a nuclear meltdown is about to start. This will release lethal radiation into the nearby town, killing thousands of people.

If you push the foreman onto the conduits it will dissolve enough heat to prevent the nuclear chain reaction. You will kill him, but you will save yourself and the thousands of town inhabitants.

Do you push the foreman down on the conduits to cool down it, so the nuclear chain reaction will be stopped in time for you and the thousands of people?

18) Nuclear reactor (b): Impersonal, Incidental, Self, Inevitable
You are an inspector of a nuclear power plant. The plant foreman and you are visiting the facility when one of the supply conduits overheats. The emergency coolant system fails to activate, and a chain reaction which will result in a nuclear meltdown is about to start. This will release lethal radiation into the nearby town, killing thousands of people.

If you insert liquid nitrogen manually into the supply chamber it will absorb enough heat to prevent the nuclear chain reaction. This will kill one employee, who is trapped in the supply chamber, but it will save you and the thousands of town inhabitants.

Do you insert liquid nitrogen into the supply chamber where the employee is trapped, so the nuclear chain reaction will be stopped in time for you and the thousands of people?

19) Cinderblock (a): Personal, Instrumental, Self, Inevitable

You are the explosives expert of a company that has been hired to demolish a skyscraper. You are examining the last charges of the explosives when you suddenly become aware of a teenager who is about to Incidentally detonate one of the charges. The explosion will result in the building's uncontrolled collapse over you, the teenager, and the crowd of spectators. The teenager stands several floors below you and cannot hear you.

If you drop a heavy cinderblock on his head, you will kill him, but you will prevent the explosion and save yourself and the crowd.

Do you drop the cinderblock on teenager's head stopping him, so the building won't collapse over you and the crowd of spectators?

20) Cinderblock (b): Impersonal, Instrumental, Self, Inevitable

You are the explosives expert of a company that has been hired to demolish a skyscraper. You are examining the last charges of the explosives when you suddenly become aware of a teenager who is about to Incidentally detonate one of the charges. The explosion will result in the building's uncontrolled collapse over you, the teenager, and the crowd of spectators. The teenager stands several floors below you and cannot hear you.

If you reactivate the building's electricity, the boy will get an electric shock because he is touching an open circuit. This will kill him, but it will save you and the crowd by preventing the explosion.

Do you stop the teenager by reactivating the building's electricity, so the building won't collapse over you and the crowd of spectators?

21) Cliffhanger (a): Personal, Instrumental, Self, Inevitable

You are a construction worker. You and your crew are standing on some scaffolding, working on a skyscraper. Suddenly, the scaffolding collapses partially. You and several others are hanging on to a dangling crossbar, but it cannot hold the weight of all of you. A worker next to you slips off the crossbar and grabs your one free arm. However, you realize that the entire structure is about to give way.

If you kick your co-worker until he falls, you will remove just enough weight so the rest of you can make it to safety before the scaffolding collapses entirely. You will kill your colleague but you will save yourself and the others.

Do you hit this colleague until he lets go of your arm and falls removing weight, so you and the others can continue to hold on to the structure?

22) Cliffhanger (b): Impersonal, Instrumental, Self, Inevitable
You are a construction worker. You and your crew are standing on some scaffolding, working on a skyscraper. Suddenly, the scaffolding collapses partially. You and several others are hanging on to a dangling crossbar, but it cannot hold the weight of all of you. The worker next to you slips off the crossbar and catches himself on another portion of the scaffolding. The entire structure is about to give way.

If you pull out a latch that will detach the section of scaffolding with your co-worker on it, this will remove enough weight on the scaffolding. This will kill him but save you and the other five coworkers.

Do you remove weight by pulling out the latch so your co-worker falls off the crossbar, so you and the others can continue to hold on to the structure?

23) Bus plunge (a): Personal, Incidental, Self, Inevitable
You are the bus driver of a kindergarten trip to the zoo. On the way, faulty tires cause the bus to plunge off a bridge and into a roaring river. You and three of the children are still in the sinking bus. The rest has already been swept away by the river. You grab the two children next to you and begin to swim towards the exit. The third child latches onto your leg. You are not strong enough to fight against the current and swim with all three children.

If you shake off the third child you will be able to fight against the current, but the child dropped behind will drown. You will kill him, but you will save yourself and the other two children.

Do you shake off the child, which will make him to drown, to fight against the current so you and the other two children can reach the surface?

24) Bus plunge (b): Impersonal, Incidental, Self, Inevitable
You are the bus driver of a kindergarten trip to the zoo. On the way, faulty tires cause the bus to plunge off a bridge and into a roaring river. You and three of the children are still in the

sinking bus. The rest has already been swept away by the river. You grab the two children next to you and begin to swim towards the exit, but bulky seats are blocking it.

If you pull the seats away you will free the exit, but you will block the corridor and the third child will be trapped, causing him to drown. This will kill him, but it will save you and the other two children.

Do you free the exit putting the seats in the corridor, which will trap the third child, so you and the other two children can reach the surface?

25) Modified Transplant (a): Personal, Instrumental, Other, Avoidable
You are a doctor. You have five patients who will all die if they don't get an immediate organ transplant. Another patient is just being rushed to the hospital after a serious car accident. This person is critically injured, but you can probably save him by means of a long and complicated operation.

If you secretly cut his carotid artery during surgery it will cause his death and you will have the organs for the other five patients. You will kill him, but you will save the other five patients.

Do you cut the carotid artery of the accident victim obtaining the organs so you can undertake the transplantations for the other five patients?

26) Modified Transplant (b): Impersonal, Instrumental, Other, Avoidable
You are a doctor. You have five patients who will all die if they don't get an immediate organ transplant. Another patient is just being rushed to the hospital after a serious car accident. This person is critically injured. During the long and complicated surgery you notice that a nurse is about to inject the wrong medication, which will be lethal in this case.

If you let the nurse inject the wrong medication the accident victim will die and you will have the organs to save the other five patients.

Do you obtain the organs letting the nurse inject the wrong medication, so you can undertake the transplantations for the other five patients?

27) On the waterfront (a): Personal, Incidental, Other, Avoidable
You are part of a shipyard dock team that attaches crane cables to containers to unload the cargo ships. You and the others are now climbing on top of it to make sure it is unloaded properly. Suddenly you realize that the crane cable is about to fail. You see that the reason for

this is a fight between two crewmembers. The container is swinging dangerously over five other crewmembers on the deck.

If you separate the two fighting crewmembers, you will avoid having the container fall down. However, one of the crewmembers is not wearing his safety harness and will fall off the container. You will kill him, but you will save the five crewmembers on the deck.

Do you stop the swinging of the container by pushing your colleagues, which will cause the death of a crewmember, so the container won't collapse onto the five crewmembers on the deck?

28) On the waterfront (b): Impersonal, Incidental, Other, Avoidable

You are part of a shipyard dock team that attaches crane cables to containers to unload the cargo ships. You and the others have just attached cables to a container and are now climbing on top of it to make sure it is unloaded properly. Suddenly you realize that the crane cable is about to fail. You see that the reason for this is a fight between two crewmembers. The container is swinging dangerously over five other crewmembers on the deck.

If you push the emergency release button the container will be dropped back into the cargo bay where one crewmember is still working. Dropping the container back there will kill him, but it will save the five men on the deck.

Do you drop the container pushing the emergency button, which will cause the container to fall back into the cargo bay on the crewmember, so the container won't collapse onto the five men on the deck?

29) Modified vaccine Test (a): Personal, Incidental, Other, Avoidable

A viral epidemic has spread across the globe killing thousands of people. You are a medical researcher and have developed two substances in your laboratory. Due to a mistake both are labeled as vaccine. One of them is indeed the vaccine, which could save thousands of lives. The other one is lethal. You don't have much time to identify the vaccine.

If you inject the substances to your two lab assistants, the only available test subjects, you will be able to identify the vaccine. You will kill one of the assistants, but you will save thousands of lives with your vaccine.

Do you inject these two substances into your two lab assistants, which will poison one of them, identifying the vaccine so thousands of people can be vaccinated?

30) Modified vaccine Test (b): Impersonal, Incidental, Other, Avoidable

A viral epidemic has spread across the globe killing thousands of people. You are a medical researcher and have developed two substances in your laboratory. Due to a mistake both are labeled as vaccine. One of them is indeed the vaccine, which could save thousands of lives. The other one is lethal. You don't have much time to identify the vaccine.

If you allow a nurse to inject the two substances to two patients, the only available test subjects, you will be able to identify the vaccine. One of the patients will die, but you will be able to save thousands of lives with the vaccine.

Do you identify the vaccine allowing the nurse to inject the two substances to two patients, which will poison one of them, so thousands of people can be vaccinated?

31) Modified Footbridge: Personal, Instrumental, Other, Avoidable
A runaway trolley is speeding down the tracks towards five workmen who will be killed if the trolley continues on its present course. You are standing next to the tracks, but you are too far away to warn them. Next to you there is a very large stranger.

If you push the large stranger onto the tracks, the trolley will slide off the tracks and won't continue its course towards the workmen. You will kill the stranger, but you will save the five workmen.

Do you push the stranger onto the tracks cause the trolley to derail, so the trolley does not reach the five workmen?

32) Modified trolley: Impersonal, Incidental, Other, Avoidable
A runaway trolley is speeding down the tracks towards five workmen who will be killed if the trolley continues on its present course. You are standing next to the tracks, but you are too far away to warn them. Next to you there is a control switch that can redirect the trolley onto a different track, where only one workman is working.

If you flip the control switch it will divert the trolley onto the track with one workman and will not continue its course towards the five workmen. This will kill this workman, but it will save the other five.

Do you divert the trolley by flipping the control switch, which will cause the trolley to run over one workman, so the trolley does not reach the five workmen?

33) Nobel Prize (a): Personal, Instrumental, Other, Avoidable
You and a fellow researcher have discovered a powerful new energy source that is cheap, safe, and clean. It has the potential to put an end to pollution and poverty in the world

However, your colleague wants to sell the discovery and you know that he is planning to contact the potential buyers today. You also know for sure that the latter will use the invention as a deadly weapon, but your colleague doesn't believe you.

If you poison your colleague with a common poison available in your lab, you will avoid having the discovery fall into the wrong hands. You will kill your colleague, but you will save thousands of people.

Do you poison your colleague to prevent the sale of the discovery, so the source of energy can't be used as a weapon against thousands of people?

34) Nobel Prize (b): Impersonal, Instrumental, Other, Avoidable
You and a fellow researcher have discovered a powerful new energy source that is cheap, safe, and clean. It has the potential to put an end to pollution and poverty in the world. However, your colleague wants to sell the discovery and you know that he is planning to contact the potential buyers by email today. You also know for sure that the latter will use the invention as a deadly weapon, but your colleague doesn't believe you.

If you release a flammable gas in the lab, it will cause an explosion when your colleague turns on his computer and you will avoid having the discovery fall into the wrong hands. This will kill him, but it will save thousands of people.

Do you cause the computer of your colleague to explode releasing the flammable gas, in order to prevent the discovery being used as a weapon against thousands of people?

35) Bike week (a): Personal, Instrumental, Other, Avoidable
You are an expert motorcyclist participating in a Bike Week. As you are driving down the road in front of a group of ten bikers, you notice that a biker up front is losing control over his machine. As you speed up to pull alongside him, you realize that he is going to crash any moment. This would result in a large pile-up and the group of ten bikers behind you will die.

If you force this biker off the road he will crash into the trees, but you will prevent the pile-up. At his current speed you will kill him, but you will save the group of ten riders.

Do you force this biker off the road preventing the large pile-up by, in order to impede that the group of ten bikers crash into him?

36) Bike week (b): Impersonal, Instrumental, Other, Avoidable
You are an expert motorcyclist participating in a Bike Week. As you are driving down the road in front of a group of ten bikers, you notice that a biker up front is losing control over

his machine and is falling. You can easily evade him yourself but the bikers behind you will crash into each other and die in the resulting pile-up.

If you let your bike run into the falling biker while jumping into the roadside ditch yourself, you will warn the others in time. This will kill this biker, but it will save the other ten.

Do you alert the others about the imminent accident by running your bike into the falling bikers' machine, so the other ten riders will have enough time to drive around him?

37) Modified Euthanasia (a): Personal, Instrumental, Other, Inevitable

You are the leader of a group of soldiers. You are on your way back from a mission in enemy territory when one of your men steps in a trap that catches his leg, injuring him badly. You cannot free him without killing him, but if you leave him behind, enemy troops will torture him until he reveals the position of an allied base camp with a platoon of 10. The soldier begs you not to leave him, but you can't stay because you don't have any more ammunition.

If you stab the soldier yourself you will impede that he'll be tortured and reveal the information, which leads to the death of the allied platoon. You will kill him, but you will save the ten soldiers of the platoon.

Do you stab him yourself to death to impede he will be tortured, so he can't reveal the location of the ten allied troop members?

38) Modified Euthanasia (b): Impersonal, Instrumental, Other, Inevitable

You are the leader of a group of soldiers. You are on your way back from a mission in enemy territory when one of your men steps in a trap that catches his leg, injuring him badly. You cannot free him without killing him, but if you leave him behind, enemy troops will torture him until he reveals the position of an allied base camp with a platoon of 10. The soldier begs you not to leave him, but you can't stay because you don't have any more ammunition.

If you signalize the position of the soldier with an illumination rocket, the region will be bombed. The soldier won't be tortured and won't reveal the information, which will lead to the death of the allied troop. This will kill him, but it will save the ten soldiers of the allied platoon.

Do you impede that the trapped soldier is tortured by ordering the bombing of that region, so he can't reveal the location of the ten allied troop members?

39) Modified Fumes (a): Personal, Incidental, Other, Inevitable

You are on the night watch in a hospital. A chemical product has been spilled from a large crack on the air duct in a room with six patients. This chemical is highly toxic and it will kill all the patients in the room. You don't have much time to evacuate all the patients.

If you move the closest patients' bed in front of the crack, you will stop the spilling and you could evacuate the other patients. You will kill this patient but you will save the other five patients in the room.

Do you move this patient's bed in front of the crack to prevent the spilling, so the other five patients won't be poisoned?

40) Modified Fumes (b): Impersonal, Incidental, Other, Avoidable
You are on the night watch in a hospital. A chemical product has been spilled from a large crack on the air duct in a room with six patients. This chemical is highly toxic and it will kill all the patients in the room. You don't have much time to evacuate all the patients.

If you activate the ventilation system the poisonous gas will be taken out of the room. However, it will be transferred into a room upstairs with one patient, whom you won't be able to evacuate in time. This will kill this patient, but it will save the other five.

Do you divert the gas out of the room by activating the ventilation system, causing it to be transferred to the room with one patient, so the other five patients won't be poisoned?

41) Modified Rowboat (a): Personal, Instrumental, Other, Inevitable
You are on a rowboat with a tour guide on a lake in Alaska. Nearby, three children have fallen off their boat and are in danger of freezing to death. You rescue the children, but one of them is very heavy and you realize that if you keep him on board your boat will sink and all will die. Neither you nor the guide can leave the boat because you are rowing and the guide is giving CPR to one of the children.

If you throw the heavy child off the boat you will be able to reach the shore. You will kill this child, but you will save the other two.

Do you throw that one child overboard to get rid of load, so you can reach the shore with the other two children?

42) Modified Rowboat (b): Impersonal, Incidental, Other, Inevitable
You are on a rowboat with a tour guide on a lake in Alaska. Nearby, three children have fallen off their boat and are in danger of freezing to death. After you rescue two of the children, you realize that the weight of the third child would cause your boat to sink and all would die.

Neither you nor the guide can leave the boat because you are rowing and the guide is giving CPR to one of the children.

If you row to the shore leaving the third child behind in the water, you will prevent your boat from sinking. This will kill the child left behind, but it will save the other two.

Do you prevent your boot from sinking by leaving the third child behind, which will cause him to die, so you can reach the shore with the other two children?

43) Mine Shaft (a): Personal, Instrumental, Other, Inevitable

You are a miner. The only way out of the mine is to ride up with a cable car. The shift is end and everybody is riding up to the surface in the cubicles. While you are in the queue, you see that the cable supporting all the cubicles is about to snap. 10 miners are riding in the cubicles at this time.

If you knock over the last cubicle, the miner inside will fall down. In this way, you will reduce the load enough for the cable to resist breaking. You will kill the miner in the cubicle you knock over, but you will save the other 10.

Do you knock over the cubicle with only one miner to reduce weight, so the other ten miners will reach the exit?

44) Mine Shaft (b): Impersonal, Incidental, Other, Inevitable

You are a miner. The only way out of the mine is to ride up with a cable car. It is the end of your turn and everybody is riding up to the surface in the cubicles. While you are in the queue, you see that the cable supporting all the cubicles is about to snap. 10 miners are riding the cubicles at this time.

If you push an emergency switch the last cubicle will be detached from the cable. This will reduce enough weight to maintain the cubicles of the other 10 miners. This will kill the miner in the detached cubicle, but it will save the other ten.

Do you reduce weight by pushing the emergency switch which detaches the last cubicle, so the other ten miners can reach the exit?

45) Tycoon (a): Personal, Instrumental, Other, Inevitable

You are an electrician hired to fix an electrical problem in the home of a very wealthy tycoon who is terminally ill of cancer. Recently, it has been announced that upon his death, his enormous fortune will be donated to the local children's hospital. You know that there are 100 children at this hospital who could be saved with this money, but who cannot wait much longer before they die.

If you suffocate the tycoon while he is sleeping by covering his nose and mouth with your gloved hands, this essential donation for the children will arrive in time. You will kill the tycoon, but you will save the lives of 100 children.

Do you suffocate this man to speed the donation, so it will get to the 100 ill children in time?

46) Tycoon (b): Impersonal, Instrumental, Other, Inevitable
You are an electrician hired to fix an electrical problem in the home of a very wealthy tycoon who is terminally ill of cancer. Recently, it has been announced that upon his death, his enormous fortune will be donated to the local children's hospital. You know that there are 100 children at this hospital who could be saved with this money, but who cannot wait much longer before they die.

If you short-circuit the cables instead of fixing the problem, the tycoon's life support equipment will fail and this essential donation for the children will arrive in time. This will kill the tycoon, but it will save the lives of 100 children.

Do you anticipate the donation by causing the tycoon's life support equipment to fail, so the donation gets to the 100 ill children in time?

47) Enemy Spy (a): Personal, Instrumental, Other, Inevitable
You are a military officer during a war. Your soldiers have found an enemy spy trapped and injured in a collapsed building. You have been informed that enemy soldiers are planning a surprise attack on a nearby town. They will kill thousands of civilians if you and your soldiers do not stop them. The spy knows which town will be attacked. You have questioned him but he doesn't want to tell you. He won't survive much longer due to his injuries.

If you torture the spy, he will reveal the information about the town. In this way you will kill him, but you will save thousands of civilians.

Do you torture the spy to make him reveal the information, so you can prevent the attack on thousands of civilians?

48) Enemy Spy (b): Impersonal, Instrumental, Other, Inevitable
You are a military officer during a war. Your soldiers have found an enemy spy trapped and injured in a collapsed building. You have been informed that enemy soldiers are planning a surprise attack on a nearby town. They will kill thousands of civilians if you and your soldiers do not stop them. The spy knows which town will be attacked. You have questioned him but he doesn't want to tell you. He won't survive much longer due to his injuries.

If you let the rats enter in his cell, they will chew his legs until he reveal the information about the town. The torture will kill him, but it will save thousands of civilians.

Do you make the spy reveal the information by letting the rats enter in his cell, so you can prevent the attack on the thousands of civilians?

49) Missile (a): Personal, Instrumental, Other, Avoidable

You are in charge of the Maritime Police. You have received a message that the captain and a seaman of a cargo ship are healthy carriers of a lethal and contagious virus. They do not know that they are infected, and are travelling towards a small gulf where fishermen live. The communications system of the cargo ship is not working and, therefore, they cannot be contacted.

If you launch one of your missiles and sink the cargo ship you will avoid it mooring and thus spreading the virus. You will kill the captain and seaman, but you will save the fishermen.

Do you launch on of your missiles and sink the cargo ship, so the fishermen won't be infected?

50) Missile (b): Impersonal, Instrumental, Other, Avoidable

You are in charge of the Maritime Police. You have received a message that the captain and a seaman of a cargo ship are healthy carriers of a lethal and contagious virus. They do not know that they are infected, and are travelling towards a small gulf where fishermen live. The communications system of the cargo ship is not working and, therefore, they cannot be contacted.

If you signal the cargo ship to the Aviation they will sink it so you will avoid it mooring and thus spreading the virus. This will kill the captain and seaman, but it will save the fishermen.

Do you signal the cargo ship to the Aviation making it be sunk, so the fishermen won't be infected?

51) Bomb in the Bank (a): Personal, Incidental, Self, Inevitable

You are in the office of your bank together with four other people. Suddenly, the director calls you because he has discovered a bomb in in the vault, where there is a client. He knows you are a bomb disposal expert and asks you to defuse it. You realize immediately that there is not enough time defuse the bomb or to evacuate the people in the bank before the bomb explodes.

If you manually close the vault's door, the explosion will be isolated in the vault, but the client won't have enough time to go out. You will kill the client, but you will save yourself and the other four people in the bank.

Do you manually close the vault's door, where there is the client, make the explosion be isolated inside the vault, so it won't reach you and the other four people?

52) Bomb in the Bank (b): Impersonal, Incidental, Self, Inevitable

You are in the office of your bank together with four other people. Suddenly, the director calls you because he has discovered a bomb in in the vault, where there is a client. He knows you are a bomb disposal expert and asks you to defuse it. You realize immediately that there is not enough time defuse the bomb or to evacuate the people in the bank before the bomb explodes.

If you push the emergency button the vault's door will close and the explosion will be isolated in the vault. However, the client won't have enough time to go out. This will kill the client, but it will save yourself and the other four people in the bank.

Do you make the vault's door close by pushing the emergency button, so the explosion won't reach you and the other four people?

4CONFIDe dilemmas: Italian version

1) Burning Building (a): Personal, Instrumental, Self, Avoidable
Tu e altre cinque persone siete intrappolati in un edificio in fiamme. C'è un'unica uscita di emergenza da cui potete tutti scappare ma è bloccata da detriti incendiati. Un'altra persona ferita sta attraversando un'apertura alla base della porta di uscita. Tu e le altre cinque persone dietro di te non avete tempo di fare la stessa cosa.

Se sblocchi il varco usando la persona ferita, sarete in grado di scappare. In questo modo sicuramente ucciderai il ferito, ma salverai te stesso e le altre cinque persone.

Usi la persona ferita per aprire il varco cosí che tu e le altre cinque persone possiate scappare?

2) Burning Building (b): Impersonal, Incidental, Self, Avoidable
Tu e altre cinque persone siete intrappolati in un edificio in fiamme. C'è un'unica uscita di emergenza da cui potete scappare ma è bloccata da detriti incendiati. Un'altra persona ferita sta attraversando un'apertura alla base della porta di uscita. Tu e le altre cinque persone dietro di te non avete tempo di fare la stessa cosa.

Se attivi il sistema di emergenza questo rilascerà della schiuma, spegnendo l'incendio, ma la schiuma soffocherà la persona ferita. La persona ferita morirà, ma tu e le cinque persone dietro di te vi salverete.

Spegni l'incendio attivando il sistema di emergenza, cosa che farà soffocare la persona ferita, cosí che tu e le altre cinque persone possiate scappare?

3) Modified Crying Baby (a): Personal, Incidental, Self, Avoidable
Dei soldati nemici hanno occupato il tuo villaggio e uccideranno tutti i civili sopra i due anni di età. Tu e dieci vicini siete nascosti in due stanze nel seminterrato di una grande casa. Puoi sentire le voci dei soldati alla ricerca di oggetti di valore. Il tuo neonato comincia a piangere forte. Il rumore del pianto attirerà l'attenzione dei soldati, che rispamieranno la vita del tuo neonato, ma uccideranno te e gli altri rifugiati in entrambe le stanze.

Se usi la mano per tappare la bocca al neonato, smorzerai il rumore del pianto, ma il tuo neonato non riuscirà a respirare. In questo modo lo ucciderai, ma salverai te stesso e gli altri dieci vicini.

Tappi la bocca al tuo neonato, cosa che lo lascerà senz'aria, per smorzare il rumore del suo pianto cosí che i soldati nemici non scoprano te e gli altri dieci rifugiati?

4) Modified Crying Baby (b): Impersonal, Incidental, Self, Avoidable
Dei soldati nemici hanno occupato il tuo villaggio e uccideranno tutti i civili sopra i due anni di età. Tu e dieci vicini siete nascosti in due stanze nel seminterrato di una grande casa. Puoi sentire le voci dei soldati alla ricerca di oggetti di valore. Il tuo neonato comincia a piangere forte. Il rumore del pianto attirerà l'attenzione dei soldati, che rispamieranno la vita del tuo neonato, ma uccideranno te e gli altri rifugiati in entrambe le stanze.

Se attivi una rumorosa caldaia, questa attutirà il rumore del pianto, ma renderà l'ambiente insopportabilmente caldo. Il calore sarà mortale per il tuo neonato, ma salverà te e i dieci vicini.

Smorzi il rumore del pianto attivando la rumorosa caldaia che asfissierà il tuo neonato, cosí che tu e i dieci vicini non veniate scoperti?

5) Modified Submarine (a): Personal, Incidental, Self, Avoidable
Fai parte dell'equipaggio di un sottomarino che sta viaggiando sotto un grande iceberg. Un'esplosione ha ferito molti membri dell'equipaggio e sta facendo collassare l'unico passaggio tra la sezione superiore e inferiore. Tu e dieci sopravvissuti siete nella sezione superior senza ossigeno a sufficienza perché tutti raggiungiate la superficie. Un solo membro dell'equipaggio si trova privo di sensi nella sezione inferiore, dove c'è abbastanza ossigeno.

Se apri il portello di sicurezza l'ossigeno salirà. Tuttavia il portello cadrà sul membro dell'equipaggio nella sezione inferiore. Cosí facendo lo ucciderai, ma salverai te stesso e i dieci sopravvissuti.

Apri il portello di sicurezza, che cadrà sul membro dell'equipaggio nella sezione inferiore, cosí che tu e i dieci sopravvissuti abbiate ossigeno a sufficienza?

6) Modified Submarine (b): Impersonal, Incidental, Self, Avoidable
Fai parte dell'equipaggio di un sottomarino che sta viaggiando sotto un grande iceberg. Un'esplosione ha ferito molti membri dell'equipaggio e sta facendo collassare l'unico passaggio tra la sezione superiore e inferiore. Tu e dieci sopravvissuti siete nella sezione superior senza ossigeno a sufficienza perché tutti raggiungiate la superficie. Un solo membro dell'equipaggio si trova privo di sensi nella sezione inferiore, dove c'è abbastanza ossigeno.

Se premi un pulsante, il portello di sicurezza si aprirá e farà salire l'ossigeno. Tuttavia, il portello cadrà sul collega nella sezione inferiore uccidendolo, ma questo salverá te e i dieci sopravvissuti.

Premi il pulsante, che fará cadere il portello sul membro dell'equipaggio, cosí tu e i dieci sopravvissuti abbiate abbastanza ossigeno?

7) Shark Attack (a): Personal, Instrumental, Self, Avoidable
Tu e altri dieci sommozzatori delle Nazioni Unite disattivate mine navali della IIa Guerra Mondiale. Un sommozzatore si è ferito e il sangue nell'acqua ha attirato molti squali. Hai un fucile subacqueo con un solo arpione. Il sommozzatore insanguinato sta nuotando verso l'ultima gabbia di protezione e la raggiungerà prima di te e degli altri. Gli squali, seguendo il sangue, si avvicineranno troppo perchè tu e gli altri sommozzatori possiate scappare.

Se spari al sommozzatore ferito lo ucciderai e gli squali si fermeranno per mangiare lui, ma salverai te stesso e i dieci sommozzatori.

Spari al sommozzatore ferito, lasciando che gli squali si fermino a mangiarlo, cosí che tu e i dieci subacquei possiate raggiungere la gabbia di protezione?

8) Shark Attack (b): Impersonal, Instrumental, Self, Avoidable
Tu e altri dieci sommozzatori delle Nazioni Unite disattivate mine navali della IIa Guerra Mondiale. Un sommozzatore si è ferito e il sangue nell'acqua ha attirato molti squali. Hai un fucile subacqueo con un solo arpione. Il sommozzatore insanguinato sta nuotando verso l'ultima gabbia di protezione e la raggiungerà prima di te e degli altri. Gli squali, seguendo il sangue, si avvicineranno troppo perchè tu e gli altri sommozzatori possiate scappare.

Se fai detonare una delle mine con un telecomando a distanza, questa ucciderà il sommozzatore ferito e gli squali si fermeranno per mangiare lui. Tu e i dieci sommozzatori vi salverete.

Lasci che gli squali mangino il sommozzatore ferito facendo detonare una delle mine, cosí che tu e gli altri dieci sommozzatori possiate raggiungere la gabbia di protezione?

9) Orphanage (a): Personal, Instrumental, Self, Inevitable
Lavori in un orfanotrofio che accoglie dieci bambini in un paese in guerra. I soldati ribelli hanno sostituito il governo e stanno uccidendo tutti coloro che non appoggiano il regime. Stanno inoltre facendo una campagna di pulizia etnica contro un particolare gruppo. Tu e i dieci bambini non appoggiate i ribelli e nel tuo orfanotrofio c'è un bambino di questo gruppo etnico. Non avete modo di sfuggire.

Se soffochi il bambino del gruppo etnico perseguitato con un cuscino mentre dorme, i soldati crederanno che tu sostieni il loro regime. In questo modo ucciderai il bambino, ma salverai te stesso e i restanti dieci bambini.

Soffochi il bambino facendo credere ai soldati che appoggi il loro regime, cosí che risparmino la vita a te e agli altri dieci bambini?

10) Orphanage (b): Impersonal, Instrumental, Self, Inevitable
Lavori insieme ad un'infermiera in un orfanotrofio che accoglie dieci bambini in un paese in guerra. I soldati ribelli hanno sostituito il governo e stanno uccidendo tutti coloro che non appoggiano il regime. Stanno inoltre facendo una campagna di pulizia etnica contro un particolare gruppo. Tu e i dieci bambini non appoggiate i ribelli e nel tuo orfanotrofio c'è un bambino di questo gruppo etnico. Non avete modo di sfuggire.

Se ordini all'infermiera di dare al bambino del gruppo etnico perseguitato una dose letale di sonnifero, i soldati crederanno che tu sostieni il loro regime. Questo ucciderà il bambino, ma salverá te l'infermiera e gli altri dieci bambini.

Fai credere ai soldati che appoggi il regime ordinando all'infermiera di dare una overdose di sonnifero al bambino, cosí che risparmino la vita a te e agli altri dieci bambini?

11) Preventing Cholera (a): Personal, Instrumental, Self, Avoidable
Sei un volontario dei Corpi di Pace in un villaggio rurale dell'Africa. Un uomo di un villaggio vicino è stato infettato dal colera, un batterio estremamente contagioso e quasi sempre mortale. Lui è ancora vivo, indicando che deve essere immune. L'uomo ritiene erroneamente che il tuo centro medico possa curare completamente la sua malattia. Lo vedi avvicinarsi al villaggio e sai che se entra contagerà 100 persone innocenti, che a differenza sua, moriranno.

Se gli spari con la pistola del centro medico, gli impedirai di diffondere il batterio a te e al resto del villaggio. In questo modo lo ucciderai ma salverai te e i 100 abitanti del villaggio.

Spari all'uomo impedendogli di entrare nel villaggio, cosí che non contagi te e i 100 abitanti?

12) Preventing Cholera (b): Impersonal, Instrumental, Self, Avoidable
Sei un volontario dei Corpi di Pace in un villaggio rurale dell'Africa. Un uomo di un villaggio vicino è stato infettato dal colera, un batterio estremaente contagioso e quasi sempre mortale. Lui è ancora vivo, indicando che deve essere immune. L'uomo ritiene erroneamente che il tuo centro medico possa curare completamente la sua malattia. Lo vedi avvicinarsi al villaggio e sai che se entra contagerà 100 persone innocenti, che a differenza sua, moriranno.

Se avverti il consiglio del villaggio questi gli spareranno e gli impediranno di contagiare te e e il resto del villaggio. Questo lo ucciderà, ma salverà te e i 100 abitanti del villaggio.

Impedisci all'uomo di entrare nel villaggio avvertendo il consiglio del villaggio che gli sparerà, così che non contagi te e i 100 abitanti?

13) Rescue 911 (a): Personal, Instrumental, Self, Inevitable
Sei l'unico medico in un elicottero di soccorso durante una devastante alluvione. Hai salvato otto feriti in condizioni critiche e li stai mantenendo in vita. Improvvisamente, il pilota ti avvisa che c'è un guasto al motore e ordina che l'elicottero debba perdere peso altrimenti precipiterà e morirete tutti. Non puoi abbandonare l'elicottero perchè le persone ferite hanno bisogno del tuo aiuto e le pesanti attrezzature mediche sono fissate alla parete.

Se lanci uno dei feriti, ridurrai il peso a sufficienza da mantenere l'elicottero in aria. In questo modo ucciderai quell'uomo, ma salverai te stesso e le altre persone a bordo.

Lanci uno dei feriti fuori dall'elicottero per ridurne il peso, cosí che tu e le altre otto persone a bordo non precipitiate?

14) Rescue 911 (b): Impersonal, Instrumental, Self, Inevitable
Sei l'unico medico in un elicottero di soccorso durante una devastante alluvione. Hai salvato otto feriti in condizioni critiche e li stai mantenendo in vita. Improvvisamente, il pilota ti avvisa che c'è un guasto al motore e ordina che l'elicottero debba perdere peso altrimenti altrimenti precipiterà e morirete tutti. Non puoi abbandonare l'elicottero perchè le persone ferite hanno bisogno del tuo aiuto e le pesanti attrezzature mediche sono fissate alla parete.

Se ordini al pilota di rilasciare il cavo con cui l'ultima persona salvata sta salendo, ridurrai il peso a sufficienza da mantenere l'elicottero in aria. Questo ucciderà quella persona, ma salverà te e le altre otto persone a bordo.

Riduci il peso del carico ordinando al pilota di rilasciare il cavo con cui l'ultima persona sta salendo, cosí che tu e le altre otto persone a bordo non precipitiate?

15) Space Station (a): Personal, Incidental, Self, Inevitable
Sei un ingegnere della Stazione Spaziale Internazionale. Un incendio scoppia nella stiva. Il sistema antincendio puó automaticamente aprire la porta esterna della stiva per far fuoriuscire l'ossigeno e spegnere l'incendio. Il sistema si attiva solo se la porta interna è sigillata, ma un un meccanico è rimasto nella stiva. Non ha tempo di togliersi l'ingombrante tuta spaziale e quando attraverserà la porta interna rimarrà bloccato, e l'incendio divamperà uccidendo tutti.

Se chiudi manualmente la porta interna, il sistema antincendio si attiverà. In questo modo ucciderai il meccanico, che verrà risucchiato nello spazio, ma salverai te e gli altri dieci astronauti.

Chiudi manualmente la porta interna, facendo risucchiare il meccanico nello spazio, cosí che il fuoco non raggiunga te e i dieci astronauti?

16) Space Station (b): Impersonal, Incidental, Self, Inevitable
Sei un ingegnere della Stazione Spaziale Internazionale. Un incendio scoppia nella stiva. Il sistema antincendio puó automaticamente aprire la porta esterna della stiva per far fuoriuscire l'ossigeno e spegnere l'incendio. Il sistema si attiva solo se la porta interna è sigillata, ma un un meccanico è rimasto nella stiva. Non ha tempo di togliersi l'ingombrante tuta spaziale e quando attraverserà la porta interna rimarrà bloccato, e l'incendio divamperà uccidendo tutti.

Se premi un pulsante di emergenza, il portellone si chiuderà, attivando il sistema antincendio. Cosí facendo il meccanico morirà risucchiato nello spazio, ma tu e gli altri dieci astronauti vi salverete.

Spegni l'incendio premendo il pulsante che sigilla la porta interna, facendo risucchiare il meccanico nello spazio, così che il fuoco non raggiunga te e i dieci astronauti?

17) Nuclear reactor (a): Personal, Instrumental, Self, Inevitable
Sei l'ispettore di una centrale nucleare. Tu e il direttore state visitando l'impianto quando uno dei condotti di alimentazione si surriscalda. Il sistema di raffreddamento di emergenza non riesce ad attivarsi e sta per iniziare una reazione a catena con conseguente fusione nucleare che rilascerà radiazioni letali nella città vicina, uccidendo migliaia di persone.

Se spingi il direttore nel condotto, il suo corpo diffonderà abbastanza calore da prevenire la reazione a catena. In questo modo lo ucciderai ma salverai te e le migliaia di abitanti della città.

Spingi il direttore nel condotto di alimentazione raffreddandolo a sufficienza, cosí che la reazione a catena si interrompa in tempo per salvare te e le migliaia di abitanti?

18) Nuclear reactor (b): Impersonal, Incidental, Self, Inevitable
Sei l'ispettore di una centrale nucleare. Tu e il direttore state visitando l'impianto quando uno dei condotti di alimentazione si surriscalda. Il sistema di raffreddamento di emergenza non riesce ad attivarsi e sta per iniziare una reazione a catena con conseguente fusione nucleare che rilascerà radiazioni letali nella città vicina, uccidendo migliaia di persone.

Se inserisci manualmente dell'azoto liquido nella camera di alimentazione questo ridurrà la temperatura cosí da prevenire la reazione a catena. Questo ucciderà uno dei dipendenti che si trova intrappolato nel condotto, ma salverà te e le migliaia di abitanti della città.

Inserisci l'azoto liquido nel condotto, dove uno dei dipendenti è intrappolato, cosí che la reazione a catena venga fermata in tempo per salvare te e le migliaia di abitanti?

19) Cinderblock (a): Personal, Instrumental, Self, Inevitable
Sei un esperto di esplosivi per una compagnia incaricata di demolire un grattacielo. Stai esaminando l'ultima carica esplosiva quando vedi un ragazzo che sta per far esplodere Incidentalmente una delle cariche. L'esplosione provocherà il crollo incontrollato dell'edificio sopra di te, il ragazzo e sulla folla di spettatori. Il ragazzo si trova diversi piani sotto di te e non può sentirti.

Se lasci cadere un blocco di cemento sopra la testa del ragazzo lo ucciderai, ma sventerai l'esplosione e salverai la vita a te e alla folla.

Fai cadere un blocco di cemento sulla testa del ragazzo fermandolo, cosí che l'edificio non collassi su di te e sulla folla di spettatori?

20) Cinderblock (b): Impersonal, Instrumental, Self, Inevitable
Sei un esperto di esplosivi per una compagnia incaricata di demolire un grattacielo. Stai esaminando l'ultima carica esplosiva quando vedi un ragazzo che sta per far esplodere Incidentalmente una delle cariche. L'esplosione provocherà il crollo incontrollato dell'edificio sopra di te, il ragazzo e su una folla di spettatori. Il ragazzo si trova diversi piani sotto di te e non può sentirti.

Se riattivi la corrente nell'edificio, il ragazzo riceverà uno shock elettrico perchè sta toccando un filo scoperto. Questo lo ucciderà, ma salverà te e la folla impedendo l'esplosione.

Fermi il ragazzo riattivando la corrente dell'edificio, cosí che l'edificio non collassi su di te e sulla folla di spettatori?

21) Cliffhanger (a): Personal, Instrumental, Self, Inevitable
Sei un muratore e stai lavorando con la tua squadra sui ponteggi di un grattacielo. Improvvisamente, il ponteggio crolla parzialmente. Tu e molti altri siete appesi ad una traversa che pende e che non può reggere il peso di tutti. Uno dei lavoratori vicino a te perde la presa sulla traversa e afferra il tuo braccio libero. Tuttavia, ti rendi conto che la struttura sta per cadere.

Se colpisci il tuo collega fino a quando cade, riduci il peso sulla traversa permettendo a tutti di mettersi in salvo. In questo modo ucciderai il tuo collega ma salverai te e gli altri.

Colpisci il tuo collega fino a che non lascia il tuo braccio e cade riducendo il peso sulla traversa, cosí che tu e gli altri possiate restare appesi alla struttura?

22) Cliffhanger (b): Impersonal, Instrumental, Self, Inevitable
Sei un muratore e stai lavorando con la tua squadra sui ponteggi di un grattacielo. Improvvisamente, il ponteggio crolla parzialmente. Tu e molti altri siete appesi ad una traversa che pende e che non può reggere il peso di tutti. Uno dei lavoratori vicino a te perde la presa sulla traversa e afferra un altro pezzo del ponteggio. Tuttavia, ti rendi conto che la struttura sta per cadere.

Se rimuovi il perno che tiene agganciato il pezzo del ponteggio a cui il tuo collega è appeso, questo ridurrà il peso sulla struttura. Questo lo ucciderà, ma salverà te e gli altri.

Riduci il peso sulla traversa rimuovendo il perno e facendo cadere il tuo collega, cosí che tu e gli altri possiate restare appesi alla struttura?

23) Bus plunge (a): Personal, Incidental, Self, Inevitable
Sei l'autista di un bus che accompagna bambini dell'asilo allo zoo. Lungo la strada i pneumatici difettosi fanno precipitare il bus in un fiume in piena. Tu e tre bambini siete nel bus che sta affondando, mentre gli altri sono già stati portati via dalla corrente. Afferri i due bambini vicino a te e inizi a nuotare verso l'uscita; il terzo bambino si aggrappa alla tua gamba. Non sei abbastanza forte per contrastare la corrente e nuotare con tutti e i tre bambini.

Se ti liberi del terzo bambino potrai nuotare contro corrente, ma il bambino lasciato indietro annegherà. In questo modo lo ucciderai, ma salverai te e gli altri due bambini.

Ti liberi del terzo bambino, che affogherà cosí che tu e gli altri due bambini possiate raggiungere la riva contrastando la corrente?

24) Bus plunge (b): Impersonal, Incidental, Self, Inevitable
Sei l'autista di un bus che accompagna bambini dell'asilo allo zoo. Lungo la strada i pneumatici difettosi fanno precipitare il bus in un fiume in piena. Tu e tre bambini siete nel bus che sta affondando, mentre gli altri sono giá stati portati via dalla corrente. Afferri i due bambini vicino a te e inizi a nuotare verso l'uscita, ma i sedili ingombranti la bloccano.

Se togli i sedili potrai liberare la via di fuga, ma bloccherai il corridoio e il terzo bambino rimarrà intrappolato, cosa che lo fará annegare. Questo lo ucciderà, ma salverà te e gli altri due bambini.

Liberi la via di fuga togliendo i sedili nel corridoio lasciando intrappolato il terzo bambino, cosí che tu e gli altri due bambini possiate raggiungere la superficie?

25) Modified Transplant (a): Personal, Instrumental, Other, Avoidable
Sei un medico e hai cinque pazienti che moriranno se non avranno un tempestivo trapianto di organi. Un altro paziente vittima di un grave incidente stradale è traspostato d'urgenza all'ospedale. Questa persona è gravemente ferita, ma probabilmente puoi salvarla con un lungo e complicato intervento chirurgico.

Se di nascosto tagli la sua corotide durante l'intervento, lo ucciderai, ma avrai gli organi per salvare gli altri cinque pazienti.

Tagli la carotide della vittima dell'incidente ottenendo gli organi che ti servono, cosí da poter effettuare il trapianto sugli altri cinque pazienti?

26) Modified Transplant (b): Impersonal, Instrumental, Other, Avoidable
Sei un medico e hai cinque pazienti che moriranno se non avranno un tempestivo trapianto di organi. Un altro paziente vittima di un grave incidente stradale è trasportato d'urgenza all'ospedale. Durante un lungo e complicato intervento chirurgico ti accorgi che l'infermiera sta per iniettargli un medicinale sbagliato che in questo caso sarebbe letale.

Se lasci che l'infermiera inietti il medicinale sbagliato, il paziente vittima dell'incidente morirà e tu avrai gli organi necessari per salvare gli altri cinque pazienti.

Ottieni gli organi che ti servono lasciando che l'infermiera inietti al paziente il medicinale sbagliato cosí che tu possa effettuare il trapianto di organi sugli altri cinque pazienti?

27) On the waterfront (a): Personal, Incidental, Other, Avoidable
Lavori al porto di un cantiere navale e ti occupi di collegare i cavi delle gru ai container per scaricarli dalle navi mercantili. Tu e i tuoi colleghi vi state arrampicando per verificare che lo scarico avvenga correttamente. Ti accorgi che il cavo della gru si sta per spezzare. Vedi che il problema nasce da un litigio tra due membri dell'equipaggio. Il container sta pericolosamente ondeggiando sopra altri cinque operai dell'equipaggio che si trovano sul ponte.

Se separi i due membri dell'equipaggio che stanno litigando eviterai che il container cada sugli altri. Tuttavia, uno dei due non indossa l'imbragatura di sicurezza. Spingendolo lo ucciderai, ma salverai i cinque membri sul ponte.

Separi i due membri dell'equipaggio, cosa che causerà la caduta di quello senza imbragatura, fermando l'ondeggiare del container cosí che questo non cada sopra i cinque sul ponte?

28) On the waterfront (b): Impersonal, Incidental, Other, Avoidable
Lavori al porto di un cantiere navale e ti occupi di collegare i cavi delle gru ai container per scaricarli dalle navi mercantili. Tu e I tuoi colleghi vi state arrampicando per verificare che lo scarico avvenga correttamente. Ti accorgi che il cavo della gru si sta per spezzare. Vedi che il problema nasce da un litigio tra due membri dell'equipaggio. Il container sta pericolosamente ondeggiando sopra altri cinque operai dell'equipaggio che si trovano sul ponte

Se premi un pulsante il container verrà rilasciato sul mercantile, dove un membro dell'equipaggio sta ancora lavorando. Questo lo ucciderà ma salverà la vita dei cinque sul ponte.

Premi il pulsante per rilasciare il container, che cadrá sul membro dell'equipaggio sul mercantile, cosí che il container non cada sopra i cinque sul ponte?

29) Modified vaccine Test (a): Personal, Incidental, Other, Avoidable
Un'epidemia si è diffusa in tutto il pianeta uccidendo migliaia di persone. Sei un medico ricercatore e hai sviluppato due sostanze in laboratorio. Per errore entrambe sono state etichettate come vaccino. Una è di certo un vaccino, che permetterebbe di salvare milioni di vite. L'altra è una sostanza letale. Non hai molto tempo per individuare qual è il vaccino.

Se inietti le sostanze ai tuoi due assistenti di laboratorio, gli unici due soggetti testabili, sarai in grado di identificare il vaccino. In questo modo ucciderai uno dei tuoi due assistenti ma salverai migliaia di vite.

Inietti le sostanze ai tuoi due assistenti, uccidendo uno dei due per indentificare il vaccino in modo che migliaia di persone possano essere immunizzate?

30) Modified vaccine Test (b): Impersonal, Incidental, Other, Avoidable
Un'epidemia si è diffusa in tutto il pianeta uccidendo migliaia di persone. Sei un medico ricercatore e hai sviluppato due sostanze in laboratorio. Per errore entrambe sono state etichettate come vaccino. Una è di certo un vaccino, che permetterebbe di salvare milioni di vite. L'altra è una sostanza letale. Non hai molto tempo per individuare qual è il vaccino.

Se permetti all'infermiera di iniettare le sostanze a due pazienti, gli unici due soggetti testabili, sarai in grado di identificare il vaccino. Uno dei pazienti morirà, ma migliaia di vite verranno salvate.

Identifichi il vaccino permettendo all'infermiera di iniettare le due sostanze a due pazienti, uccidendo uno dei due, così che migliaia di persone potranno essere vaccinate?

31) Modified Footbridge: Personal, Instrumental, Other, Avoidable
Un tram fuori controllo sta correndo a forte velocità sui binari verso cinque operai che moriranno se il tram continua la sua corsa. Sei vicino ai binari, ma troppo lontano per avvertirli. Vicino a te c'è uno sconosciuto di stazza imponente.

Se spingi lo sconosciuto sui binari il tram deraglierà e non investirà i cinque operai. In questo modo ucciderai lo sconosciuto, ma salverai i cinque operai.

Spingi lo sconosciuto sui binari facendo deragliare il tram cosí che il tram non investa i cinque operai?

32) Modified trolley: Impersonal, Incidental, Other, Avoidable
Un tram fuori controllo sta correndo a forte velocità sui binari verso cinque operai che moriranno se il tram continua la sua corsa. Sei vicino ai binari, ma troppo lontano per avvertirli. Accanto a te c'è una leva che può reindirizzare il tram su un altro binario dove c'è un solo operaio al lavoro.

Se azioni una leva, il tram verrà indirizzato sul binario dove c'è un operaio ma non investirà i cinque operai. Questo ucciderà un operaio, ma salverà gli altri cinque.

Fai cambiare la direzione del tram azionando la leva, che causerà la morte di un operaio, cosí che il tram non investa i cinque operai?

33) Nobel Prize (a): Personal, Instrumental, Other, Avoidable
Tu e un tuo collega ricercatore avete scoperto una nuova fonte di energia che è economica, sicura e pulita. Ha il potenziale di porre fine all'inquinamento e alla povertà nel mondo. Tuttavia il tuo collega vuole vendere la scoperta e sai che sta pianificando di contattare i potenziali clienti oggi stesso. Sai che sicuramente cercheranno di usare questa tecnica come un'arma mortale, ma il tuo collega non vuole crederti.

Se avveleni il tuo collega con una sostanza facilmente accessibile nel tuo laboratorio, impedirai che la vostra scoperta cada nelle mani sbagliate. In questo modo ucciderai il tuo collega, ma salverai migliaia di persone.

Avveleni il tuo collega impedendo la vendita della tua scoperta, cosí che la vostra tecnica non venga usata come un'arma contro migliaia di persone?

34) Nobel Prize (b): Impersonal, Instrumental, Other, Avoidable
Tu e un tuo collega ricercatore avete scoperto una nuova fonte di energia che è economica, sicura e pulita. Ha il potenziale di porre fine all'inquinamento e alla povertà nel mondo. Tuttavia il tuo collega vuole vendere la scoperta e sai che sta pianificando di contattare i potenziali clienti oggi stesso. Sai che sicuramente cercheranno di usare questa tecnica come un'arma mortale ma il tuo collega non vuole crederti.

Se rilasci del gas infiammabile in laboratorio ci sarà un'esplosione nel momento in cui il tuo collega accenderà il suo computer. Questo lo ucciderà, ma salverà migliaia di persone impedendo che la vostra scoperta arrive in mani sbagliate.

Rilasci del gas, che farà esplodere il computer del tuo college uccidendolo, cosí che la vostra tecnica non venga usata come un'arma contro migliaia di persone?

35) Bike week (a): Personal, Instrumental, Other, Avoidable
Sei un motociclista esperto e stai partecipando ad un evento. Mentre stai guidando di fronte ad un gruppo di dieci motocilisti vedi che un motoclista davanti a te che ha perso il controllo della sua moto. Mentre accelleri per avvicinarti al suo fianco ti accorgi che si schianterà da un momento all'altro. Questo provocherà un grande tamponamento a catena e il gruppo di motociclisti dietro di voi morirà.

Se spingi il motociclista fuori strada si schianterà sugli alberi ma eviterai il tamponamento a catena. Alla velocità in cui sta andando lo ucciderai, ma salverai il gruppo dei dieci motociclisti.

Spingi il motociclista fuori strada evitando il tamponamento a catena, cosí che il gruppo di dieci motociclisti non si schianti?

36) Bike week (b): Impersonal, Instrumental, Other, Avoidable
Sei un motociclista esperto e stai partecipando ad un evento. Mentre stai guidando di fronte ad un gruppo di dieci motocilisti vedi che un motoclista di fronte a te ha perso il controllo della sua moto e sta cadendo. Tu puoi facilmente evitarlo ma i motociclisti dietro di te andranno a schiantarsi uno sull'altro e moriranno.

Se lasci che la tua moto investa il motociclista caduto mentre salti nel fosso, riuscirai ad avvisare gli altri in tempo. Questo ucciderà il motociclista caduto, ma salverà gli altri dieci.

Avvisi gli altri dell'imminente incidente lasciando che la tua moto colpisca il motociclista caduto, cosí che gli altri dieci avranno abbastanza tempo per scavalcarlo?

37) Modified Euthanasia (a): Personal, Instrumental, Other, Inevitable
Sei il capo di un gruppo di soldati che sta tornando da una missione in territorio nemico. Uno dei tuoi uomini mette il piede in una trappola, ferendosi. Non puoi liberarlo senza ucciderlo, ma se lo abbandoni le truppe nemiche lo tortureranno finchè non rivelerà la posizione di un accampamento alleato con un plotone di dieci soldati. Il soldato ti prega di non lasciarlo solo ma i nemici si stanno avvicinando e non potete restare perchè avete finito le munizioni.

Se pugnali il soldato questo impedirà che venga torturato e che riveli l'informazione che porterà alla morte del plotone alleato. In questo modo lo ucciderai ma salverai i dieci soldati del plotone.

Pugnali a morte il soldato intrappolato evitando che venga torturato, cosí che non riveli la posizione dei dieci membri delle truppe alleate?

38) Modified Euthanasia (b): Impersonal, Instrumental, Other, Inevitable
Sei il capo di un gruppo di soldati che sta tornando da una missione in territorio nemico. Uno dei tuoi uomini mette il piede in una trappola, ferendosi. Non puoi liberarlo senza ucciderlo, ma se lo abbandoni le truppe nemiche lo tortureranno finchè non rivelerà la posizione di un accampamento alleato con un plotone di dieci soldati. Il soldato ti prega di non lasciarlo solo ma i nemici si stanno avvicinando e non potete restare perchè avete finito le munizioni.

Se indichi la posizione del soldato con un razzo di segnalazione quell'area verrà bombardata. Eviterai così che il soldato venga torturato e che riveli l'informazione che porterà alla morte del plotone alleato. Questo lo ucciderà ma i dieci soldati del plotone alleato si salveranno.

Eviti che il soldato intrappolato venga torturato ordinando il bombardamento di quella regione, cosí che non riveli la posizione del plotone alleato?

39) Modified Fumes (a): Personal, Incidental, Other, Inevitable
Sei di guardia in un ospedale durante il turno di notte. Scopri che c'è una fuoriuscita di sostanze chimiche da una grande crepa nel condotto di areazione in una stanza con sei pazienti. Questa sostanza è altamente tossica e ucciderà tutti i pazienti nella stanza. Non hai molto tempo per evacuare tutti i pazienti.

Se muovi il letto del paziente vicino davanti alla crepa, fermerai la fuoriuscita e potrai far uscire gli altri pazienti. In questo modo ucciderai quel paziente, ma salverai la vita degli altri cinque pazienti della stanza.

Muovi il letto di uno dei pazienti di fronte alla crepa cosí che gli altri cinque pazienti possano essere evacuati?

40) Modified Fumes (b): Impersonal, Incidental, Other, Avoidable
Sei di guardia in un ospedale durante il turno di notte. Scopri che c'è una fuoriuscita di sostanze chimiche da una grande crepa nel condotto di areazione in una stanza con sei pazienti. Questa sostanza è altamente tossica e ucciderà tutti i pazienti nella stanza. Non hai molto tempo per evacuare tutti i pazienti.

Se attivi il sistema di ventilazione il gas velenoso sarà risucchiato fuori dalla stanza. Tuttavia sarà trasferito in una stanza al piano superiore dove c'è un altro paziente, che non riuscirà ad andarsene in tempo. Questo ucciderà quel paziente, ma salverà la vita degli altri cinque.

Fai deviare il gas fuori dalla camera dei cinque pazienti, causando il trasferimento del gas nella stanza con un paziente, cosí che i cinque pazienti non vengano avvelenati?

41) Modified Rowboat (a): Personal, Instrumental, Other, Inevitable
Sei in una barca a remi su un lago in Alaska con una guida. Nelle vicinanze tre bambini sono caduti dalla loro barca e ora rischiano di morire di freddo. Hai salvato i tre bambini, ma uno di loro è molto pesante e realizzi che se lo tieni a bordo, la tua barca affonderà e tutti voi morirete. Nè tu nè la guida potete lasciare la barca perchè tu stai remando e la guida sta rianimando uno dei bambini.

Se butti il bambino pesante fuori bordo sarai in grado di raggiungere la riva. Così facendo ucciderai quel bambino, ma salverai gli altri due bambini.

Butti il bambino pesante in acqua per disfarti del suo peso, cosí da poter raggiungere la riva con gli altri due bambini?

42) Modified Rowboat (b): Impersonal, Incidental, Other, Inevitable
Sei in una barca a remi su un lago in Alaska con una guida. Nelle vicinanze tre bambini sono caduti dalla loro barca e ora rischiano di morire di freddo. Hai salvato due dei trebambini, ma l'ultimo è molto pesante e realizzi che se lo porti a bordo, la tua barca affonderà e tutti voi morirete. Nè tu nè la guida potete lasciare la barca perchè tu stai remando e la guida sta rianimando uno dei bambini.

Se remi verso la riva lasciando il terzo bambino in acqua eviterai che la vostra barca affondi. Questo ucciderà il bambino lasciato indietro, ma salverai gli altri due.

Eviti che la barca affondi lasciando in acqua il terzo bambino, cosa che lo farà morire, così che tu possa raggiungere la riva con gli altri due?

43) Mine Shaft (a): Personal, Instrumental, Other, Inevitable
Sei un minatore. L'unica via d'uscita dalla miniera è usare una funivia. Il turno è finito e tutti stanno risalendo in superficie con le cabine. Mentre sei in fila, vedi che il cavo che regge le cabine è sul punto di cedere. Al momento, ci sono dieci minatori dentro alle cabine.

Se spingi con forza l'ultima cabina il minatore al suo interno cadrà. In questo modo ridurrai a sufficienza il peso da permettere al cavo di resistere. Ucciderai il minatore nella cabina che hai spinto, ma salverai gli altri dieci.

Spingi l'ultima cabina con un solo minatore per ridurre il peso sul cavo, cosí che gli altri minatori possano raggiungere l'uscita?

44) Mine Shaft (b): Impersonal, Incidental, Other, Inevitable
Sei un minatore. L'unica via d'uscita dalla miniera è usare una funivia. Il turno è finito e tutti stanno risalendo in superficie con le cabine. Mentre sei in fila, vedi che il cavo che regge le cabine è sul punto di cedere. Al momento, ci sono dieci minatori dentro alle cabine.

Se premi un interruttore di emergenza l'ultima cabina verrà staccata dal cavo. Questo consentirà di ridurre il peso a sufficienza da permettere al cavo di resistere. Questo ucciderà il minatore nella cabina che hai staccato, ma salverà gli altri dieci.

Riduci il peso sul cavo premendo l'interruttore che stacca l'ultima cabina, in modo da permettere agli altri minatori di raggiungere l'uscita?

45) Tycoon (a): Personal, Instrumental, Other, Inevitable
Sei un elettricista assunto per risolvere un problema elettrico nella casa di un ricco magnate malato terminale di cancro. Di recente l'uomo ha annunciato che dopo la sua morte la sua enorme fortuna sarà devoluta all'ospedale pediatrico locale. Sai che ci sono 100 bambini in questo ospedale che potrebbero essere salvati da questi soldi, ma che non possono aspettare ancora a lungo prima di morire.

Se soffochi il magnate mentre dorme coprendogli il naso e la bocca con le mani guantate, questa donazione essenziale per i bambini arriverà in tempo. In questo modo ucciderai il magnate, ma salverai le vite dei 100 bambini.

Soffochi l'uomo anticipando la donazione, cosí che arrivi in tempo per salvare i 100 bambini malati?

46) Tycoon (b): Impersonal, Instrumental, Other, Inevitable

Sei un elettricista assunto per risolvere un problema elettrico nella casa di un ricco magnate malato terminale di cancro. Di recente l'uomo ha annunciato che dopo la sua morte la sua enorme fortuna sarà devoluta all'ospedale pediatrico locale. Sai che ci sono 100 bambini in questo ospedale che potrebbero essere salvati da questi soldi, ma che non possono aspettare ancora a lungo prima di morire.

Se mandi il sistema elettrico in corto circuito, le apparecchiature che tengono in vita il magnate smetteranno di funzionare e l'essenziale donazione per i bambini arriverà in tempo. Questo ucciderà il magnate, ma salverà la vita di 100 bambini.

Anticipi la donazione provocando il guasto delle apparecchiature che tengono in vita il magnate in modo che la donazione arrivi in tempo ai 100 bambini malati?

47) Enemy Spy (a): Personal, Instrumental, Other, Inevitable
Sei un ufficiale dell'esercito in guerra. I tuoi soldati hanno trovato una spia nemica intrappolata e ferita in un edificio diroccato. Sei stato informato che i nemici stanno progettando un attacco a sorpresa su una città vicina. Uccideranno migliaia di civili e la spia è a conoscenza di quale sarà la città attaccata. Hai interrogato l'uomo ma non vuole darti questa informazione e sai che non sopravviverà a lungo a causa delle sue ferite.

Se torturi la spia, questa ti rivelerà il nome della città. In questo modo lo ucciderai, ma potrai salvare migliaia di civili.

Torturi la spia per estorcerle il nome della città, cosí da poter prevenire l'attacco su migliaia di civili?

48) Enemy Spy (b): Impersonal, Instrumental, Other, Inevitable
Sei un ufficiale dell'esercito in guerra. I tuoi soldati hanno trovato una spia nemica intrappolata e ferita in un edificio diroccato. Sei stato informato che i nemici stanno progettando un attacco a sorpresa su una città vicina. Uccideranno migliaia di civili e la spia è a conoscenza di quale sarà la città attaccata. Hai interrogato l'uomo ma non vuole darti questa informazione e sai che non sopravviverà a lungo a causa delle sue ferite.

Se lasci entrare dei ratti nella sua cella, questi gli morderanno le gambe finchè non rivelerà il nome della città. Questo lo ucciderà, ma salverà migliaia di civili.

Estorci l'informazione alla spia lasciando che i ratti entrino nella cella, così da poter prevenire l'attacco su migliaia di civili?

49) Missile (a): Personal, Instrumental, Other, Avoidable

Sei al comando della Polizia Marittima. Vieni informato che il capitano e il marinaio di una nave cargo sono portatori sani di un virus letale e contagioso. Non sanno che sono stati infettati e stanno viaggiando verso un golfo dove vivono dei pescatori. Il sistema di comunicazione della nave cargo non funziona e quindi non puoi contattarli.

Se lanci un missile a tua disposizione sulla nave cargo eviterai che questa attracchi e che i due uomini diffondano il virus. In questo modo ucciderai il capitano e il marinaio ma salverai i pescatori.

Lanci un missile sulla nave cargo evitando che la nave attracchi, così da scongiurare che i pescatori vengano infettati?

50) Missile (b): Impersonal, Instrumental, Other, Avoidable

Sei al comando della Polizia Marittima. Vieni informato che il capitano e il marinaio di una nave cargo sono portatori sani di un virus letale e contagioso. Non sanno che sono stati infettati e stanno viaggiando verso un golfo dove vivono dei pescatori. Il sistema di comunicazione della nave cargo non funziona e quindi non puoi contattarli.

Se segnali la nave all'Aviazione, questa lancerà un missile sulla nave cargo evitando che attracchi e che i due uomini diffondano il virus. Questo ucciderà il capitano e il marinaio ma salverà i pescatori.

Segnali la nave all'Aviazione evitando che la nave attracchi, così da scongiurare che i pescatori vengano infettati?

51) Bomb in the Bank (a): Personal, Incidental, Self, Inevitable

Ti trovi in un ufficio della tua banca insieme a quattro persone. Improvvisamente, il direttore ti chiama perchè ha scoperto una bomba nel caveau della banca, dove in questo momento si trova un cliente. Il direttore sa che sei un artificiere e ti chiede di disinnescare la bomba. Realizzi subito che non c'è abbastanza tempo per disinnescare la bomba o evacuare la banca prima che la bomba esploda.

Se chiudi manualmente la porta blindata del caveau, l'esplosione resterà confinata al suo interno ma il cliente non farà in tempo ad uscire. In questo modo ucciderai il cliente ma salverai te stesso e le altre quattro persone nella banca.

Chiudi manualmente la porta del caveau confinando l'esplosione al suo interno, dove si trova il cliente, così che non colpisca te e le altre quattro persone?

52) Bomb in the Bank (b): Impersonal, Incidental, Self, Inevitable

Ti trovi in un ufficio della tua banca insieme a quattro persone. Improvvisamente, il direttore ti chiama perchè ha scoperto una bomba nel caveau della banca, dove in questo momento si trova un cliente. Il direttore sa che sei un artificiere e ti chiede di disinnescare la bomba. Realizzi subito che non c'è abbastanza tempo per disinnescare la bomba o evacuare la banca prima che la bomba esploda.

Se premi il pulsante di emergenza la porta blindata del caveau si chiuderà, l'esplosione resterà confinata al suo interno ma il cliente non farà in tempo ad uscire. Questo ucciderà il cliente ma salverà te stesso e le altre quattro persone nella banca.

Fai chiudere la porta del caveau dove si trova il cliente, premendo il pulsante di emergenza così che l'esplosione non colpisca te e le altre quattro persone?