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Seminar Paper

Ethical Positions and Decision Making

Examining the (gendered) effects of Ethical Positions on Moral
Decision Making using the Trolley Experiment

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Abstract

In this paper, the ethical decision-making is examined through a survey of action decisions with three different treatment groups regarding the known trolley dilemma and footbridge dilemma. The original dilemma was developed by Foot (1978) p. 2 and consists of a mental experiment in which the driver a runaway tram is heading towards a group of five people and will kill these people, unless the tram is diverted to a second track where only one person is standing. The driver has the choice of doing nothing, in which case, five people will perish, or divert the tram, ensuring the death of the person on the other track. This thought scenario is traditionally employed to evaluate deontological and consequentialist reasoning mechanisms (cf. Kahane 2015: 557).

In this paper we will also consider the gender differences in ethical decision-making, as studies involving trolley dilemmas have found that men are more inclined to make utilitarian decisions than women (cf. Zamzow & Nichols 2009: 371). Research of the past two decades has focussed on these kind of gender differences with regard to moral decisions. However, literature reviewing the interplay between gender and individual ethical positions – and how it influences moral choices – has been "surprisingly scarce" (Donoho et al. 2012: 57). This paper will therefore contribute to existing literature by considering the role of ethical positions when explaining gender related patterns in moral decision making.

Seminar: Political Framing

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1   Introduction

The discussion about ethical principles can be found today in many socially relevant areas. Research on digital technologies such as autonomous driving, which is already possible and may soon be reality on our streets, must deal with such principles. In Germany, politicians adopted the first set of ethical standards for autonomous driving system manufacturing (cf. King 2018). But the question if and how "moral programming" (Birnbacher & Birnbacher 2016: 9) is possible will be difficult to solve and the political discussion will remain.

Political framing is a phenomenon which is used more and more by politicians today to win people's votes and to convince people for such decisions as mentioned in the example of the autonomous driving. Framing is the setting of frames of interpretation over language and can work in very different ways. Frames are not manipulative per se, but a natural part of all language and one can't resist frames neuronally as they are always activated when we hear or read a word.

In this paper, the ethical decision-making is examined through a survey of action decisions with three different treatment groups regarding the known trolley dilemma and footbridge dilemma. The original dilemma was developed by Foot (1978) p. 2 and consists of a mental experiment in which the driver a runaway tram is heading towards a group of five people and will kill these people, unless the tram is diverted to a second track where only one person is standing. The driver has the choice of doing nothing, in which case, five people will perish, or divert the tram, ensuring the death of the person on the other track. This thought scenario is traditionally employed to evaluate deontological and consequentialist reasoning mechanisms (cf. Kahane 2015: 557).

In this paper we will also consider the gender differences in ethical decision-making, as studies involving trolley dilemmas have found that men are more inclined to make utilitarian decisions than women (cf. Zamzow & Nichols 2009: 371). Research of the past two decades has focussed on these kind of gender differences with regard to moral decisions. However, literature reviewing the interplay between gender and individual ethical positions – and how it influences moral choices – has been "surprisingly scarce" (Donoho et al. 2012: 57). This paper will therefore contribute to existing literature by considering the role of ethical positions when explaining gender related patterns in moral decision making.

In the following section, the theoretical background of ethical decision making, ethical positions and the role of gender is examined. In the methodological section the online survey experiment is explained and the operationalization of the variables used in this analysis is discussed. Afterwards, problems regarding the randomization into three treatment groups are analysed and descriptive statistics are reported. What follows is the empirical analysis, for which 12 different models were estimated. In the last section, the results of the analysis are discussed in regard to their broader implications for theory and some concluding remarks on future research are made.

2   Theory

2.1   Ethical decision making

When faced with an ethical decision, there is rarely a single, indisputable moral course of action. The same action can be considered both moral and immoral. When making such decisions, individuals can refer to certain moral principles, such as "you must not harm", or "you must not lie", but can also take into account the consequences of the specific action. These two different perspectives consist, respectively, of deontological and teleological decision making logics (2.1.1.). A means of understanding how people make ethical decisions is to use thought experiments such as sacrificial dilemmas like the trolley dilemma, where the individual must choose the action that one considers the most moral (2.1.2.).

2.1.1   Deontological and teleological decision making logics

In Western normative philosophy, a distinction is traditionally drawn between deontological and teleological ethical frameworks (Singer 2013). These perspectives, identified as "the two major ethical principles" by Kohlberg (1984) p. 579, rely on two distinct bases to assess the morality of acts (Bartels 2008: 382).

Deontology (from "deon", meaning "duty" or "obligation") refers to a normative framework in which the morality of an action is judged according to its intrinsic rightness or wrongness irrespective of its consequences (Frankena 1973). The normative principles that determine whether an action is right or wrong are perceived as inherently true without further justification. Kant's categorical imperative (1785) is considered the key concept of this deontological moral system. It posits that an unconditional rule is considered as a moral end in itself, regardless of the circumstances or purposes (Schwaiger[Kant] 1785). It follows that only the moral integrity of the individual act counts. Committing "bad" acts cannot be morally justified, even as a means to morally-imperative ends, and even even if the bad acts are negligible compared to the importance of the larger goal to be achieved (i.e. telling a lie or intentionally harming a person to save millions of lives (Bartels 2008: 382).

By contrast, teleology (from "telos", meaning "goal" or "end") refers to a normative framework in which the morality of an action is solely based on the desirability of the outcome. Here, the moral "goodness" of an action is extrinsic to the action itself, and depends on the consequence of the action (cf. Frankena 1973). Actions are, in a sense, considered morally neutral. Only when taking into account the intended consequence, can an action be morally evaluated. Moral evaluation of an act consists in gauging whether the "goodness" of the outcome overweighs the possible "badness" of the act. Teleological moral reasoning is therefore also referred to as consequentialism. A prominent

strand of consequentialist ethics is John Stuart Mill's utilitarianism, in which actions that ultimately maximise "the greatest good for the greatest number" are judged as moral (cf. Bartels 2008: 382).

However, these definitions are ideal types. It is commonly assumed that these two categories of ethical reasoning are combinable and that their respective degree is nuanced (cf. Cornelissen et al. 2013: 483). Holmes (1993) differentiates between strong deontology, which does not take into account an act's "goodness" to determine its rightness, and weak deontology, which sees "goodness" as a major but not decisive factor for moral rightness (Indick et al. 2000: 286). As such, the goodness of an act's consequences is important in both ethical perspectives. It is however the only important element for consequentialism, which aims to produce the best possible outcomes regardless of the means employed (cf. Bartels 2008: 382). In certain contexts, deontologist and consequentialist reasoning might lead to the same moral decision, for instance when an intrinsically bad act leads to harmful consequences. In consequentialism, deontological principles are often considered as informal rules which must be overridden in circumstances where not doing so produces harmful consequences (i.e. telling the truth leading to the death of innocent people) (cf. Bartels 2008: 382).

Previous work has shown that this distinction between deontology and teleology is not only relevant in moral philosophy, but also for individuals when reflecting on their actions. Both types of argument can be used to justify actions, and at times both moral reasonings can be combined. Depending on different situations, individuals might focus on one of the two logics or on a combination of both to make their decision (cf. Cornelissen et al. 2013: 483).

A prominent way of revealing deontological and teleological decision making logics has been to apply them to thought experiments such as the trolley dilemma as well as to its variants in the form of the switch or the footbridge dilemmas.

2.1.2   Different trolley dilemma settings and different decision making logics

Originally expressed by Foot (1967), what will later be referred to as the trolley dilemma consists of a mental experiment in which a runaway tram is heading towards a group of five people and will kill these people, unless the tram is diverted to a second track where only one person is standing (Foot 1967: 2). The individual has the choice of doing nothing, in which case, five people will perish, or divert the tram, ensuring the death of the person on the other track. In this moral dilemma, both inaction and action cannot only be morally justified, but also be considered immoral, depending on the individual's stance.

In the original dilemma, it is the driver of the runaway trolley who must choose to divert the train or not: the "driver [. . .] can only steer from one narrow track on to another; five men are working on one track and one man on the other; anyone on the track he enters is bound to be killed." The main question in this scenario is "why we should say, without hesitation, that the driver should

steer for the less occupied track" (Foot 1967: 2).

In the trolley or switch dilemma, the participating individual is no longer the driver as in the original trolley dilemma, but is a bystander who has the possibility to hit a switch that diverts the trolley from a track heading towards five people to a track heading towards one person. There is widespread agreement amongst philosophers that, in this scenario, it might be morally acceptable to hit the switch (cf. Nichols & Mallon 2006: 2).

The footbridge dilemma refers however to a scenario where a stranger is pushed in front of the trolley to prevent it from killing the five people on the track, by using the body of the stranger to stop the train. Both philosophers and the majority of individuals argue that it is wrong to push the stranger onto the track, even if this means that the five people will die (cf. Nichols & Mallon 2006: 2). As previous studies have established, "most people think it is permissible to divert a train so that it will kill one innocent person instead of five, but most people think that it is not permissible to push a stranger in front of a train to save five innocents." (Nichols & Mallon 2006: 1).

Given the similarity of the outcome of these scenarios, where one person is sacrificed to save five, and the differing responses, this result seems interesting. It has been argued that people are more inclined to apply a teleological logic when it comes to the trolley dilemma and a deontologist logic when solving the footbridge dilemma (cf. Nakamura 2013: 803).

Where do these different decision making logics stem from? Let us recall that for consequentialists the relevant unit of analysis is the outcome and not the action whereas for deontologists, the opposite holds true. This is the reason why especially deontologist philosophers have developed a set of different trolley scenarios that evoke intuitive reactions in favour of the normative assumption that certain acts are impermissible. By designing cases similar to the footbridge dilemma, deontologists emphasise that some actions are so "evil" that consequentialism is not an appropriate moral theory to justify them (Bartels 2008: 385). Using these different scenarios, they argue that actions leading to similar outcomes can present different type of actions and therefore trigger different moral judgements. For instance, the act of killing can be seen as forbidden whereas the decision to let somebody die might be morally justifiable (cf. Bartels 2008: 385).

Within the field of moral philosophy, the type of intention is central to determine the morality of a specific action (cf. Foot 1967: 2). As Foot explains, the difference can be drawn between "what we allow" (thought of as obliquely intended) and "what we do" (equated with direct intention) (cf. Foot 1967: 3). There is an obvious difference between a situation where the intention to kill is direct, and a situation where death is the consequence but not the purpose of a decision. The intention to kill is thus oblique, that is to say, a natural and foreseeable consequence of switching the track, but not the main intention. If the intention of the push is to kill the pushed individual, i.e. that the individual must die in order to save the others, then death is a direct intention. Whereas in the case

of switching the track, the death caused is an oblique intention. The switch dilemma is thus usually considered as an "incidental" dilemma, in which the death of one person is a predictable but not intended result of the action aimed at saving more people. The footbridge dilemma, on the other hand, belongs to the category of "instrumental" dilemmas, in which the killing of one person is an absolute necessary means to save more people (cf. Lotto et al. 2014: 1). As Greene sums up, "[...] the difference between these two cases lies in the fact that in the footbridge dilemma one literally uses a fellow human being as a means to some independent end, whereas in the trolley dilemma the unfortunate person just happens to be in the way" (Greene et al. 2001: 2105).

Another aspect to be taken into account is the degree of personal involvement. When confronted with an "impersonal" dilemma like the switch scenario (diverting the trolley away from five people to one person), which does not elicit emotional reactions, most respondents would engage in a consequentialist logic, whereby it would be morally acceptable to let one person die to save more people. However, when dealing with a "personal" dilemma like the footbridge scenario (pushing a person onto the tracks so that the person's body stops the trolley from reaching five people), emotional reactions are elicited and most people refuse to commit a harmful act, thereby engaging in a deontological logic (cf. Gleichgerrcht & Young 2013: 1). It has been established that the degree of emotions involved might increase when the intention to harm is combined with the use of personal force. In addition, the use of personal physical force also influences the perceived morality of an action. This involves physically pushing someone into harm's way, rather than pulling a trigger on a gun, for instance. A situation in which personal force is exerted will thus be considered morally worse than if a switch is flicked (cf. Greene et al. 2001: 2105). Previous studies have shown that this kind of scenario evokes the strongest emotional reaction and consequently a more deontology-consistent response (cf. Gleichgerrcht & Young 2013: 1).

Whilst appearing to be fundamentally similar in their outcomes, the differing actions employed in these two dilemmas appeal to different ethical decision making logics, thus making these dilemmas highly adapted to analysing the different influences of ethical positions and their different interactions with gender and deliberation processes. These are the theoretical elements that will be explored in the following chapters.

2.2   Ethical Positions

Current theoretical approaches believe that „individual differences in ethical ideology [...] play a key role in ethical decision making" (Davis et al. 2001: 35). This means that each individual's moral philosophy may have an influence on a person's ethical judgments, their response and behavior in a given situation. A way of classifying these different moral philosophies is proposed by Forsyth (1980, 1992) and involves two dimensions; relativism and idealism. According to Forsyth, moral judgments

and decision making will vary according to one's position on these two dimensions (cf. Davis et al. 2001: 35). These "individual moral beliefs and attitudes are part of an integrated conceptual system of personal ethics" (Davis et al. 2001: 35).

The first concept, idealism, "refers to individuals' concern for the welfare of others" (Forsyth et al. 1988: 244). Those individuals who are idealistic in their moral judgements ("idealists"), "believe in the absolute value of ethical standards based on unselfish concern for others" (Park 2005: 84). Therefore their ethical judgment are "morally absolute in terms of moral principles, norms or laws" (Park 2005: 83) insisting that one must always avoid harming others and act for the welfare of others (cf. Forsyth et al. 1988: 244). Avoiding harming others can thus be perceived as a universal principle that can under no circumstances be broken. In contrast, non-idealistic individuals may approve harming someone, which "will sometimes be necessary to produce good" (Forsyth et al. 1988: 244). Idealism has been found to positively influence "the degree of deontological norms and ethical judgment (Vitell et al., 1993), perceived importance of ethics and social responsibility (Etheredge, 1999; Singhapakdi et al., 1996b), and ethical judgment and behavioral intention (Marta et al., 2001; Singhapakdi et al., 1996b, 1999)." (in Park 2005: 84).

The second concept, relativism, "refers to the extent to which individuals base their personal moral philosophies on universal ethical rules" (Forsyth et al. 1988: 244). Those individuals who are relativistic in their moral beliefs ("relativists"), see all "moral standards are relative to a society and culture" (Park 2005: 83). They assume that exceptionless moral principles do not exist (cf. Forsyth et al. 1988: 244) and that moral actions depend on the situations and circumstances (cf. Park 2005: 83). Ethical decision making of what is morally right and wrong can be changed according to the situation (cf. Park 2005: 84). On the other side, non-relativists see certain principles as their "guidelines for action" (Forsyth et al. 1988: 244).

The major contribution that Forsyth made was to emphasize that idealism and relativism are not mutually exclusive dimensions, as previously assumed (cf. Davis et al. 2001: 35). This means that both traits can be combined. An individual who exhibits a high degree of both idealist and relativist traits might be idealist when certain principles are concerned (i.e. "under no circumstance one can violate individual human rights") while being relativist in other domains (i.e. "whether it is morally right to divorce depends on the sociocultural situation").

Since these two concepts are considered independent, Forsyth distinguishes between four subtypes, depending on the varying degree to which an individual might exhibit idealist and/or relativist characteristics; Absolutists (high idealism/low relativism), Subjectivists (high relativism/low idealism), Situationists (high idealism/high relativism) and Exceptionalists (low relativism/low idealism) (cf. Strack & Gennerich 2007: 1).

Whereas Forsyth (1992) sees the dimensions, idealism and relativism, as independent concepts

of belief, many researchers have found contrasting relationships of idealism and relativism with ethical constructs (cf. Etheredge, 1999; Marta et al., 2001; Singhapakdi et al., 1996b, 1999; Vitell et al., 1993 in Park 2005: 84). Because of problems associated with their compatibility or the juxtaposition/contrasting of relativism and idealism, the four subtypes have been criticized in the literature (cf. Strack & Gennerich 2007: 2; Park 2005: 849), this study therefore concentrates on the first two subtypes, which are the absolutists (as referred to be highly idealistic) and the subjectivists (as referred to be highly relativist).

Given the characteristics of these two concepts as mentioned above, links can be drawn with deontological and consequentialist decisions. More idealistic individuals accentuate the importance of not harming others at any cost, thus deontological reasoning dominates the decision making process. We can thus formulate the following hypothesis:

H1a: The more idealist an individual, the less likely he/she will switch/push.

Persons with high relativism however recognize that rules are not universal and can be broken, thus other factors may influence the decision making process, including the consequences of action and inaction in addition to rules such as not to harm. Given therefore that relativism can both lead to action and inaction in the case of the trolley dilemma, the following hypothesis has been formulated:

H1b: Relativism has no effect on an individual's decision to switch/push.

2.3   The Influence of Gender

Gender, be it due to biological or sociological causes, is strongly associated with influencing an individual's values, ideals and priorities. This is particularly visible in the case of moral decision-making where the decision is based almost purely on these three factors. Thus, gender will influence whether an individual is more likely to make deontological or consequentialist ethical decisions (2.3.1.). Given these tendencies, gender is therefore associated to an individual's ethical position (2.3.2.)

2.3.1   Gender and Ethical Decision Making

As Marta and colleagues pointed out, "gender is regularly identified as a particularly important personal characteristic, which may affect ethical decisions" (Marta et al. 2008: 593). The claim that gender decisively influences choices when it comes to ethical issues has been empirically established (cf. Glover et al. 2002: 223f.). While both men and women consider their moral standards as higher than the other gender, the ethical judgements of men are less empathetic and sensitive than those of women (cf. Donoho et al. 2012: 57). Explanations for this gender difference are diverse, with two main strands of theorizing standing out.

One is the trait-driven account, which contrasts male instrumentalism and high competitiveness against female empathy and sensitivity (cf. Donoho et al. 2012: 57). Behavioral endocrinology maintains that biological aspects, for instance, the higher level of testosterone in men, may influence their ethical decisions. Testosterone is related to increased risk tolerance and higher endurance of conflict, fear, stress and threats. At the same time, it impedes reaction to affective signals, which plays an important role in encouraging empathic behaviors and choices. Carney and Mason therefore assumed that "individuals high in testosterone are more likely to make utilitarian decisions-specifically when doing so involves acts of aggression and social cost" (Carney & Mason 2010: 668).

An alternative account for these differences is gender socialization theory, which assumes that different orientations between men and women are the result of divergent socialization experiences more than that of innate biological traits (cf. Donoho et al. 2012: 57). This theory can be traced back to Freud (1925) and Piaget (1932), and was applied by Gilligan (1982) to explain the gender difference in moral evaluation logics. Individuals are expected from their early childhood on to act according to gender related stereotypes, leading men and women to develop different thinking processes and, as a consequence, different behavioral patterns (cf. Dubinsky et al. 2005: 1693). Thereafter, men are socially rewarded for exhibiting competitive behaviors whereas women are expected to exhibit caring, nurturing behaviors (cf. Donoho et al. 2012: 57).

In her work, Gilligan (1982) focused especially on the reasoning in moral dilemmas, and emphasizes that an important, often neglected factor in moral decision-making is the "care" component. She criticizes the focus of traditional theories, both in philosophical ethics and in moral psychology, on the criteria of justice and fairness as a primary determinant of human moral evaluation. She suggests that care is a decisive factor that sets apart male and female psychology when it comes to moral issues. A justice orientation is characterized by logic and reason, whereby moral decisions are made based on impartiality, and can be applied to every situation regardless of the circumstances to derive an ultimate "just" decision. A care orientation is motivated by empathy, and moral decisions can involve subjective emotions and individual evaluation of the respective relationships and situations. While these two orientations are not mutually exclusive, Galligan assumes that men are more likely to prioritize principles of justice over the principles of care, whereas it is the opposite for women. The takeaway from this theory is that the "ethic of justice", that frequently leads to consequential and objective moral evaluation, tends to characterize the male moral decision-making logic, while the "ethic of care", which often leads to the consideration of individual circumstances and motivations, is more indicative of female moral reasoning (cf. Carol 1982: 25).

Traits and socialization together provide theoretical reasons to believe that moral evaluation patterns differ between gender, with men being more inclined to make consequentialism-consistent decisions, while women being more inclined to make deontology-consistent decisions. As Dawson (1992:24)

describes, women evaluate moral behavior "by a standard of inclusion and an injunction against hurting others" (in Harris et al. 2004: 193) – a behavior that corresponds with the decision to not switch or push when confronted with the trolley dilemma. This leaves us with the following hypothesis:

H2a: Women are less inclined to switch/push than men.

2.3.2   Gender and Ethical Positions

While this conclusion might be plausible, Walker's (1984) meta-analysis of 108 studies has also shown contradicting results, with only eight cases clearly indicating gender differences in moral decision making (in Indick et al. 2000: 287). It is therefore legitimate to assume that, while gender-generated preferences do account for moral reasoning and moral choices to some extent, other factors decisively intervene to modify this relationship. This brings us back to ethical positions, assumed to be a key influencer of moral decisions in this paper. We will consider the role of ethical positions when explaining gender related patterns in moral decision making.

One of the few who explored the relationship between gender and ethical positions is Schminke (1997), with findings indicating that both men and women slant towards relativistic frameworks (cf. Schminke et al. 1997). Differences become apparent however when distinguishing between contexts: when it comes to decisions in non-business settings, women exhibit more idealism, while men exhibit more relativism (cf. Donoho et al. 2012: 57).

So, how does an individual's moral decision concerning the trolley dilemma change when its gender generated preferences for either deontologist or consequentialist orientation meet the influence of its idealism and relativism?

With regard to idealism, we can maintain that a high degree of this trait makes an individual adhere to the cardinal rule of never actively harming other human beings (cf. Forsyth et al. 1988: 244), hence making it opt for a deontological decision when confronted with the trolley dilemma. We just assumed that gender is indicative of differences in moral choices. However, it is plausible to assume that gender becomes increasingly irrelevant to predict an individual's moral choice the more it is characterized by this trait. However strongly a man (or a woman, in some cases) might have been socialized to endorse consequentialist-driven decisions, his reluctance to actively harm a person will become stronger the more idealist he is. This leaves us with the following hypotheses:

H2b: The more idealist a woman, the less inclined she is to switching/pushing.

H2c: The more idealist a man, the less inclined he is to switching/pushing.

H2d: The difference between woman and men (see H1) becomes smaller with higher idealism.

On the other hand, relativism is defined as the extent to which individuals reject universal ethical principles as the foundation for their moral philosophies. A high degree of relativism makes an individual evaluate morality on a case to case basis, making its moral judgements independent from sociocultural contexts (cf. Park 2005: 83) – including gender-generated patterns of thinking. We can therefore assume that, with increasing levels of relativism, a man or a woman's initial gender-related preferences for either deontology- or consequentialism-orientated choices, still exist, but become increasingly moderated by relativist scrutinization. The latter requires that the individual includes alternative principles and considerations when making moral evaluations. However strongly an individual might have been socialized to follow a certain decision making logic because of its gender, with increased relativism, it will be more inclined to reject the decision making logic that has been ascribed to it because of gender socialization.

While women are initially more likely to give a deontology-consistent response compared to their male counterpart (because of their care-orientation), their behaviour might deviate from this by gender generated reference framework the more relativist they are. This leaves us with the following hypothesis:

H2e: The more relativist a woman, the more inclined she is to switch/push.

Conversely, while men are initially more likely to give a consequentialism-consistent response compared to their female counterpart (because of their justice-orientation), their behaviour might deviate from this by gender generated reference framework the more relativist they are. This leaves us with the following hypothesis:

H2f: The more relativist a man, the less inclined he is to switch/push.

2.4   The Influence of Deliberation

2.4.1   Definition of Deliberation

To give a definition of deliberation, one needs to take a closer look at the idea of deliberative democracy, as there exists no single definition of deliberation. Many theorists thus focus on the essential features of deliberative democracy to define the concept.

This form of democracy "sees preference formation as a public, interpersonal activity at the core of democracy rather than an exogenous and private process that precedes political choice" (Leeper & Slothuus 2017: 1). Jürgen Habermas (1982), one of the main contributors to deliberative theory, developed a model of deliberation. This model is defined through the logic of communicative action through common understanding (cf. Habermas 1982: 385).

Deliberation is "not concerned with the aggregation of pre-existing, fixed preferences" but can

be described as a "process in which political actors listen to each other, reasonably justify their positions, show mutual respect, and are willing to re-evaluate and eventually revise their initial preferences" (Steenbergen et al. 2003: 21).

Myers and Mendelberg (in Huddy et al. 2013: 701) define deliberation as "the free, open-minded dialogue about a matter of public concern among anyone affected by the issue". Thus, we can say that deliberation is a form of dialogue between citizens who often already have a position regarding the topic at hand.

2.4.2 Deliberation and Ethical Decision Making

An assumption about how deliberation might influence moral decisions was formulated by Kahane (2015), who argues that "deliberative processing is needed to weigh competing moral rules, not to perform a utilitarian cost–benefit analysis" (Kahane 2015: 557). He interprets deliberative platforms as a place to discuss competing deontological guidelines, such as the « particularly salient deontological principle telling us that we mustn't cause certain kinds of harm (a component of what is often known as the duty of non-maleficence), and an opposing duty to prevent grievous harm to others (a component of beneficence) (cf. Kahane 2015: 557). The idea here is that the deliberation process consistently encourages emotional, deontology-consistent moral reasoning rather than consequentialist cost-benefit calculations that is less intuitive and more effort-intensive. This implies that people are more likely to slant towards deontology-consistent behaviour after being subjected to deliberative influences. However, other authors examining the link between deliberation and moral decision making have come to the opposite conclusion, despite starting from the same point of reference. Greene et al. also assume that deontology-consistent judgements are mainly produced by emotional responses while consequentialist-consistent judgements are the result of factual reasoning" (Greene 2008: 35 f.). While Kahane and like-minded authors conclude that deliberative action favours intuitive, deontological reasoning when moral issues are concerned, Greene et al. argue that deliberation serves rather as a platform that allows deontological intuitions to be overshadowed by consequentialist reasoning (cf. Greene 2008: 35 f.). Thus, consequentialist moral judgments are generated by deliberatively arguing away initially predominant, deontology-orientated intuitions.

As these are two opposite views on the potential effect of deliberation on moral decision making logics, no clear theoretical conclusion can be drawn. However, we might resolve this mystery by taking into the equation the interaction between individual ethical dispositions and deliberation processes. As mentioned before, idealist individuals show a high degree of adherence to universal principles, while relativist individuals show a high degree of rejection of universal principles. Given this key difference between relativism and idealism, it is interesting to compare the effect of idealism and that of relativism on ethical decision making logics when deliberation as an intervening variable comes

into play. The main question here is then, which kind of moral decision making logic individuals follow when idealist traits or relativist traits are combined with deliberation.

In this paper, we assume that the deontology-favouring effect of deliberation, as outlined by Kahane, does not apply to all individuals alike, but mainly to those already exhibiting idealist traits. Relativists, on the other hand, are less predictable with regard to the influence that deliberation has on their moral decisions. They are open to all kinds of deliberative influences, those that favour deontology consistent responses, and those that favour consequentialist consistent responses. However, if the consequentialist-favouring effect of deliberation, as explained by Green et al. does indeed apply, then it is more probable that this logic only works on individuals with relativist traits and not on those with idealist traits. We will derive hypotheses following these three lines of reasoning to test which out of these are salient.

First of all, individuals with idealist characteristics rely strongly on universal principles as a moral guideline, implying that these individuals are more likely to "jump onto" whatever argument that may support their position while ignoring opposite views. They will shy away from making the effort of developing exhaustive cost-benefit analyses that is counterintuitive and that requires them to distance themselves from their familiar way of thinking. Furthermore, it has been theorized that deliberation, when involving people with firm preferences, might lead to making their initial opinions more extreme instead of changing their opinions (cf. Schkade et al. 2010: 1). Following this logic, we assume that idealist individuals, who already adhere to the cardinal rule of "not harming", are likely to consolidate their initial position after a being confronted with opposing arguments. As they have always relied on their cherished principles to guide and to justify their behaviors, it is important for them to defend these even more strongly when challenged by non-likeminded people. Being backed-up by peers in the same camp, individuals possessing rigid, untouchable principles tend to consolidate rather than reconsider their position after a discussion. Accordingly, we generated the following two hypotheses:

> H3a: Receiving supporting and opposing arguments strengthens the effect of idealism on decision to not switch/push (assuming H1a validated, this means that idealist individuals will be even less likely to switch/push after being given arguments in favour of and against the deontological decision).

> H3b: Discussion supporting and opposing arguments strengthens the effect of idealism on decision to not switch/push (assuming H1a validated, this means that idealist individuals will be even less likely to switch/push after discussing the arguments in favour of and against the deontological decision).

Relativists, on the other hand, reject the claim that moral values and principles are set in stone. To take an example, moral relativism is the claim that the truth or justification of beliefs with moral

content is relative to specific moral codes (which in turn might depend on/co-vary with underlying paradigms, cultures, belief systems or linguistic contexts). Thus, relativists are more susceptible to outside influences. They are therefore more likely to change their opinion when receiving new information that challenges their initial view. Summing up, idealists are more likely to consolidate their position when challenged by new ideas and when having to defend their universal principles in discussions, while individuals with high relativism, who tend to reject of irrefutable universal truths, are probably more open to deliberative influences that might lead to opinion change, but not in a specifically predictable direction. This leaves us with the following hypothesis:

H4a: In general, relativism has no effect on the direction of opinion change.

Lastly, if we take into account Green et al.'s argument – that deliberation allows for consequentialist-rationalist reasoning to overshadow initially deontology-consistent responses in moral arguments – then we can assume a hypothesis that is contrary to H4a. In this case, we would assume that deliberation does influence the direction of opinion change in favour of derailing the trolley or of pushing the person to be save five other people. While this logic might not apply to idealism (individuals tend to be unwavering when their moral principles are concerned), it might kick in for highly relativist individuals (moral principles relative to individual context), which are persuaded by those utilitarian cost-benefit analysis during the deliberative process.

This leads us to an additional hypothesis to be tested against H4a:

H4b: After experiencing deliberative influences, the more relativist an individual is, the greater the opinion change in the direction of switching/pushing.

3   Methods and Data

3.1   Online Experiment

A online survey-experiment, on which this paper was based, concerning moral decision-making in the two hypothetical dilemmas was conducted over a period of one week. The studied subjects were chosen beforehand through dispension of digital invitations by members of the project group. Three hundred subjects were selected this way. As a result of the selection method, the sample reflects a very high percentage of students as well as a very low age and a political centre-left attitude on average (see below).

The pooled subjects were randomized into three groups each receiving a different treatment in between the first and the second query of a decision in the two scenarios. The two different dilemmas were the described "trolley dilemma' and 'footbridge dilemma', also referred to as o the 'switch track" and "push person" dilemma, respectively (see appendix for original descriptions). For the first scenario, people were asked (translated from German): "Please imagine the following situation: A waggon is moving towards five persons, who are standing on the track and will be killed if nothing is done. Anna can redirect the waggon to a second track, rescuing all five persons. But on the second track, there is one uninvolved person. This person will die if the tracks are switched. To which degree is it morally justifiable for Anna to redirect the waggon onto the second track?" The second scenario differed in regard to the action Anna could take to stop the train: instead of switching tracks, she could push a person in front of the train to stop it, so the five persons would be rescued, but the pushed person would die."

Chosen subjects got to read a insertion text and had to fill in a survey regarding their general ethical position (cf. Forsyth 1980) as well as their personality and political attitudes. The they were asked to make a first decision in one of the two ethical dilemmas via dichotomous Yes/No choice and continuous tendency-rating, which will be used as the dependent variable in this paper. Afterwards each of the three groups received a treatment:

- The first group, which comes closest to a ‚control group', had to read a short text conerning ethics (see attachement).
- In the second group each subject received identical utilitarian and deontological arguments. Three arguments each argued for or against an intervention in the ethical dilemmas (see attachement).
- The third group participated in a one-week-long asynchronous dialog on a digital platform. "Smartopinion" allowed the participants to post and comment their own arguments for or against any decision in the ethical dilemma or comment on one of 6 pro/contra-arguments (3 each utilitarian/deontological) which were posted beforehand by the project group. The

discussion was moderated by project members who did not intervene in the dialog at any
given point.

After these treatments the subjects were once again asked for their decision in their respective
ethical dilemma in the forms of choice and rating and answered a questionnaire concerning their
socio-demographic background.

3.2   Dataset

The resulting dataset consists of 93 variables and data from 300 subjects. The studied sample depicts
a high percentage of students (approximately 92 percent) and therefore reflects a low age (24 years),
a political centre-left attitude (4.7 on a scale from 1 to 10) and a relatively high political interest
(3.2 on a scale from 1 to 4) on average. The exact population cannot be determined, because of
arbitrary selection mechanisms within some steps of the research process (dispension of invitations,
reaction to invitations etc.). The interpretation of any results from this study should therefore be
carried out with caution, even with respect to the population of students from the University of
Stuttgart.

3.3   Operationialization and Factor Analysis

The factors under study were operationalized as follows:

The dependent variable, the decision in one of two ethical dilemmas, was gathered in the form
continuous tendency in regards to whether Anna's action of switching the tracks/pushing the person
was morally justifiable (ranging from 1"Not at all", 6 "partly" to 11 "Absolutely")

The main independent variables, the different ethical ideologies of the subjects under study, were
gathered as German versions of the twenty "Ethical Position" items originally developed by Forsyth
(1980). These items ask the respondent for their reaction to ethical statements concerning one of
the two dimensions (Idealism and Relativism) identified by Forsyth, on a scale from 1 ‚Completely
disagree' to 9 ‚Completely agree' (Forsyth 1980: 178).

One example for such an (Idealism-)statement is:

> "A person should make certain that their actions never intentionally harm another even
> to a small degree" (Forsyth 1980: 178).

The used translation of the "Ethical Position Questionnaire" was taken from Strack and Gennerich
(Strack & Gennerich 2007: 13). The question wording in German can be found in the Appendix. To
validate and extract the two dimensions, ‚Idealism' and ‚Relativism', from the data, an Explorative
Factor Analysis (Principal Component Analysis) was conducted and indices, each consisting of

their dimension's 10 variables, were formed (see below). The selected control variables were age (continuous), gender (dichotomous) and frequency of church attendance from 1 ,More than once a week' to 6 ,Never'.

In order to validate the two latent dimensions Idealism and Relativism, from the Ethical Positions Questionnaire, a principal component analysis with the rotation method varimax was performed. Consequently, the extracted factors are orthogonal and therefore independent from each other. This rotation method was also used by Forsyth (cf. Forsyth 1980; Davis et al. 2001: 45).

Figure 1: Principal Component Analysis

N = 278. Own calculations based on data from Online-Survey Experiment.
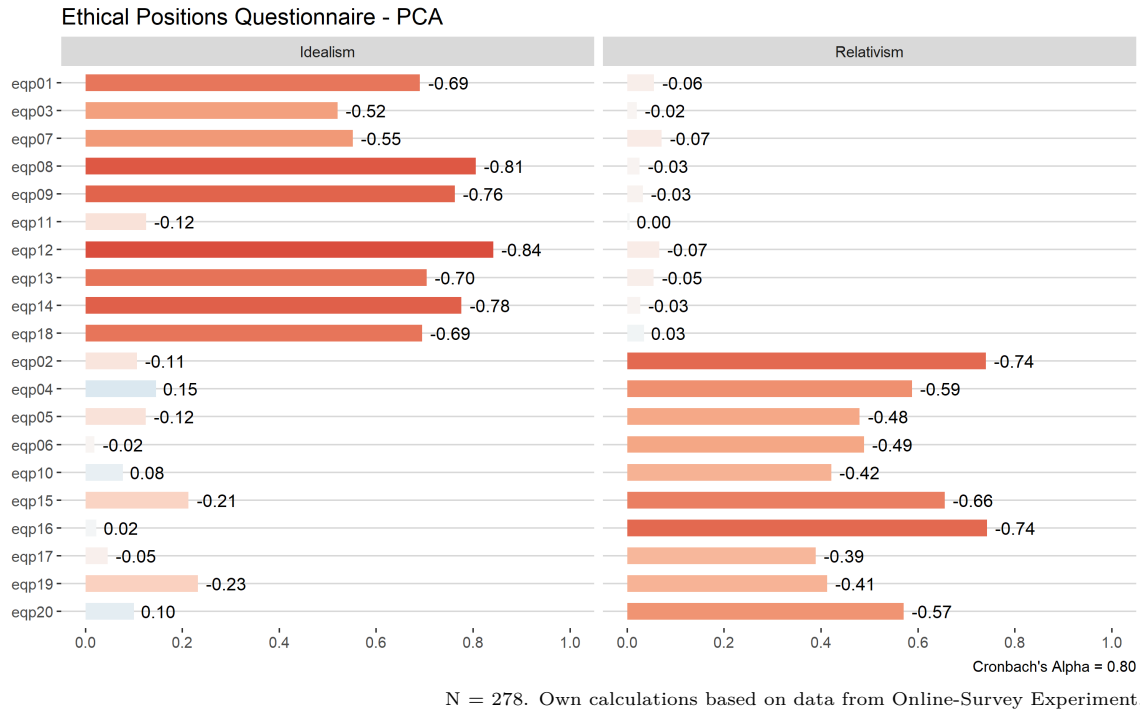
The factor analysis (Figure 1) shows that the variables of the ethical positions questionnaire load very well without any large cross-loads (highest cross-loading: eqp19 = -0.23). Therefore, a high divergent/discriminant validity is indicated. Regarding convergence validity, only the loading of eqp11 is rather low (-0.12), although the factor Idealism has higher factor loadings on average. In general, construct validity for both factors can be assumed, even if the factor idealism seems to be better captured by its items. For the aggregation of the factors, factore scores were created and used to weight the respective variables.

3.4   Randomization and Descriptive Statistics

This section will introduce some basic descriptive statistics of the used variables. Table 1 shows summary statistics for the variables of the analysis. Regarding the rule of thumb for normal distribution of skewness and kurtosis within +/- 1, only the control variables age and church

Table 1: Summary Statistics

	N	Mean	SD	Median	Min	Max	Skew	Kurt
Switch Track T1	290	5.76	2.91	6	1	11	-0.03	-0.90
Switch Track T2	290	5.56	2.91	6	1	11	0.01	-0.94
Push Person T1	290	4.29	2.83	4	1	11	0.55	-0.72
Push Person T2	290	4.18	2.86	4	1	11	0.60	-0.64
Idealism	290	0	1	0.18	-3.40	1.73	-0.86	0.37
Relativism	290	0	1	0.11	-3.21	2.34	-0.35	0.02
Gender	290	1.46	0.50	1	1	2	0.17	-1.98
Age	289	24.09	3.86	23	18	53	2.14	10.52
Church Attendance	278	1.87	1.04	2	1	6	1.38	2.06
Control Group	290	0.32	0.47	0	0	1	0.78	-1.39
Discussion Group	290	0.34	0.47	0	0	1	0.67	-1.56
Information Group	290	0.34	0.47	0	0	1	0.67	-1.56

attendance show violations of the assumption. Especially age has a high kurtosis, the other values are well within the acceptable range of normal distributions.

Figure 2 depicts a comparison between the experimental groups by age and gender. It appears that, to some degree, the randomization of the groups was flawed. Regarding the comparison between the experimental groups by age and gender, the differences are significant. The control group has a women proportion of over 52%, whereas only 41% of the discussion group are women. In addition, there is a strong outlier in the control group with over 50 years in age, although the differences between the three groups are not statistically significant (p-values of t-tests are shown above the brackets for the respective distributions). In general, when excluding the outlier, age is rather evenly distributed between the treatment groups.

Regarding the dependent variables at the time T1, Figure 3 indicates significant differences between control and discussion groups for Scenario 1 ($p < 0.05$). Moreover the visual inspection of the
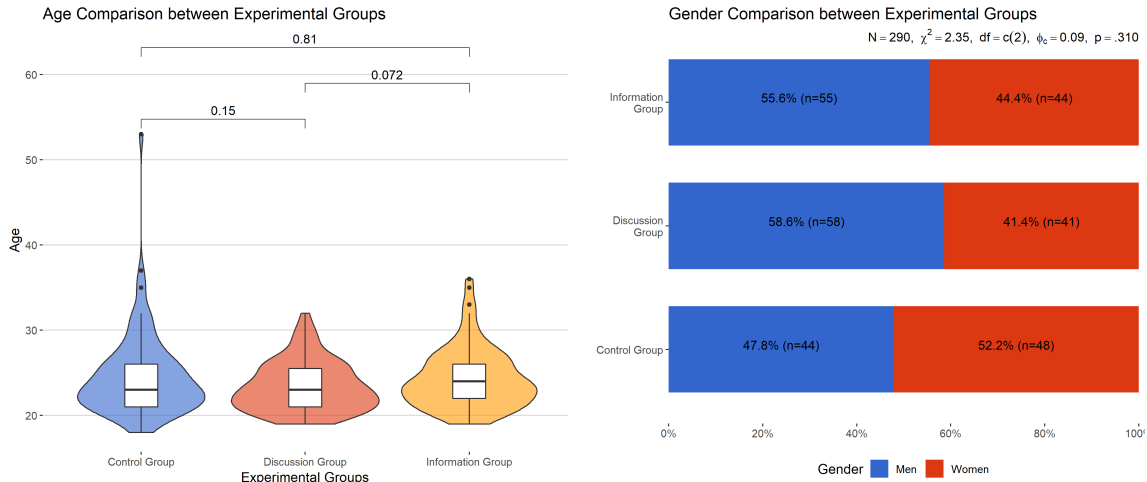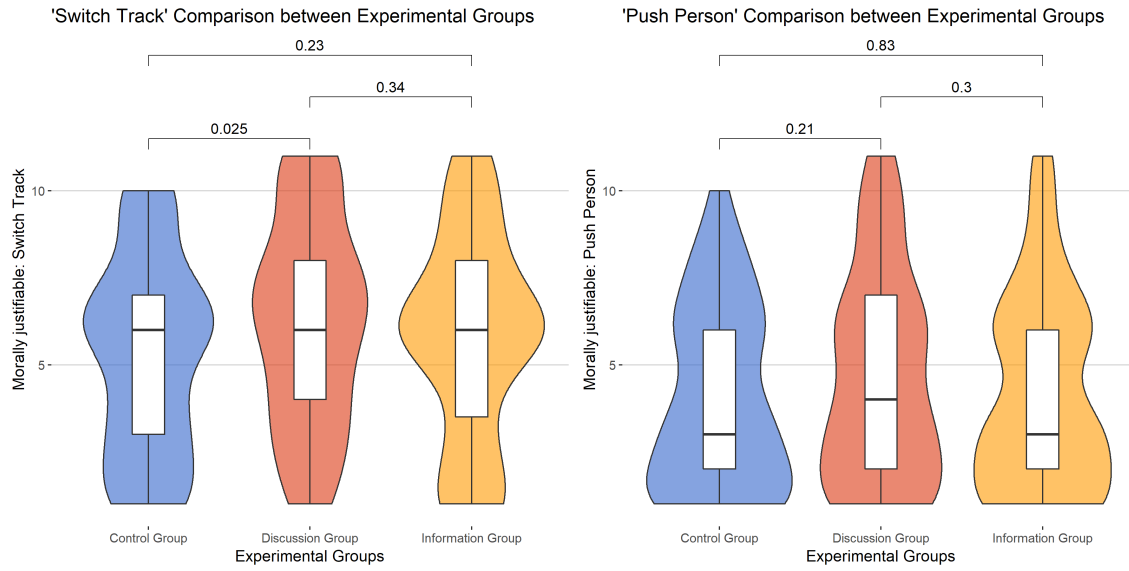
Figure 2: Randomization - Sociodemographics

N = 278. P-Values are reported. Own calculations based on data from Online-Survey Experiment.

Figure 3: Randomization - Dependent Variables

N = 278. P-Values are reported. Own calculations based on data from Online-Survey Experiment.

distribution does show some differences: the highest category was never chosen by individuals of the control group. Regarding scenario 2, there are similar differences observable, although statistically not significant, which might be due to the fact that in sum, more people chose lower scores on this variable.

Moreover, there are also differences between the experimental groups regarding the main independent variables Idealism and Relativism (see Figure 4). For relativism, these are not statistically significant, although the control group has a notably lower mean than discussion and information group. For

Figure 4: Randomization - Independent Variables

N = 278. P-Values are reported. Own calculations based on data from Online-Survey Experiment.
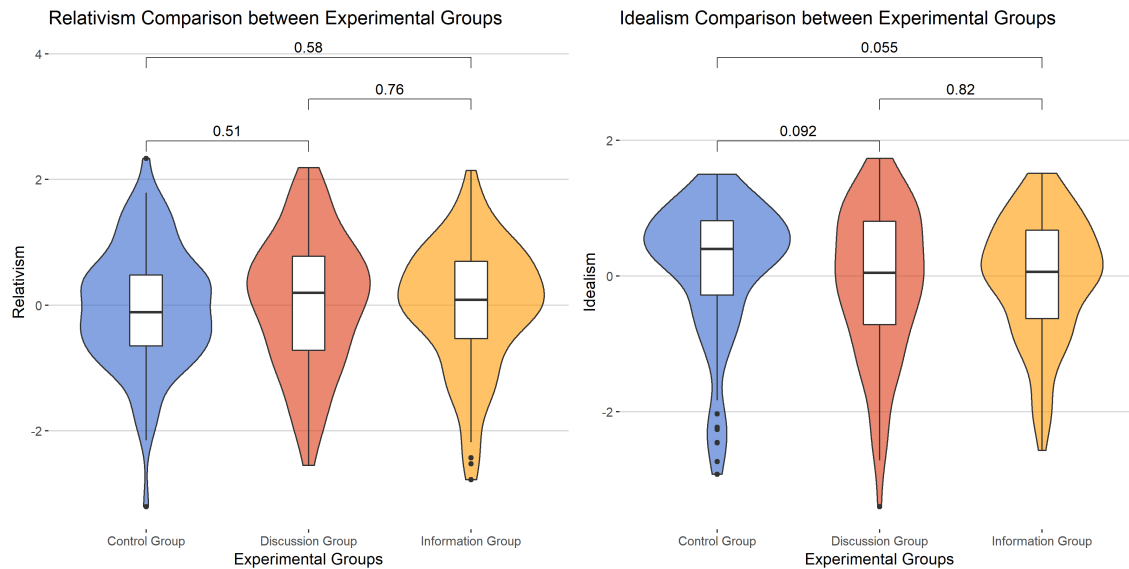
idealism, the difference in means between the control group and the discussion (p = 0.092) and information group (p = 0.055) are significant on the 90%-level, indicating that these groups contain on average more idealistic persons.

In sum, it can be concluded that the randomization into the three groups did not work out as intended. There are significant differences in means and different distributions of variables which are central to the analysis: gender, relativism and the dependent variables, especially the Switch track variable. Concerning this issue, the following analysis should be interpreted with caution.

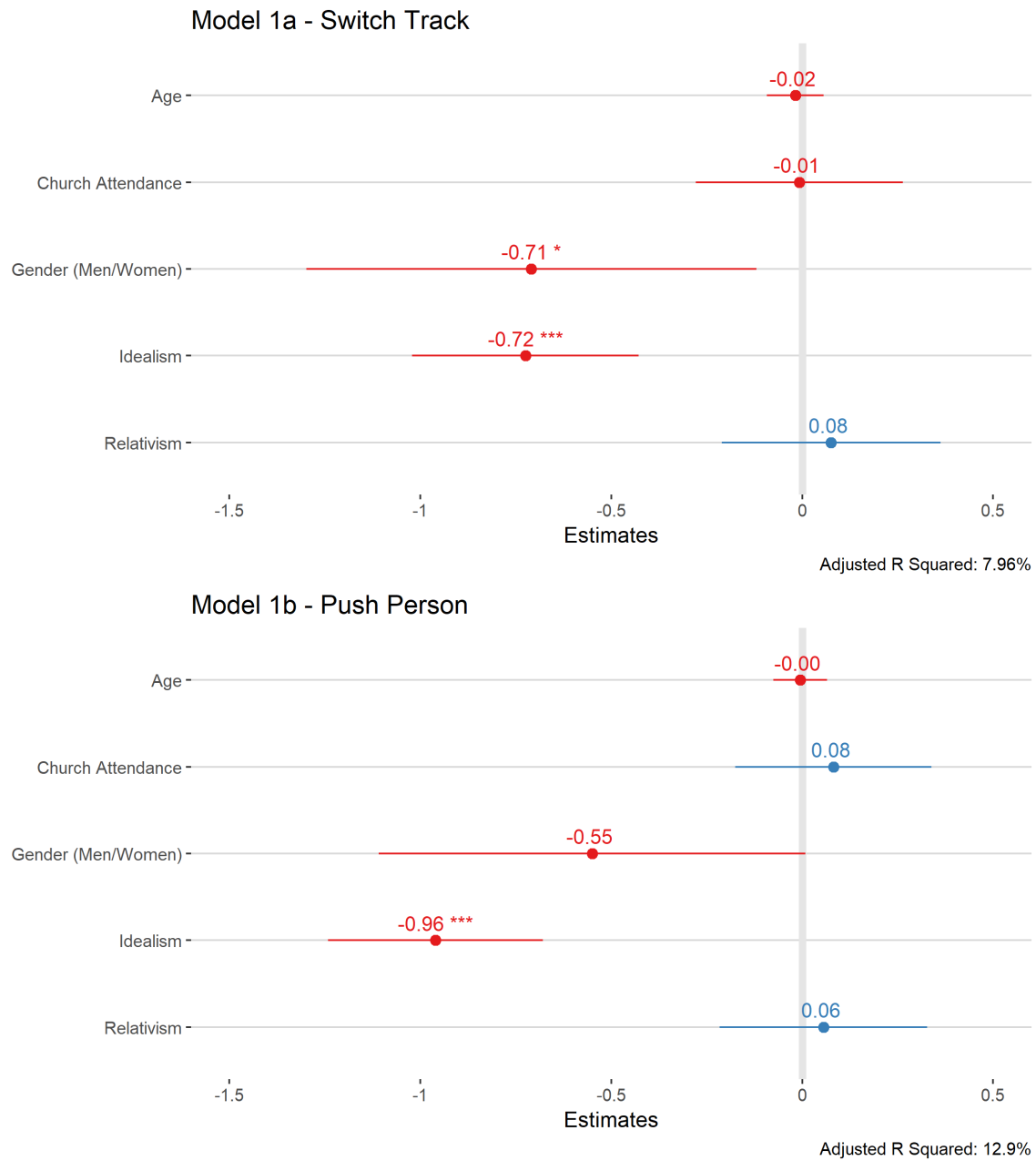Figure 5: Randomization - Dependent Variables by Gender
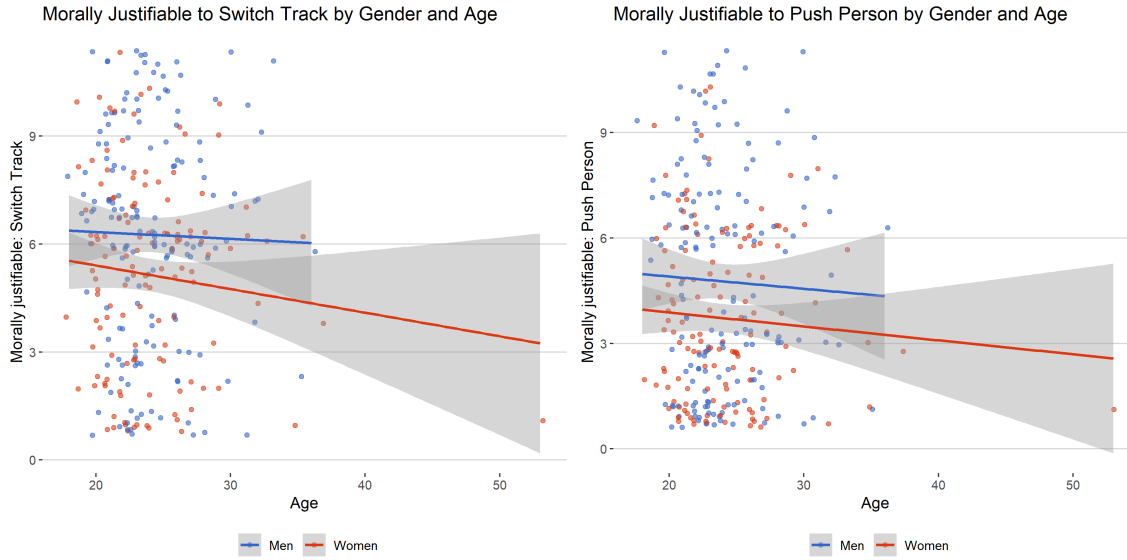
N = 278. Own calculations based on data from Online-Survey Experiment.

After the randomization was checked, some general descriptive statistics are reported. When it comes to the question of whether it is morally justifiable to switch the track or even push a person, there are differences in age and gender (see Figure 5). Older people as well as female persons consider both scenarios as less morally justified. Examining the values of both scenarios for men and women seperately, the differences are statistically significant in both scenarios with men being more likely to push and switch. Comparing the two scenarios shows that switching tracks is on average more likely to be considered morally justifiable than pushing a person.
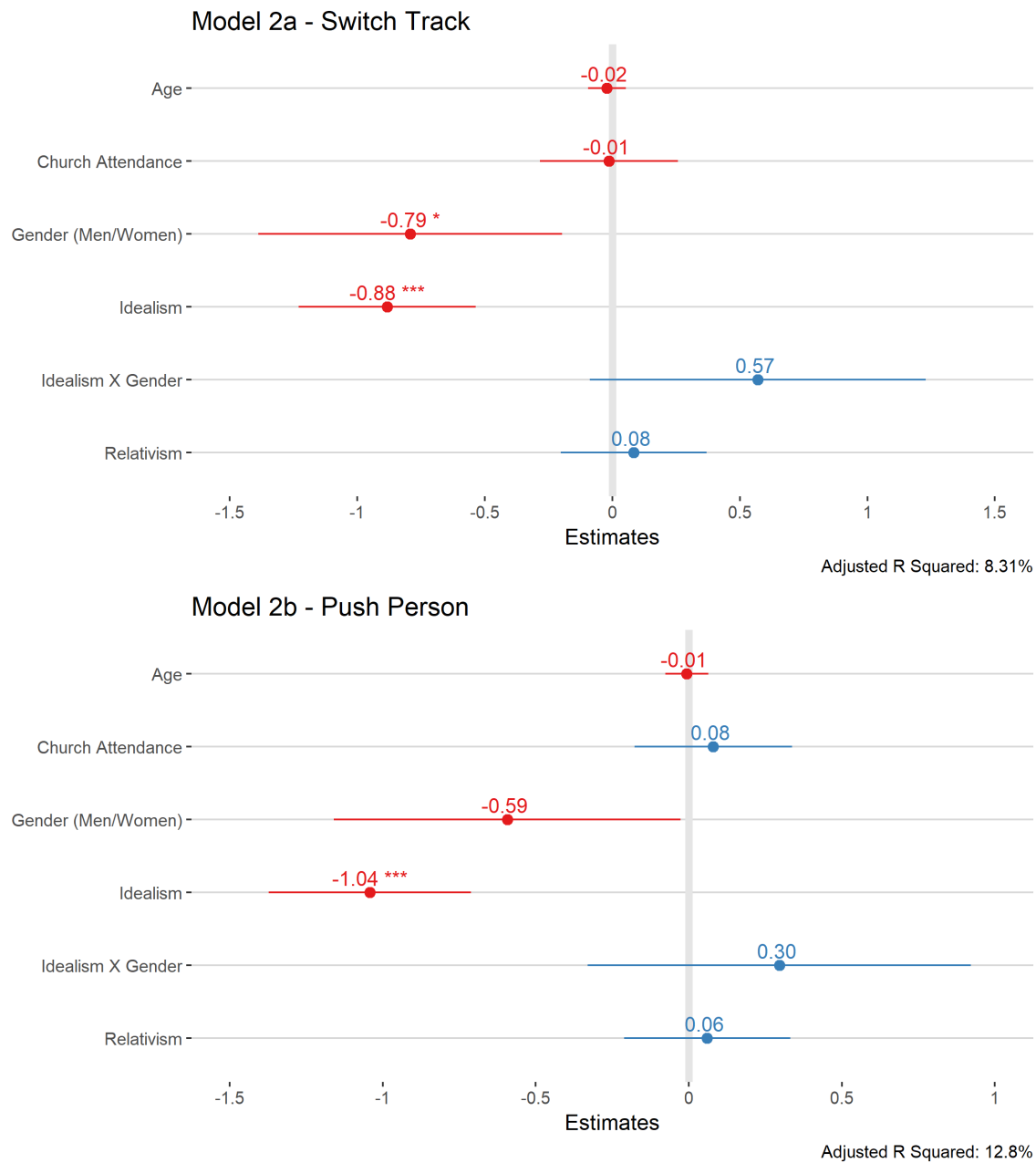
4   Analysis

Figure 6: Models 1

Model 1a - Switch Track

Age   -0.02

Church Attendance   -0.01

Gender (Men/Women)   -0.71 *

Idealism   -0.72 ***

Relativism   0.08

Estimates

Adjusted R Squared: 7.96%

Model 1b - Push Person

Age   -0.00

Church Attendance   0.08

Gender (Men/Women)   -0.55

Idealism   -0.96 ***

Relativism   0.06

Estimates

Adjusted R Squared: 12.9%

$^{***}p < 0.001, ^{**}p < 0.01, ^{*}p < 0.05$. Unstandardized regression coefficients. 90% confidence intervals are shown. Own calculations based on data from Online-Survey Experiment.

In this section, the regression models are reported and interpreted in regard to their implications for the previously derived hypotheses. In sum, 12 models were estimated, which are depicted in coefficient and interaction plots (see Figures 1 to 13). Models with the suffix "a" represent the dependent variable asked for scenario 1 (switch track), the suffix "b" designates the respective models with the dependent variable for scenario 2 (push person). In general, statistical significance

Figure 7: Models 2 - Idealism

Model 2a - Switch Track

Adjusted R Squared: 8.31%

Model 2b - Push Person

Adjusted R Squared: 12.8%

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$. N = 278. Unstandardized regression coefficients. 90% confidence intervals are shown.
Own calculations based on data from Online-Survey Experiment.

is reported, but it should be noted, that it has not the same meaning as it has for analyses with data from a random sample. Therefore, significance should not be overinterpreted. Nevertheless, it can be used as an indicator of the precision and accuracy of the estimations (cf. Hildebrandt 2015: 82).

First, the models with the dependent variable at time T1 (before the treatment) are analyzed (Models 1 to 3 in Figures 6 to 10). Model 1a shows the results for scenario 1, model 1b for scenario 2 (Figure reg1). The factor idealism has a strong negative effect in both scenarios, meaning that the more idealistic a person is, the less they find it morally justifiable to switch track or push a person

(Model 1a: b = -0.72 , p < 0.001 and Model 1b: b = -0.96 , p < 0.001).

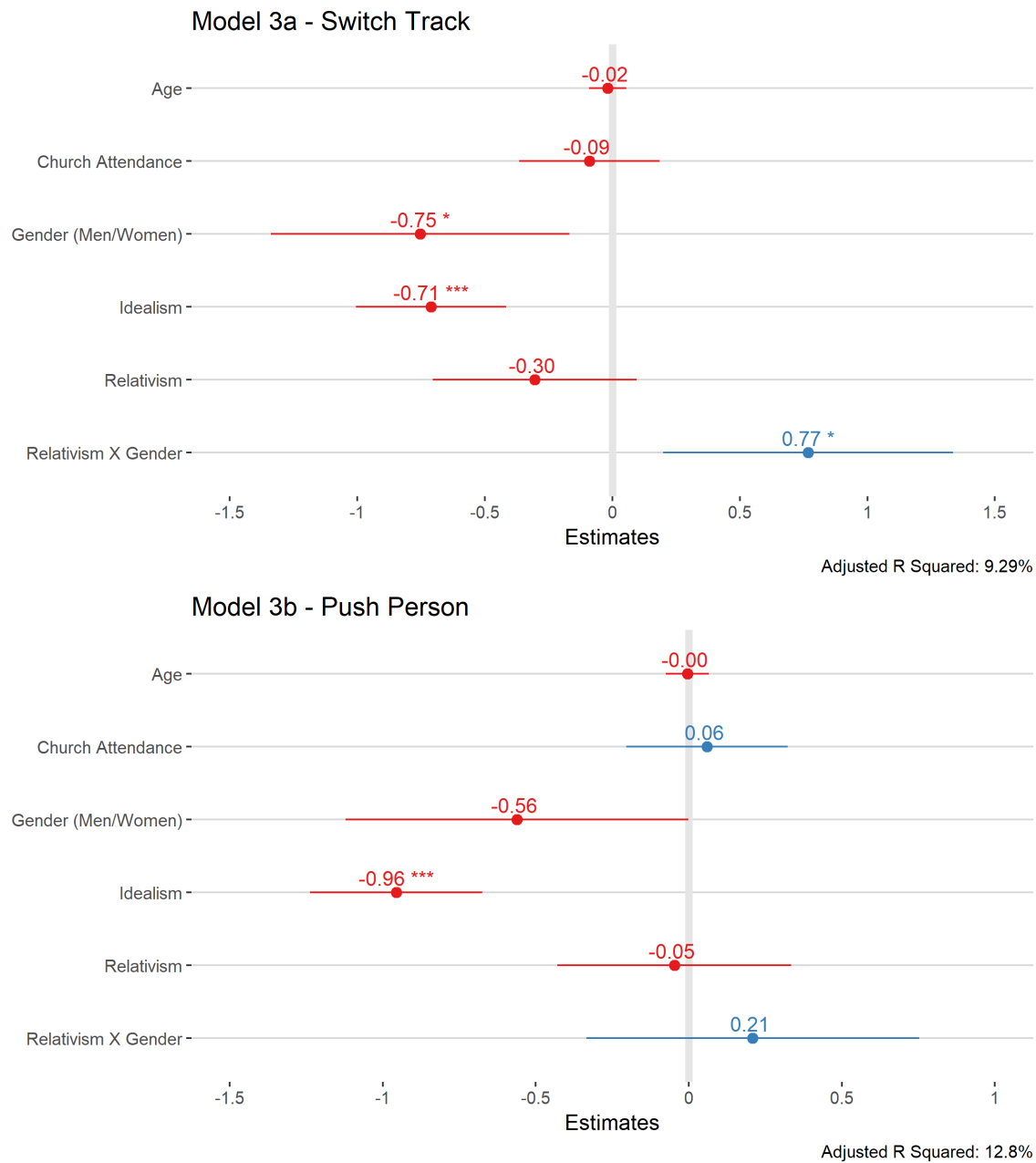Figure 8: Models 2 - Idealism Interaction Plots
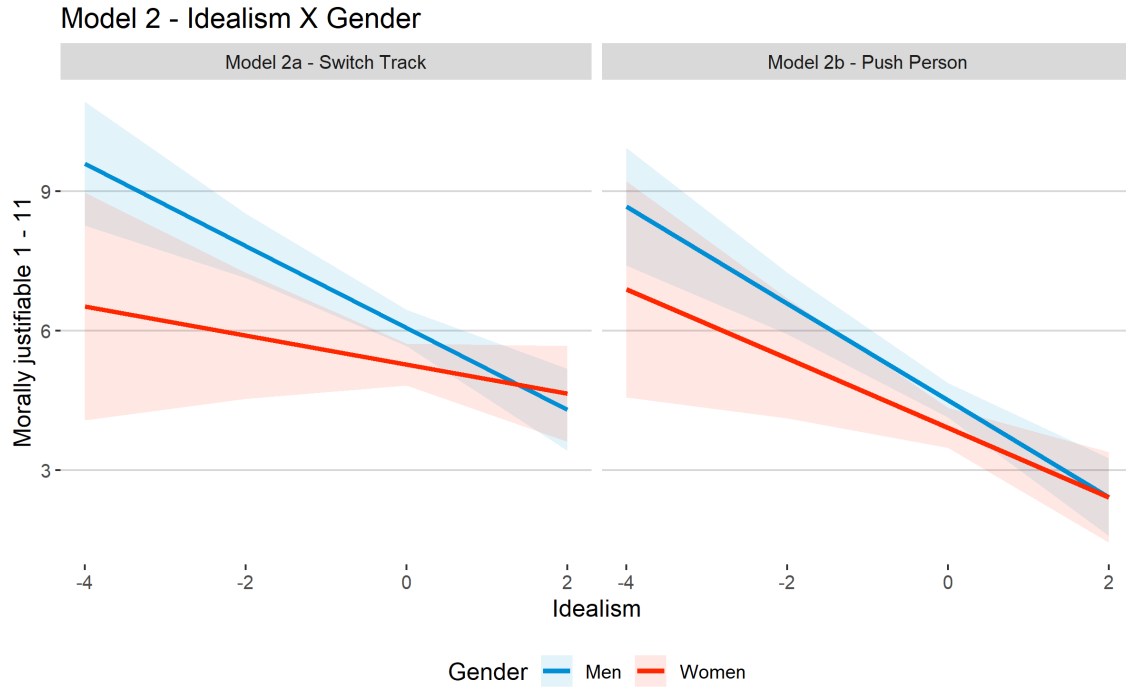
N = 278. 90% confidence intervals are shown.
Own calculations based on data from Online-Survey Experiment.

Relativism in turn has a positive sign, but is statistically insignificant and has only a marginal coefficient size (Model 1a: b = 0.08 and Model 1b: b = 0.06). It has to be noted that the Adjusted R^2 statistics are not particularly large, indicating only 7,9% and 12,9% explained variance of the dependent variable for the Models 1a and 1b, respectively. Nevertheless, for the previously derived hypothesis H1a, which states that, the more idealist an individual, the less likely it will switch/push, confirming evidence can be noted. The same holds true for H1b, which assumes that relativism has no effect on an individual's decision to switch/push.

Regarding hypothesis 2a, which states that women are less inclined to find switching/pushing morally justifiable than men, supporting evidence can be found here as well. For scenario 1, the effect becomes weakly significant and negative (b = -0.71), which points in the direction proposed by H2a. For the push person scenario, the effect is not as large and statistically not significant, but still pointing in the same direction (b = -0.55). Models including an interaction effect between gender and idealism are reported in Figure 7 and Figure 8 to test hypotheses 2b, 2c and 2d, which assume that idealism has a negative effect for women and men, but that the difference between both genders becomes smaller with higher idealism. For all of the hypotheses, supporting evidence can be noted. For both genders, idealism has a negative effect on the intention to switch the track and push a person in front of the train (Model 2a: men b = -0.88, women: b = -0.21; Model 2b: men: b

Figure 9: Models 3 - Relativism

Model 3a - Switch Track

Adjusted R Squared: 9.29%

Model 3b - Push Person

Adjusted R Squared: 12.8%

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$. N = 278. Unstandardized regression coefficients. 90% confidence intervals are shown.
Own calculations based on data from Online-Survey Experiment.

= -1.04; women: b = -0.74).

The slope is stronger negative for men, which have higher predicted values on the dependent variable for individuals with the lowest level of idealism, although the difference is not significant for model 2b (Model 2a: b = -0.79, p <0.05; Model 2b: b = -0.59). This results in almost equal predicted values of the dependent variable for individuals with the highest idealism (see Figure 8). The interaction effect is stronger for scenario 1 (b = 0.57), although the effect can be observed for scenario 2 as well (b = 0.30). In line with the effect sizes, the Adjusted R^2 for Model 2a is only slightly higher
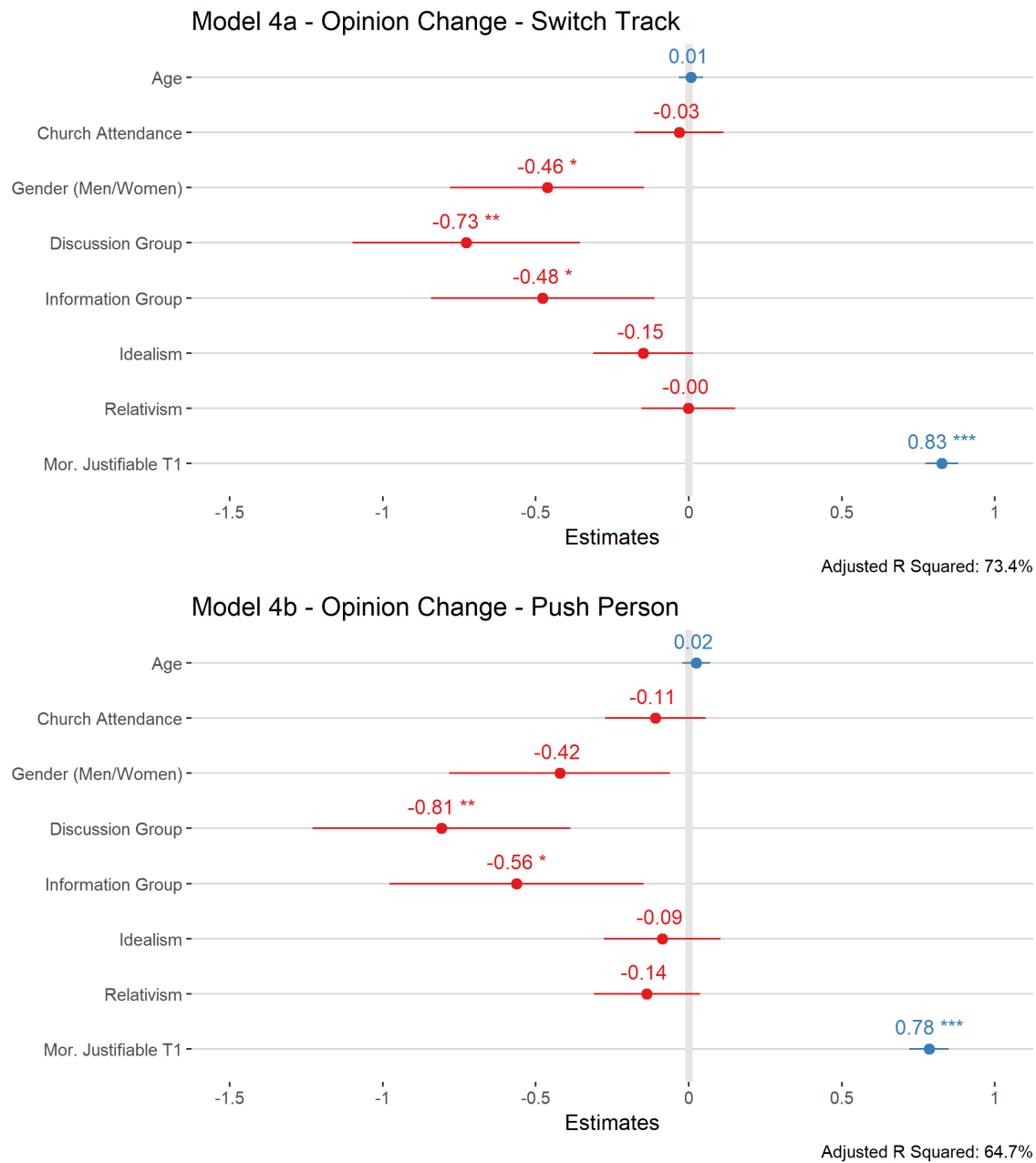
Figure 10: Models 3 - Relativism Interaction Plots
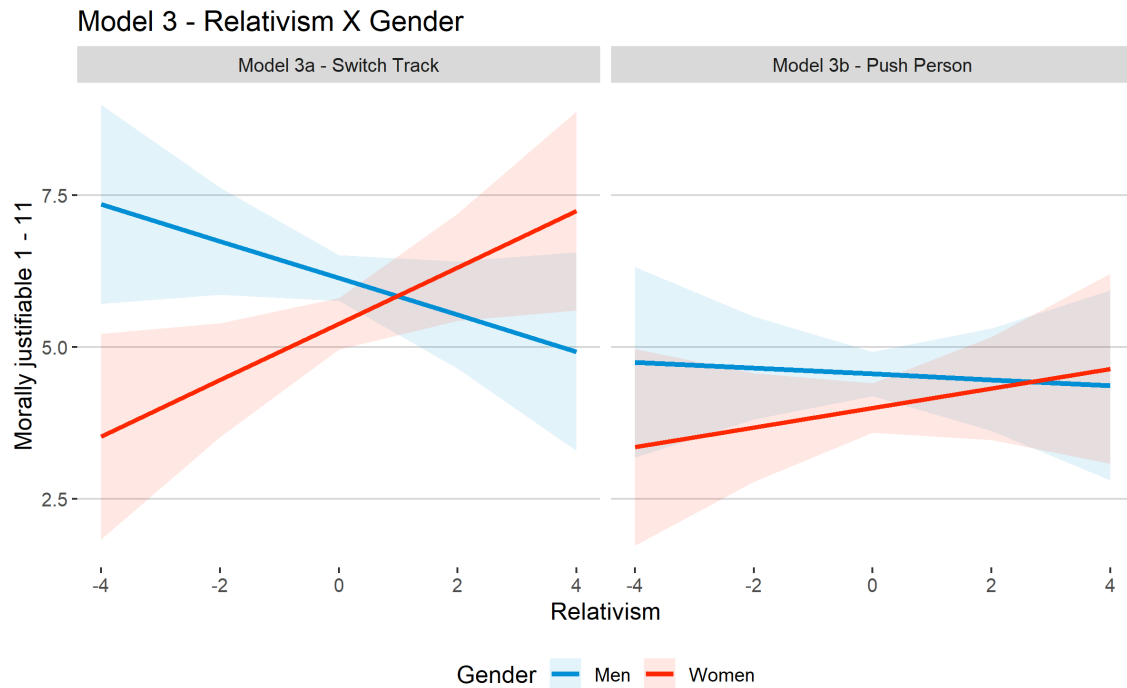
Model 3 - Relativism X Gender

(8.31 % compared to 7,96% in Model 1a), while it is even smaller for Model 2b (12.9% compared to 12.8%). For none of the models, the interaction effect reaches statistical significance, but points in the direction of the hypotheses. Therefore, some confirming evidence can be noted for H2a to H2d.

The hypothesis H2e assume, that the more relativist a woman, the more she becomes inclined to switching/pushing, while H2f postulates the opposite for men (the more relativist a man, the less inclined he is to switching/pushing). They are tested in Models 3a and 3b, which are depicted in Figures 9 and 10. Again, at the lowest level of relativism, men are clearly more inclined to switching/pushing than women (Model 3a: b = -0.75, p < 0.05; Model 3b: b = -0.56). As assumed by H2e, for women the effect of relativism is positive, although only weak for the push person scenario (Model 3a: b = 0.47; Model 3b: 0.16). In turn, as assumed by H2f, the effect of relativism is negative for men, although the effect sizes are rather weak (Model 3a: b = -0.30; Model 3b = -0.05).

As shown in Figure 10, at the highest levels of relativism, woman have higher predicted values on the dependent variable, meaning they are more inclined to find it morally justifiable to switch track/push a person than men are. The difference is only marginal for Model 3b, for which the interaction effect fails to gain statistical significance (b = 0.21). For Model 3a though, the effect is rather strong and significant on the 95%-level (b = 0.77). Regarding the explained variance, the Adjusted R^2 for Model 3b is slightly higher (9.29 % compared to 7,96% in Model 1a), while
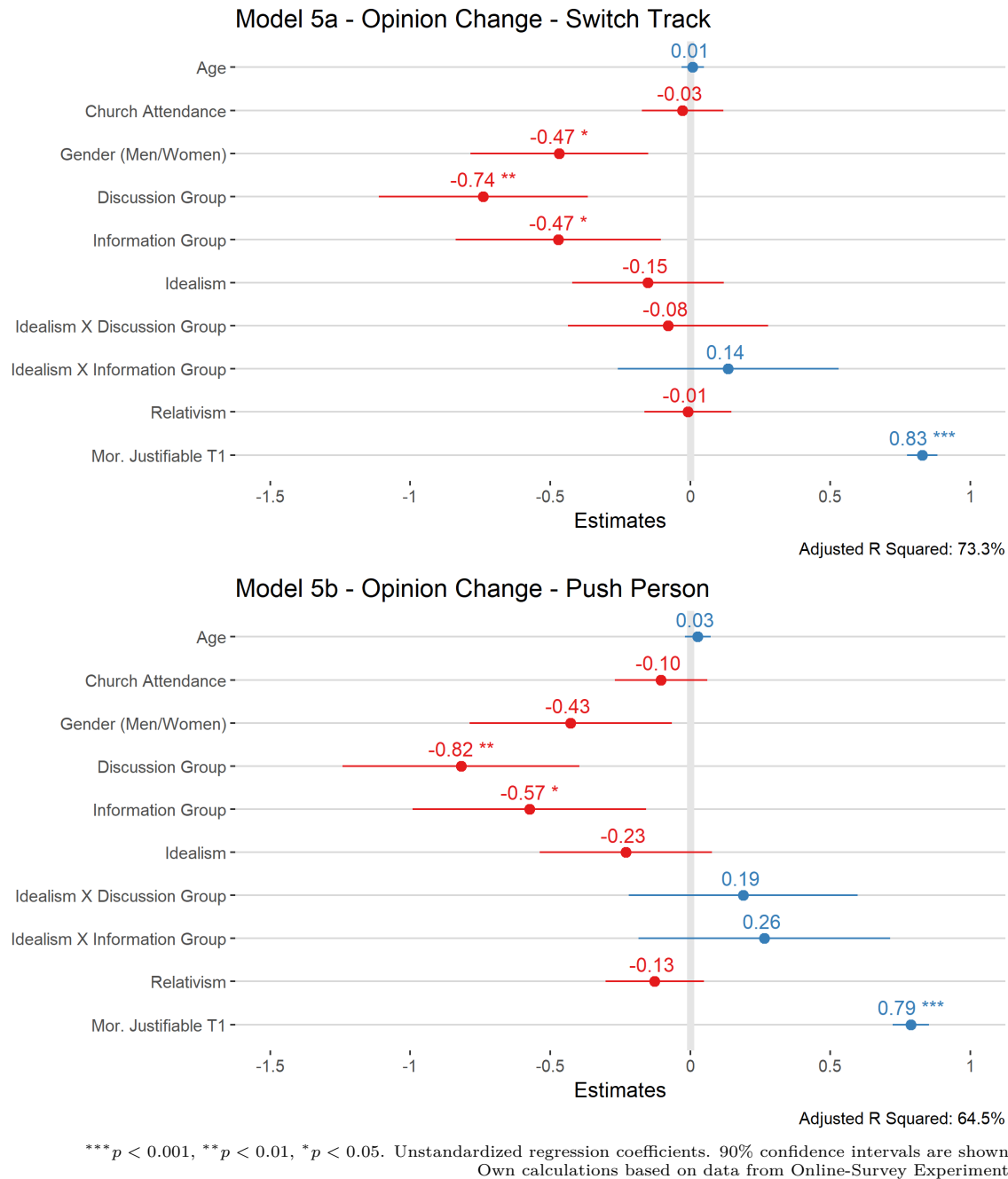
Figure 11: Models 4 - Opinion Change

Model 4a - Opinion Change - Switch Track

Adjusted R Squared: 73.4%

Model 4b - Opinion Change - Push Person

Adjusted R Squared: 64.7%

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$. N = 278. Unstandardized regression coefficients. 90% confidence intervals are shown. Own calculations based on data from Online-Survey Experiment.

it is equal for Model 3b (12.8% in Model 1b as well). In sum, the results point in the direction of confirming evidence for H2f and H2e, although this holds true mostly for the switch track and less for the push person scenario, and the observed effects are rather small.

As a next step, models with the dependent variable after the treatment are estimated (T2) to test the hypotheses regarding opinion change (Figures 11 to 15). Here, we control for the variable at the time T1, which means that the other independent variables only predict those t parts of the variance of the dependent variable which are not bound by the T1-variable. Thus, positive

Figure 12: Models 5 - Idealism

In general, the Adjusted R^2 values in all of the T2-models therefore indicate a high amount of explained variance, due to the fact that the judgment at the time T2 is highly dependent on the judgment at T1, wich is included in all of the T2-models.

coefficients indicate opinion change in the direction of higher values on the dependent variable (finding it more justifiable to switch/push) and negative coefficients in turn indicate negative opinion change. Gender is included in this models as well, although it only serves controlling purposes. In general, the Adjusted R^2 values in all of the T2-models therefore indicate a high amount of explained variance, due to the fact that the judgment at the time T2 is highly dependent on the judgment at T1, wich is included in all of the T2-models.

In Models 5a and 5b (see Figure 12), an interaction effect with the treatment and idealism is

Figure 13: Models 5 - Idealism Interaction Plots
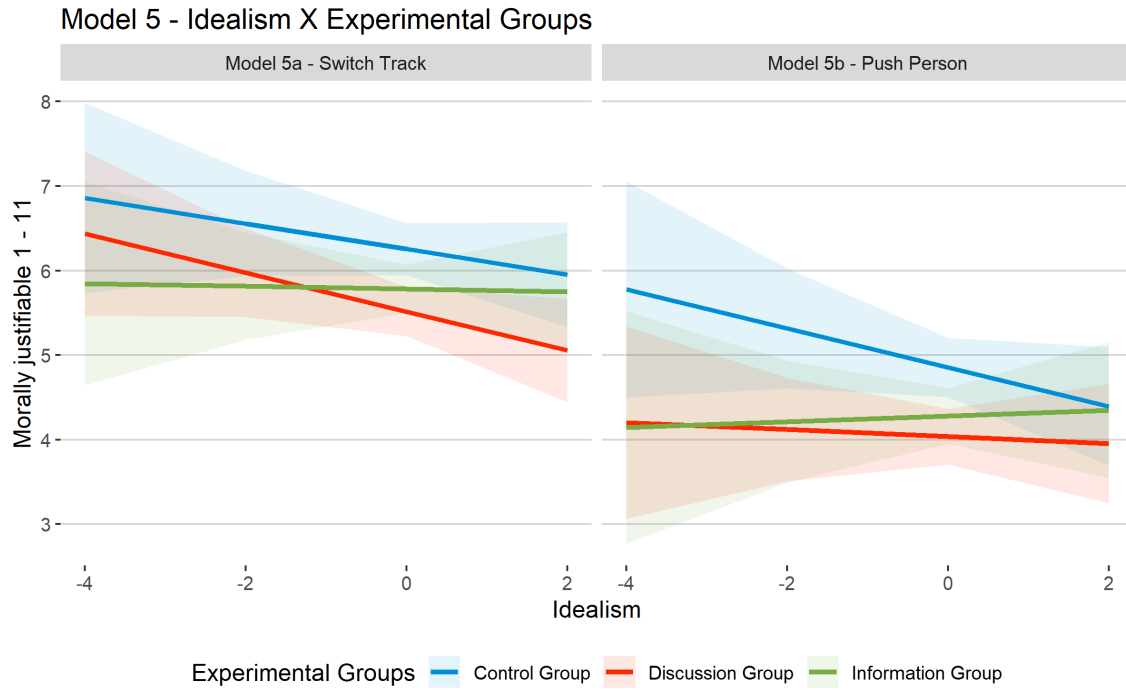
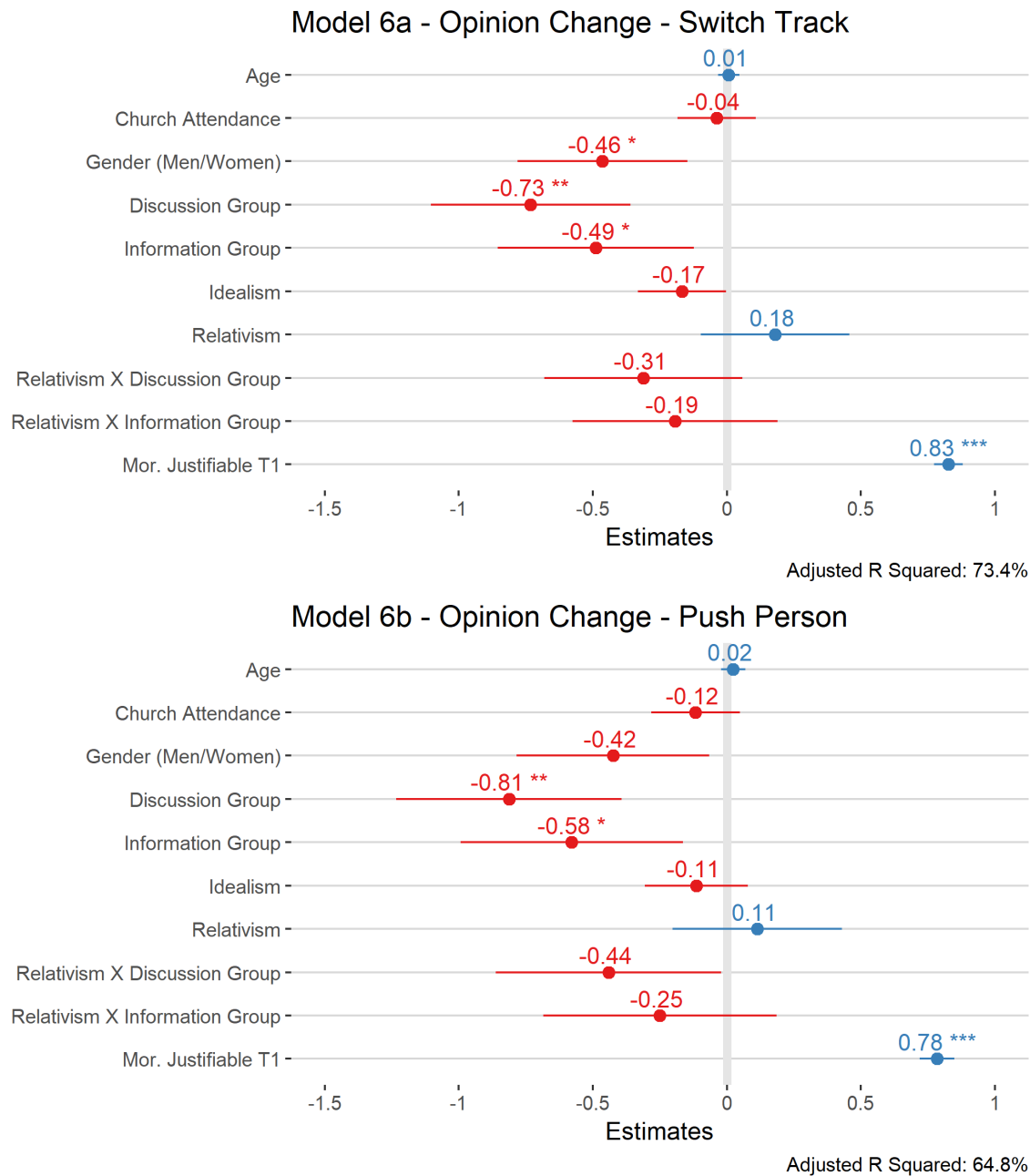
Model 5 - Idealism X Experimental Groups

N = 278. 90% confidence intervals are shown.
Own calculations based on data from Online-Survey Experiment.

estimated to test hypothesis H3: Compared to the control group, the information (H3a) and discussion treatments (H3b) strengthen the effect of idealism on the decision to not switch/push. Figure 13 shows the marginal effects for the interactions. The explained variance rises not at all when adding the interaction effects (73.3 % in Model 5a and 64.5% in Model 5b, compared to 73.4% in Model 4a and 64.7% in Model 4b). Moreover, the reported results do not point in the direction of the hypotheses. For the control group, idealism has a negative effect (Model 5a: b = -0.15; Model 5b: b = -0.23). The slope for the information group is close to zero for scenario 1 (b = 0.14, slope: b = -0.01), and slightly positive for scenario 2 (b = 0.26, slope: b = 0.03). Therefore, hypothesis 3a is not confirmed. In Model 5a, the effect is slightly more negative for the discussion group than the control group, as assumed in H3b (b = -0.08, slope b = -0.23), but in model 5b, the effect of idealism for the discussion group is less negative (b = 0.19, slope: b = -0.04). For H3b, the results point in no clear direction and are far from being statistically and substantively significant.

In Models 6a and 6b, interaction effects with the treatment and relativism are estimated to test H4a (in general, relativism has no effect on the direction of opinion change) and especially H4b (For the discussion treatment, the more relativist an individual is, the greater the opinion change in the direction of switching/pushing.). Figure 14 depicts the coefficient plots, while Figure 15 shows the marginal effects for the interactions. It appears that for the control group, relativism has a positive effect on opinion change (Model 6a: b = 0.18; Model 6b: b = 0.11). The slope for the

Figure 14: Models 6 - Relativism

Model 6a - Opinion Change - Switch Track

Adjusted R Squared: 73.4%

Model 6b - Opinion Change - Push Person

Adjusted R Squared: 64.8%

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$. N = 278. Unstandardized regression coefficients. 90% confidence intervals are shown. Own calculations based on data from Online-Survey Experiment.

information group is only marginal for scenario 1 (b = -0.19, slope: b = -0.01), and weakly negative for scenario 2 (b = -0.25, slope: b = -0.14), indicating no effect of relativism in this group. For the hypothesis H4a, that relativism in general has no effect on the direction of opinion change, the results are mixed and not very supportive, similar to the results of the Models 4a and 4b.

In Model 6a, the effect is the strongest negative for the discussion group (b = -0.31, slope b = -0.13), which holds also true for Model 6b (b = -0.44, slope: b = -0.33). The Adjusted R^2 rises not at

Figure 15: Models 6 - Relativism Interaction Plots
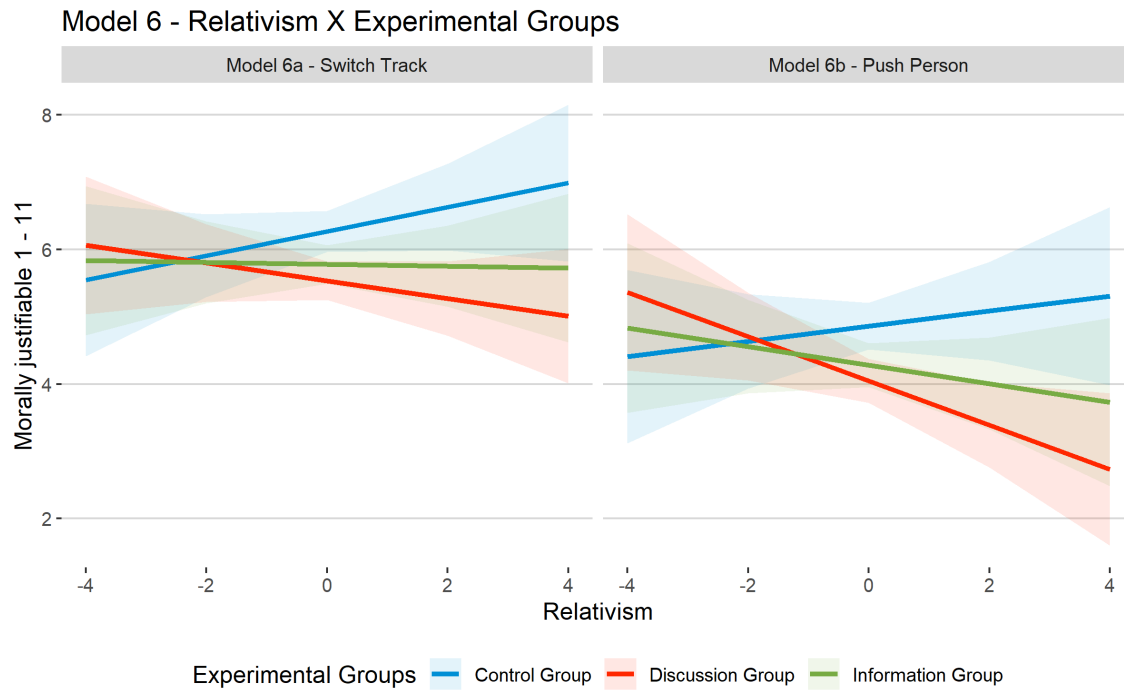
Model 6 - Relativism X Experimental Groups

N = 278. 90% confidence intervals are shown.
Own calculations based on data from Online-Survey Experiment.

all when adding the interaction effects (73.4 % in Model 6b and 64.8% in Model 6b, compared to 73.4% in Model 4a and 64.7% in Model 4b). For H4b, the results point in a contradicting direction, indicating for the discussion group that individuals with higher relativism have a weaker intention to switch/push. H4b is therefore clearly not confirmed, while for H4a the analyses produce, in sum, unclear results, although the weak effect sizes and statistical insignificance do indicate some support.

5   Discussion and Conclusion

In this section, the results are discussed in regard to their theoretical implications. It ends with some concluding remarks on limitations of this study and recommendations for further research. The conducted analyses of data from the online survey experiment indicate rather strong support for a negative effect of idealism and no effect of relativism on moral decision making, which is in line with the theoretical assumptions. Moreover, gender has shown to be a reliable predictor, with women finding it less justifiable to switch track/push a person, which is in line with reported gender-differences in moral judgements from previous studies (cf. Zamzow & Nichols 2009: 371). In addition, the theoretically proposed interaction effects between gender and idealism/relativism were empirically confirmed, although the evidence was in sum rather weak. One theoretical explanation could be, that women are more care-oriented than men, and therefore are more conscious of the moral implications for both scenarios, while men become more care-oriented when their personal involvement is concerned. Idealism has a similar effect for both women and men, although the effect is stronger for men, resulting in almost no observable differences between genders at high levels of idealism. Regarding relativism, a positive effect for women can be observed, especially for scenario 1, but also for scenario 2. This is in line with the assumption that the more relativist a woman, the more likely it is that she will switch/push. Men in turn are less inclined to finding it morally justifiable to switch tracks with higher relativism, while for the push person scenario, relativism has only a very weak effect in this direction. This is mainly in line with the assumption that the more relativist a man, the less likely it is that he will switch/push.

Discussion and information treatment on their own seem to have an effect in the direction of finding it less justifiable to switch/push after receiving the respective treatment, but the effect of idealism is not influenced by those treatments. The theoretical assumptions regarding treatment-effects on idealisms relationship with opinion change are therefore not confirmed. Regarding this hypotheses, the effects did not point in a clear direction. For individuals in the information group, idealism had no effect, while the control and the discussion group showed slightly divergent and negative idealism-effects.

Regarding the two contradictory hypotheses concerning relativism, for the first hypothesis that relativism has no effect on the direction of opinion change, only weak support can be found, as mostly rather small effects can be observed. The ones that can be observed point in the direction of opinion change towards finding switching/pushing less justifiable when receiving information and discussion treatments, when being an individual with high relativism. This finding contradicts the second hypothesis about relativism, that for the discussion group, relativism would have an effect on opinion change in the direction of more utilitarian decisions.

One important finding of this analysis is, that the results for scenario 1 and scenario 2 are often not

in line. One theoretical explanation could be the different framing of the dilemmata. As discussed in the theoretical part of this work, the second scenario consists of a person being a means to stop the waggon, while in the switch track scenario the person is just standing in the way. Moreover, a rather impersonal act is used in the switch track scenario, while pushing someone in front of a train consists of a personal action. Therefore, the push person scenario typically elicits more emotional reactions, which result in less utilitarian judgements. The fact that the effect of idealism is stronger for scenario 2 can be explained by the more "direct" or extreme character of the hypothetical situation in which respondents were asked to make a decision. In regard to the finding that the difference between men and women is stronger for scenario 1 than scenario 2, the more emotional reactions could be an explanation. The same holds true for the weaker positive effect of relativism for women in the push person scenario, compared to the switch track scenario. In the former, the personal involvement and resulting emotional reactions could have weakened the effect of relativism for women, which are more care-oriented and have a greater tendency to emotional reactions. In regard to the finding, that relativism has a strong effect in the direction of finding it less justifiable to switch tracks in general, it appears that perceptions of moral justifiability of pushing a persons is less influenced by gender, relativism and the interaction of both than the perceptions for switching track. Especially idealism on its own seems to be a stronger predictor when it comes to pushing a person, for which it has a stronger effect than for the switch tracks scenario. For the switch track scenario, the situation seems to be judged more ambivalent, which is why relativism and gender become more relevant, which is a hypothesis future research could examine in depth. Regarding the effects of the different treatments on the relationships between idealism and relativism and the dependent variable opinion change, no such possible framing effects can be observed. The results for both dilemmas are mostly in line. Summing up, framing (switching vs. pushing) appears to have an effect, although not consistently. Especially the effect of gender on moral judgements seems to be influenced by the framing of the judged scenario, while relativism appears to be more important when idealism is less influential.

The findings of this study should be interpreted with caution, as there are some limitations, which will be shortly outlined here. Firstly, no random sample was conducted and the selection process was highly skewed (see section 2). Therefore the representativity of the results can not be assumed. Moreover, the study includes not more than 300 individuals and is therefore based on a small sample. A greater drawback is though, that the randomization into the treatment groups has failed to some degree as there are significant differences between the groups regarding variables central to this analysis: gender, relativism and the dependent variables. Therefore, the results of this analysis should be used cautiously and need to be validated by further research.

Finally, this study has also some general implications for further research regarding the relationship of gender and the ethical positions relativism and idealism with moral decision making. First, gender

has shown to be an important determinant which should be included in future studies. Further, the framing of the problem (personal vs. impersonal) seems to be influential, especially regarding effects of gender. Also, both information and discussion have shown to influence opinion change regarding such dilemmata towards more deontological/less utilitarian judgements. All of these effects should not be neglected in future studies on ethical decision making.

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7 Appendix

Ethical Position Questionnaire - German

Questions were asked in random order.

Bitte geben Sie das Ausmaß Ihrer persönlichen Zustimmung oder Ablehnung an.

eqp1: Das Wohl anderer zu opfern, ist niemals wirklich notwendig.

eqp2: Moralische Standards sollten als etwas Individuelles gesehen werden: was eine Person als moralisch ansieht, kann eine andere als unmoralisch bewerten.

eqp3: Die Würde und das Wohlergehen der Menschen sollten die wichtigste Sorge in jeder Gesellschaft sein.

eqp4: Ob eine Lüge als unmoralisch oder sogar moralisch zu beurteilen ist, hängt ganz von den Umständen ab.

eqp5: In sozialen Beziehungen sind ethische Probleme oft so komplex, dass man Personen erlauben sollte, ihre eigenen persönlichen Regeln zu finden.

eqp6: Was "ethisch" ist, variiert zwischen Situationen und Kulturen.

eqp7: Es ist unmoralisch, negative Folgen einer Handlung durch positive Folgen verrechnen zu wollen.

eqp8: Man darf andere Personen weder psychisch noch physisch schädigen.

eqp9: Wenn eine Handlung eine unschuldige Person schädigen könnte, muss man sie unterlassen.

eqp10: Es gibt keine ethischen Prinzipien, die so wichtig sind, dass sie eine allgemeingültige Vorschrift bilden könnten.

eqp11: Moralisches Handeln liegt dann vor, wenn es der Ideal- Handlung entspricht.

eqp12: Man darf keine Handlungen ausführen, die in irgendeiner Weise die Würde und das Wohlergehen anderer Personen bedrohen.

eqp13: Risiken in Kauf zu nehmen, die andere Personen betreffen, ist nicht tolerierbar, egal wie gering sie sind.

eqp14: Potentielle Schädigungen Dritter in Kauf zu nehmen, ist immer schlecht, egal welche guten Zwecke verfolgt werden.

eqp15: Moralische Standards sind jeweils persönliche Regeln, sie sollten nicht auf die Beurteilung anderer angewendet werden.

eqp16: Die Frage, was ethisch richtig ist, wird sich niemals beantworten lassen, da es sich bei der Entscheidung, was moralisch oder unmoralisch ist, um eine persönliche Entscheidung handelt.

eqp17 Eine starre Ethik-Vorschrift, die bestimmte Handlungsmöglichkeiten verhindern soll, kann der Verbesserung sozialer Beziehungen sogar im Wege stehen.

eqp18: Man sollte sichergehen, mit seinen Handlungen niemanden zu verletzen oder zu schädigen.

eqp19: Verschiedene Arten von Moral dürfen nicht als mehr oder weniger "Gut" bewertet werden.

eqp20: Über das Lügen lässt sich keine Regel formulieren; ob eine Lüge zulässig ist oder nicht, hängt von der Situation ab.

Treatment - Information Group and starting Arguments for discussion group

Argument gegen Weiche umstellen und unbeteiligte Person vor den Waggon zu stossen

Jedem Menschen ist ungeachtet seiner Herkunft, seines sozialen Standes, etc. eine Würde zu eigen, die unantastbar ist. Wenn man Menschenleben gegeneinander aufwiegt, wird einem Menschenleben zwangsläufig ein bestimmter Wert zugemessen. Dieser Wert kann jedoch niemals für einen Menschen bestimmt werden. Wer entscheidet, wie dieser Wert bemessen werden soll und wo wird dabei die Grenze gezogen? Wenn man denkt es sei richtig ein Menschenleben zu opfern, um dafür mehrere Menschen zu retten, könnte man in einem zugespitzten Beispiel einem gesunden Menschen lebenswichtige Organe entnehmen um einige Patienten, die dringend einer Organspende bedürfen, zu retten. Der Mensch ist ein vernunftbegabtes Wesen, was ihn zur Freiheit befähigt. Es entspricht daher der sittlichen Pflicht, einen jeden Menschen zu achten und als Zweck an sich zu behandeln. Wenn man einen Menschen als bloßes Mittel zum Nutzen anderer instrumentalisiert, wird er zum Objekt degradiert und in seiner Würde verletzt. Individuelle Rechte müssen geachtet werden und dürfen auch nicht zur Maximierung kollektiven Wohls beschnitten werden. Bei einer Geiselnahme in Frankreich hat sicher Polizist Arnaud Betrame für eine weibliche Geisel austauschen lassen. Durch den Geiselnehmer wurde Betrame lebensgefährlich verletzt und erlag später seinen Verletzungen. Die weibliche Geisel hat heute große psychologische Probleme und lebt mit einer schweren Schuld. Eine Rettung vieler Menschen kann auch für die Geretteten schwere psychologische Folgen haben.

Argumente für Weiche umstellen und unbeteiligte Person vor den Waggon zu stossen

Menschenleben werden tagtäglich gegeneinander aufgewogen. Wenn beispielsweise eine Mutter durch die Geburt ihres Kindes sterben würde, ist es erlaubt stattdessen das Kind zu töten. Gerade weil es relevant ist Menschenleben zu achten, ist es richtig, dies bei der größtmöglichen Anzahl zu tun. Es gibt viele Beispiele, die das vor Augen führen, z. B. das von Graf von Stauffenberg, der den Tod weniger Menschen in Kauf nahm, um tausende Menschenleben zu retten. Beim Abwägen von Handlungsoptionen sollte man versuchen den größtmöglichen Nutzen für die größtmögliche Anzahl an Menschen, beziehungsweise die Gesellschaft umzusetzen und das kollektive Wohl zu steigern/schützen. Daher sollte das Gemeinwohl die ausschlaggebende Größe bei der Beurteilung von Handlungen sein, selbst wenn dadurch die Rechte bestimmter Individuen als kleineres Übel beschnitten werden müssen. Nichts tun ist auch eine Entscheidung, die moralische Konsequenzen hat. Man kann folglich nicht sagen, dass es besser ist, nichts zu tun.

Question Wording Dependent Variable - Scenario 1

Bitte stellen Sie sich nun folgende Situation vor:

Ein losgelöster Waggon bewegt sich auf fünf Personen zu, die sich auf den Gleisen befinden und getötet werden, wenn nichts unternommen wird. Anna kann eine unbeteiligte Person vor den Waggon stoßen. Der Waggon würde durch den Zusammenstoß mit der unbeteiligten Person gestoppt werden. Dadurch würden die fünf Personen gerettet, aber die unbeteiligte Person getötet. Wie sehr ist es moralisch vertretbar, dass Anna den Waggon auf diese Weise stoppt?

Antwortkategorien: Skala von 1 "Gar nicht" über 6 "Teils/Teils" bis 11 "Absolut"

Question Wording Dependent Variable - Scenario 2

Bitte stellen Sie sich nun folgende Situation vor:

Ein losgelöster Waggon bewegt sich auf fünf Personen zu, die sich auf den Gleisen befinden und getötet werden, wenn nichts unternommen wird. Anna kann eine unbeteiligte Person vor den Waggon stoßen. Der Waggon würde durch den Zusammenstoß mit der unbeteiligten Person gestoppt werden. Dadurch würden die fünf Personen gerettet, aber die unbeteiligte Person getötet. Wie sehr ist es moralisch vertretbar, dass Anna den Waggon auf diese Weise stoppt?

Antwortkategorien: Skala von 1 "Gar nnicht" über 6 "Teils/Teils" bis 11 "Absolut"