To understand a social species and to predict the behavior of its members it is essential to analyze the nature of social influence within that species. (Pratkanis, 2006, p. 1)

1 | INTRODUCTION

Moral decisions are at the core of human society. They are embedded in social conventions on what is believed to be right or wrong in society (Haidt & Kesebir, 2010; Maclagan, 2012, 2015; Rai & Fiske, 2011) and are often classified as utilitarian and deontological choices. Utilitarian choices maximize gains and minimize losses independent of what is prescribed through social conventions, and thus, are an indicator of decision rationality. Deontological choices, reflect the morality of an alternative or the way in which a choice complies to moral norms and conventions, irrespective of the gains or losses associated with it (Carmona-Perera, Caracuel, Perez-Garcia, & Verdejo-Garcia, 2015; Conway & Gawronski, 2013). Typical tasks used in research on moral decisions are formulated as moral dilemmas in which one has to choose on whether to break social norms (and even cause some degree of harm) in order to minimize losses or to obey social norms and maximize losses (Foot, 1967; Greene, Sommerville, Darley, & Cohen, 2001).

Organizations face a myriad of moral dilemmas in which conflicting principles of profitability, justice, and fairness should be simultaneously taken into account (Bagus & Howden, 2013; Dukerich, Nichols, Elm, & Vollrath, 1990; Maclagan, 2015; Queiroz, 2015; Wurthmann, 2020). For example, the management decision to replace old, environmentally harmful technology in order to...
protect locals, may come at odds with keeping all workers employed (Maclagan, 2012). Managers may decide to deliver a counterfeit product in order to satisfy the pressing request for a speedy delivery from a customer (Maclagan, 2015). In order to maintain profitability some car manufacturers decided to fake pollution tests, while oil companies decided to continue or intensify the extraction of fossil fuels while disregarding personnel and public safety in spite of their alleged commitment to alternative energy resources (van Rooij & Fine, 2018). Pharmaceutical companies might decide to launch an insufficiently tested vaccine or drug risking the lives of few in order to save the lives of many, while medical teams might face decisions in which they have to perform painful procedures with long lasting physiological consequences on neonate infants in order to save their lives (Austin, Kelecevic, Goble, & Mekechuk, 2009). Such impactful decisions are made by groups and not individuals alone.

Research on moral dilemmas focused on individual factors and little is known about how groups deal with moral dilemmas and which factors influence group utilitarianism in particular. In their critical review of the empirical studies on ethical decision-making Lehnert, Park, and Singh (2015) call for more research that addresses the social dynamics underlying the ethical decision-making process in groups. They also point to the fact that little to no attention was devoted to understand how groups make ethical choices and to explore the way in which individual preferences, interpersonal interactions, and social influence shape group decisions. Empirical research on group ethical decisions rather looked at the role of peer influences, significant others, and referent groups on individual choices (Lee & Chuang, 2018; Lehnert et al., 2015; Schminke & Wells, 1999). For example, Mihelič and Cuilberg (2019) answer the call for more research on social factors related to ethical choice, yet, their study focuses on social loafing and its antecedents. Although social loafing is most certainly a key element in group dynamics, this study focuses on its antecedents using an individualist perspective. Collective ethical decisions and their antecedents (individual preferences, social interactions, and social influence) are largely overlooked in the empirical ethical decision-making literature (De Cremer & Moore, 2020; Treviño, Weaver, & Reynolds, 2006). The main contribution of our paper is to fill this void in the literature and explore the way in which group ethical choices emerge.

This lack of empirical studies on how groups deal with moral dilemmas is also surprising given the fact that the agency and accountability of groups as decision makers is well-established in the business ethics literature (Beu, Buckley, & Harvey, 2003; Collins, 2019; de Leede, Nijhof, & Fisscher, 1999; Hunt & Jennings, 1997). In their framework for normative responsibility in team decision-making, de Leede and colleagues (1999) state that due to the emergence of group cognition (labeled as collective mind), groups are responsible decision makers in organizations. They argue that "members of a collective mind act as if they are one" and "with such a collective mind, in reality it is the group that acts and not the individuals in the group" (de Leede et al., 1999, pp. 206–207). Consequently, the main aim of our paper is to test the influence of group composition (with respect to the configuration of individual moral preferences) and social influence processes (cognitive dissent, normative deviance, and majority influence) on group choices in moral dilemmas. In the forthcoming sections, we build on the literature on emergent group rationality (Curșeu, Jansen, & Chappin, 2013; Curșeu, Meslec, Pluut, & Lucas, 2015; Goldman, 2004; List, 2005; Sarkar, 1982) to argue that group moral decisions are influenced by two important factors: group composition and the social influence processes exerted during interpersonal interactions. Next, we describe the empirical setting in which we tested the specific hypotheses concerning the role of group composition and social influence processes on emergent moral preferences in groups. The results and discussion sections emphasize the contributions of our study to the literature on moral decisions in groups and the paper ends with conclusions and implications for future research.

2 | THEORETICAL BACKGROUND AND HYPOTHESES

2.1 | Moral dilemmas and group rationality

Organizational problems and decisions with important moral consequences are addressed by organizational groups rather than individuals (Dukerich et al., 1990). For example, the collective decision of a work shift in the production facility of a chemical plant to illegally drain a substantial amount of chlorine is such an example in which teams make decisions with important ethical consequences (de Leede et al., 1999). Although groups are involved in making decisions with major societal impact (e.g., declare and wage wars, dispose hazardous waste, and contaminate the soil and water) (Curșeu & Schruijer, 2017; van Rooij & Fine, 2018), we know little about how groups deal with moral dilemmas. In moral decisions, the alternatives evoke socially shared norms and values such as doing good or not hurting anyone. Moral dilemmas are typically dichotomous: participants can select either a deontological or a utilitarian option. Take the example of the “running trolley” dilemma, in which one has to choose between sacrificing one person to save five others or sacrificing five persons by not pushing one person in front of the running trolley. In this moral dilemma, sacrificing one person to save five has the highest expected value choice and it indicates a utilitarian preference. Following the moral principle of not harming others the lowest expected value choice and it indicates a deontological preference. Drawing on the dual-process theories of cognitive processing (Chaiken & Trope, 1999), the preference for utilitarian alternatives was attributed to systematic and analytic information processing, while deontological choices were attributed to automatic and intuitive information processing (Greene, 2007; Greene, Morelli, Lowenberg, Nystrom, & Cohen, 2008). Because utilitarian choices are aligned with expected value prescriptions, they can be considered as the “rational choice” in this bipolar choice set. Utilitarian choices in moral dilemmas are associated with in-depth information processing and deliberation while deontological choices stem from emotionally laden information processing (Conway &
Gawronski, 2013; Greene, 2007; Greene et al., 2001, 2008, 2009; Greene, Nystrom, Engell, Darley, & Cohen, 2004).

Although we concur with the argument that deontological choices might be considered rational if the emotional consequences derived from violating social norms are factored into the expected value calculation, as utilitarian choices are associated with analytic information processing and rational analysis (as also indicated by neurocognitive evidence, Greene, 2007; Greene et al., 2004), we argue that utilitarianism is an indicator of decision rationality. We take here a classic view on rationality and consider rational choices those resulted from deliberate and logical analysis of the decision situation and aligned with a normative ideal (Baron, 2012; Shafir & LeBoeuf, 2002). In other words, rational choices are those that maximize gains and minimize losses in a decision situation. As such, using a systemic perspective in the moral dilemmas, although utilitarian choices might incur emotional costs on the individual decision makers, these choices would ultimately maximize gains and minimize losses for the system as a whole.

We extend this view to groups and define group rationality as an emergent group level competence of making choices aligned with a normative ideal (Curșeu et al., 2013, 2015; Sarkar, 1982). The view on emergent group rationality builds on the idea that groups are information processing systems (Hinsz, Tindale, & Vollrath, 1997; Larson & Christensen, 1993). The literature on business ethics also theorized the cognitive agency and entitativity of groups. In the framework for normative responsibility in team decision-making (de Leede et al., 1999) groups are considered cognitive systems that process incoming information in order to make collective choices for which they are responsible. Moreover, the literature on collective responsibility gaps (Collins, 2019) builds on an information processing framework to argue that because decision-making groups collectively process incoming information and engage in moral reasoning, they have moral agency and as such are responsible decision makers (groups as moral agents). Therefore, when trying to understand the way in which groups deal with moral dilemmas, we need to focus on the factors that influence collective information processing in groups.

Two important factors drive information processing and ultimately decision-making in groups. First, the collective choice is influenced by the initial configuration of individual preferences within the group. Individual utilitarian or deontological preferences in moral dilemmas will ultimately impact on the collective preference that will emerge at the group level. Second, the social influence processes, or the way in which individual group members interact will shape the combination and recombination of individual preferences into collective ones. Strong leadership influences, for example, (Dukerich et al., 1990) may shift the collective preference toward the alternatives supported by the leader. In this paper, we focus on group fragmentation as a group composition feature that reflects the uneven distribution of initial individual preferences, and on two social influence processes, namely minority and majority influence as antecedents of emergent group utilitarianism in moral dilemmas. Minority influence reflects a situation in which a single group member attempts to induce behavioral, cognitive, or affective changes within the rest of the group, while the majority influence reflects a situation in which the majority of the group attempts to achieve such changes from a group minority. In the following two sections, we develop specific hypotheses concerning the impact of composition and social influence on group utilitarianism.

2.2 | Group composition and moral dilemmas

Previous research on group rationality shows that, although groups are often less rational than their most rational group member, the average individual rationality in groups is the strongest predictor of group rationality (Curșeu & Schruijer, 2012), while group fragmentation is detrimental for group rationality (Curșeu et al., 2013). In other words, groups composed of rational individuals make more rational choices as compared with groups composed of less rational individuals. Highly fragmented groups having half of their members scoring high while the other half scoring low on rationality, make less rational choices as compared to homogeneous groups with respect to the rationality of their members.

A graphical depiction of two groups with different configurations of individual utilitarianism is presented in Figure 1. As illustrated, group 1 has two of its members scoring very high on utilitarianism, while the other two are scoring rather low. This compositional configuration reflects a fragmented group or a group scoring high on separation (Harrison & Klein, 2007). Group 2 is composed of members with the same average level of utilitarianism. Therefore, this group is not fragmented and scores low on separation.

According to the social decision scheme (Larson & Christensen, 1993) dominant individual preferences are expected to be reflected in the final collective decision. For example, if all group members enter the group with a utilitarian preference, they are more likely to accentuate this preference following group discussion. Therefore, we argue that the elevation of individual utilitarian preferences in groups fosters the utilitarianism of the collective choice.

However, if the group is fragmented (half the individual members have utilitarian and half have deontological preferences), group members will be exposed to both utilitarian and deontological preferences to the same extent. As deciding in the presence of others enhances people’s moral identities and motivates them to behave in an ethical way (Elemeres & Boss, 2012), we argue that group members with a utilitarian preference will be more likely to change their preferences than the ones with a deontological preference, and therefore, push the group toward making deontological rather than utilitarian choices. The presence of others also enforces pro-social behavior as individuals tend to be more helpful when an audience witnesses the helping act as opposed to the situation in which nobody is watching (Eagly & Crowley, 1986). Furthermore, morality norms might act as stronger drives for behavior when compared to other types of norms. When compared to competence norms, for example, morality norms have been found to have a greater impact on individual’s decisions to work on group (rather than individual)
status improvement (Ellemers, Pagliaro, Barreto, & Leach, 2008). Thus, when a group is fragmented with respect to initial individual deontological-utilitarian preferences, it is more likely that the group as a whole will prefer the deontological rather than the utilitarian alternative.

**Hypothesis 1a** Group elevation in individual utilitarianism is positively associated with group utilitarianism.

**Hypothesis 1b** Group fragmentation in individual utilitarian preferences is negatively associated with group utilitarianism.

### 2.3 Social influence and moral dilemmas

Social influence is one of the most important sources of change in the social world (Cialdini & Trost, 1998) and it reflects the behavioral, cognitive, or affective changes induced by the real or perceived presence of other individuals or groups as well as their active or inferred attempt to exert influence (Kruglanski & Mackie, 1990). Depending on the number of group members exercising social influence, the literature distinguishes between minority and majority influence processes (Cialdini & Goldstein, 2004; Kruglanski & Mackie, 1990). Although initial theoretical approaches argued that the two forms of social influence are explained by different processes (Nemeth & Wachtler, 1983), various more recent theories argue that the same mechanisms explain the two types of social influence (Cialdini & Goldstein, 2004; Martin & Hewstone, 2008).

Cialdini and Goldstein (2004) introduced a motivational framework to argue that social influence processes trigger change because people exposed to social influence attempts are motivated to be accurate in their judgments, to remain affiliated with a high-status group, and to maintain a positive self-concept. In other words, social interactions are the vehicles through which group members achieve their individual goals, in particular the goals of accuracy, affiliation, and of maintaining a positive self-concept. First of all, group members use the views and opinions expressed by others to validate their own and come up with the most accurate understanding of reality (the goal of accuracy). In moral dilemmas, group members faced with conflicting utilitarian and deontological considerations seek resolution in the views expressed by others in the group either to validate or change their own. Second, group members are motivated to establish and maintain meaningful social interactions with others and belong to the group. By expressing their views during group debates and listening to the ones expressed by others, thus eventually subscribing to the opinions and moral views expressed by others, group members achieve this affiliation goal. Finally, group members are also motivated to preserve a positive self-concept and a high self-esteem. As self-esteem is rooted in social comparison (“my views vs. the views of others”) group debates offer the vehicle through which individual members maintain a high self-esteem either through distinctiveness (“I am more accurate than the others”) or conformity (“My views are similar to the ones expressed by others”). To conclude, in line with this motivational approach (Cialdini & Goldstein, 2004), social influence processes have an important motivational function in that they help group members to achieve some important individual goals.

Another integrative model of social influence is the source-context-elaboration model of social influence (Martin & Hewstone, 2008). This model specifies the information processing tendencies associated with the two types of social influence. Minority influence, on the one hand, triggers systematic in-depth information processing, while majority influence triggers heuristic information processing. Moreover, the model states that the elaborative versus non-elaborative message processing is influenced by contextual factors like the status of the source exerting influence and the identification with the group. Therefore, the context in which social influence occurs will eventually determine its effect on the depth and type of information processing. A first principle
that explains the role of context in attitude change is that in general, when people have to make a choice between subscribing to a view that is expressed by a minority or by a majority, people tend to favor the views expressed by majorities. The second principle is that minority influence is impactful only when minorities are distinctive, openly express their views, and are consistent (Martin & Hewstone, 2008).

2.4 | Minority influence

In their comprehensive review of minority influence, Jetten and Hornsey (2014) distinguish between cognitive dissent and normative deviance as two independent forms of minority influence. Cognitive dissent refers to a situation in which one group member or a minority of the group openly disagrees with the group decisions or actions, while normative deviance describes a situation in which one group member or a minority of the group members violates the normative system of the group. Both are forms of minority influence, yet, their implication for group decision-making is different. While cognitive dissent has the potential to increase the quality of decision processes in groups (Nemeth, 1995), it increases the knowledge elaboration and group cognitive complexity (Curşeu, Schruijer, & Boroş, 2012; Curşeu, Schruijer, & Fodor, 2017), as well as group creativity and innovation (De Dreu & West, 2001; Nemeth, Brown, & Rogers, 2001), normative deviance has detrimental effects for group performance as it threatens cohesion, positive group atmosphere, and group members’ positive self-image (Jetten & Hornsey, 2014). In their source-context-elaboration model of influence Martin and Hewstone (2008) argue that minority influence stimulates the in-depth information processing only if the influence attempt does not threaten self-interest. Moreover, an important condition for a minority to induce change is to be distinctive in the eyes of the majority, consistent, and persistent (Martin & Hewstone, 2008). Therefore, the minority’s private individual moral preference should be expressed in open (cognitive) dissent in order to be impactful. Cognitive dissent will trigger cognitive activation in groups, stimulate the in-depth information processing and ultimately groups will prefer utilitarian rather than deontological choices.

However, in the case of normative deviance, as minorities threaten the normative system of the group, it is likely that the self-interest of majority members (e.g., their affiliative needs) is affected and, as a consequence, the groups are more likely to process the information related to the moral dilemmas to a lesser extent and ultimately prefer deontological rather than utilitarian options. In other words, normative deviance creates a context in which the social and normative aspects of groups become more salient and the members tend to be more influenced in their judgments by social norms rather than by rational analysis. We therefore hypothesize that:

Hypothesis 2a Minority (cognitive) dissent is positively associated with group utilitarianism.

Hypothesis 2b Minority (normative) deviance is negatively associated with group utilitarianism.

2.5 | Majority influence

Majority influence or conformism reflects a situation in which opinions held by the majority are accepted by all group members, yet, the change is rather superficial and it is rooted in social comparison processes. In line with the source-context-elaboration model of influence (Martin & Hewstone, 2008), when group majority is seen as legitimate and one is strongly identified with the group, status is a heuristic used to (uncritically) accept the position held by majority based on rather superficial information processing. As mentioned earlier, Cialdini and Goldstein (2004) explain conformity and compliance as a consequence of motivational pressures to maintain a positive self-concept, to affiliate, and to make accurate judgments. From an accuracy goal perspective and for minorities, the majority influence has a heuristic function (“If all the others support this view, it must be correct”), and it also secures the maintenance of group affiliation and a restoration of a positive self-esteem, as holding a view that is opposed to the preferences expressed by the majority might be seen as being inferior. In other words, minorities accept the options shared by the majority in order to maintain a positive motivational state characterized by making accurate judgments, being affiliated to a group and maintaining a positive self-image. These motivational pressures emphasize the compliance to the normative system of the group and are very likely to induce a deontological state of mind that ultimately will push groups to make deontological (i.e., aligned with moral values and norms) rather than utilitarian choices. Another argument stemming from conversion theory (Moscovici, 1980) and the status-context-elaboration model of social influence refers to the superficial (heuristic) processing of the arguments presented by the majority. In the case of moral dilemmas, this superficial message processing is likely to lead to deontological (complying to social norms and values) rather than utilitarian (rational) choices.

Hypothesis 3 Majority influence is negatively associated with group utilitarianism.

In line with the systemic models of group effectiveness (Gladstein, 1984; Marks, Mathieu, & Zaccaro, 2001), one could infer that group fragmentation in individual utilitarianism is a precondition for the social influence processes, especially minority influence. Group members that differ in their individual preferences are more likely to engage in cognitive dissent than group members that share similar preferences. Based on this line of reasoning, an additional aim of our paper is to explore the extent to which the effect of group fragmentation on group utilitarianism is mediated by the minority influence processes (cognitive dissent and normative deviance) in groups.
3 | METHODS

3.1 | Participants and procedure

We organized a sample of 221 students (146 women, $M_{\text{age}} = 24.5$ years old) enrolled in various courses at an Eastern European university in 67 groups and invited them to participate in a decision-making exercise. Group size ranged from 2 to 6 ($M_{\text{group size}} = 3.32$, $SD_{\text{group size}} = .58$). The study was part of their regular curricular activities with the aim to illustrate decision-making in groups, in particular moral decisions. In line with the general paradigm used in the group synergy literature (Curșeu et al., 2013; Larson, 2007, 2010; Meslec & Curșeu, 2013), we used a two-step procedure in which we first investigated group members’ individual preferences in moral dilemmas, and then asked them to decide as groups and agree on a collective moral preference that describes their group as a whole in the same decision tasks. Such an approach allows the accurate investigation of the way in which configurations of individual preferences in moral dilemmas generate group-level moral choices. More specifically, participants first received individually 10 moral dilemmas and were asked to mark their individual preferences (either utilitarian or deontological preference) for each dilemma. From this first part, the compositional scores (group elevation and group fragmentation) were derived. Then, they were invited to form groups (using a self-selection procedure) and were asked to perform the same task as a group. Each group was instructed to come up with one common answer for each of the 10 dilemmas by using consensus, that is discuss each alternative and reach a group decision accepted by all members. From this second part, the group utilitarianism score was derived by adding up the utilitarianism scores on the 10 moral dilemmas. After the group decision-making session, participants were asked to fill out a questionnaire evaluating demographics (gender, age, education) as well as cognitive dissent, normative deviance, and majority influence and were then debriefed. During the debriefing, we explained the difference between utilitarian and deontological choices and related it with previous research on rationality. We further asked the participants to compare their individual preference with the group preference and a guided reflection helped them understand the emergent process of group decision competencies. The procedure is aligned with previous research using comparisons between individual and group decision tasks (Curșeu et al., 2013; Curșeu & Schruijer, 2012; Larson, 2007, 2010; Meslec & Curșeu, 2013). Individual consent was asked at the onset of the workshop, and participants were informed that their results will be used in scientific research. The study was approved by the ethical review board of the Babeș-Bolyai University.

3.2 | Instruments and measures

3.2.1 | Moral dilemmas

We selected a set of 10 moral dilemmas, suitable for a group decision context (Greene et al., 2004). The 10 tasks were presented with two options that opposed a deontological and a utilitarian choice. Based on the traditional perspective on moral dilemmas, we contrasted the two choices and coded the utilitarian preference with 1 and the deontological preference with 0. We then summed the scores for the 10 moral dilemmas to obtain a general indicator of utilitarianism in individual and group decisions. Although answers to the 10 moral dilemmas were dichotomous, we performed a factor analysis to explore whether the items used load into the same factor. For the individual moral choices, we identified that the dominant factor accounted for more than 29% of the variance and all 10 moral decisions loaded positively on the dominant factor. For the group scores, the dominant factor accounted for more than 32% of the variance in scores and similar to the individual level, all decision tasks loaded positively into the main factor. We can therefore conclude that the summed index of utilitarianism as computed traditionally in the moral dilemmas research is a meaningful indicator of an underlying construct as all 10 decision tasks have a significant contribution to a main factor. Examples of moral dilemmas are presented in Appendix.

We computed two compositional indicators derived from individual utilitarianism scores. The first indicator is group elevation in individual utilitarianism and was computed by summing up individual responses for the 10 dilemmas that were further aggregated at a group level, as the group mean. The second indicator is group fragmentation and was computed by summing up the individual responses for the 10 dilemmas that were afterwards aggregated at a group level as the within group standard deviation. According to Harrison and Klein (2007) within group standard deviation is an accurate indicator of group fragmentation.

After finishing the group task, each group member was asked to fill out a questionnaire evaluating the three forms of social influence. As social influence reflects group-level dynamics, the individual scores were aggregated at the group level upon the inspection of the aggregation statistics.

3.2.2 | Cognitive dissent

Cognitive dissent was evaluated using four items adapted from Curşeu and Ten Brink (2016) (e.g., “One or a minority of team members often disagree with the other team members,” “One or a minority of team members often expressed completely different ideas than those expressed by the other team members”). Cronbach’s alpha for this scale is .934.

3.2.3 | Normative deviance

Normative deviance was evaluated with a three-item scale asking participants to rate the extent to which one or a minority of the group members systematically violated group norms. The items are: “Some of the team members have tried to use their influence, status or power in order to impose their point of view in the group,” “Some of the team members have tried to intimidate the others by using aggressive gestures and an intimidating tone of voice,” and “Some of the team members have bothered the rest of the team by making unjustified ironies and sarcastic remarks.” Cronbach’s alpha for this scale is .791.
3.2.4 Majority influence

Majority influence was evaluated with the following four items: “We have reached the final decision via a vote of the majority,” “The team has decided by adopting the opinion expressed by the majority,” “The final decision reflects the opinion of the majority of the team members,” and “When making the final decision for each decision situation, we have taken into consideration the opinions of the majority of the team members.” Cronbach’s alpha for this scale is .849.

The scores for minority dissent, normative deviance, and majority influence reflect group-level dynamics, therefore, the individual scores were mean-aggregated at the group level of analysis. In order to justify aggregation, the within group agreement index (RWG) and the ICC(1) and ICC(2) were computed for all variables related to within-group interactions. The results of the aggregation statistics are presented in Table 1. The RWG values reflect in general a substantial within group agreement supporting the aggregation of individual scores at the group level.

4 ANALYSES AND RESULTS

The descriptive statistics as well as the correlation among the study variables are presented in Table 2.

We tested our hypotheses using OLS regression analyses with group utilitarianism as dependent variable. As group size is likely to impact the social influence processes unfolding in groups (especially majority influence and normative deviance), we included group size as a control variable. We used the summed score of all 10 group decision tasks as an indicator of group decision utilitarianism. As main predictors, we included the compositional variables, namely group elevation and fragmentation for individual utilitarianism, as well as the three process variables, namely cognitive dissent, normative deviance, and majority influence. The results of the regression analysis are presented in Table 3.

As hypothesized, the effects of group elevation and fragmentation in individual utilitarianism on group utilitarianism are significant. The effect of group elevation in individual utilitarianism is a positive predictor for group utilitarianism (Hypothesis 1a was fully supported). The effect of group fragmentation in individual utilitarianism is negative and significant (β = −0.21, p = .022), supporting Hypothesis 2b. Although, in line with our predictions, majority influence was negatively related with group utilitarianism, the effect was not significant (β = −0.14, p = .10). As some of the groups had RWG values lower than .70, we performed an additional OLS regression including only the groups with RWGs higher than .70. The results are similar with the ones obtained for the whole sample, therefore, we can conclude that our findings are robust. The only difference is that majority influence has a significant negative influence on group utilitarianism (β = −0.19, p = .03), therefore, we can conclude that Hypothesis 3 was only partially supported.

In order to further check the robustness of our findings, we computed an additional score for decision utilitarianism (individual and group level) using the dominant factor score instead of the summed score for the 10 decisions. The dominant factor score was derived from the Principal Axis Factoring without any rotation and all moral dilemmas loaded significantly on this factor. The dominant factor score takes into account the specific factor loading of each of the items included in the analysis (DiStefano, Zhu, & Mindrila, 2009) and as such is an accurate indicator of the utilitarian dimension across the 10 moral dilemmas.

We performed an additional regression analysis and the results of the analyses with the dominant factor score as the dependent variable are also presented in Table 3. The results of these additional analyses fully confirm the first findings and show that only majority influence does not have a significant effect on group utilitarianism. Similar with the first set of analyses, we additionally ran the OLS on the sample of groups that exceed .70 for RWG obtaining similar results. As these additional analyses show a similar pattern of results as the analyses on the whole sample, we can conclude that our results are robust.

4.1 Additional exploratory analyses

Our preliminary analyses show a significant positive correlation between group fragmentation (within group standard deviation for individual utilitarianism) and cognitive dissent (r = .47, p < .001) as well as a positive and significant correlation between the two forms of minority influence (cognitive dissent and normative deviance, r = .40, p = .001). This pattern of results suggests that cognitive dissent is likely to be triggered by the group fragmentation and it might actually mediate the influence of group fragmentation on group utilitarianism. Moreover, cognitive dissent is likely to be associated with normative deviance and, as such, the effect of group fragmentation could be mediated by both cognitive dissent and normative
deviance. Therefore, we set out to test a two-step mediation model with cognitive dissent and normative deviance as mediators of the negative association between group fragmentation (within group standard deviation in individual utilitarianism) and group utilitarianism. We used as covariates groups size, group elevation in individual utilitarianism and majority influence (the same variables as the ones included in the regression models presented in Table 3). To carry out the additional exploratory analyses, we used the Hayes’s (2013) process procedure for SPSS (beta release 130612). The mediation analyses reveal that the indirect effect of group fragmentation on group utilitarianism, mediated by cognitive dissent, is positive and significant (effect size = .25, SE = .12, BCCI[.04; .51]). Moreover, the indirect effect of group fragmentation on group utilitarianism, mediated both by cognitive dissent and normative deviance, is negative and significant (effect size = −.07, SE = .05, BCCI[−.20; −.01]). The indirect effect of group fragmentation, only mediated by normative deviance, is negative, yet, not significant (effect size = −.004, SE = .06, BCCI[−.12; .14]). Finally, the direct effect of group fragmentation on group utilitarianism remained negative and significant after considering all plausible indirect effects (effect size = −.38, SE = .15, t = −2.50, p = .02). We can therefore conclude that the effect of group fragmentation on group utilitarianism is partially mediated by cognitive dissent and normative deviance. The overall results for the mediation model are presented in Figure 2.

The results of the mediation analysis show that the association between group fragmentation in individual utilitarianism and group utilitarianism hides two combined effects, one negative and one positive. To the extent to which group fragmentation generates cognitive dissent, it has a beneficial effect on group utilitarianism, while to the extent to which cognitive dissent triggers normative deviance, the effect turns negative. Moreover, the remaining direct effect is also negative pointing to the existence of additional mechanisms that explain the association between group fragmentation and group utilitarianism. Of course, given the nature of our design we must consider the case of reversed causality, that is, the impact of social influence processes on group fragmentation in group utilitarianism. Group fragmentation as a group configural property is unlikely to be influenced by social influence processes and given the evaluation sequence (group fragmentation was evaluated first and social influence was evaluated after the group task), we can refute the possibility of a reversed causation between the independent variable and the mediators.

5 | DISCUSSION

Our study set out to test the effect of group compositional variables and social influence processes on group utilitarianism in moral dilemmas. Our paper answers an important question, namely, how are individual moral preferences combined into emergent group moral choices? Our results show that the strongest predictor of group utilitarianism is the average individual utilitarianism in groups. We also show that group fragmentation is detrimental for group utilitarianism. The most important finding, however, is that on top of
the variance explained by compositional group variables, social influence processes explain additional variance in group utilitarianism. In particular, the two forms of minority influence, cognitive dissent, and normative deviance, are significant predictors of group utilitarianism. Cognitive dissent stimulates groups to make utilitarian decisions, probably by increasing the depth of information processing in groups. Normative deviance, however, is detrimental for group utilitarianism, probably due to the negative affect that is associated with individuals that violate the group norms.

Another important finding in our sample is that group utilitarianism ($M = 5.52, SD = 2.02$) is higher than average individual utilitarianism ($M = 4.92, SD = 1.45$), yet, it is lower than the highest individual score within groups ($M = 6.67, SD = 1.75$). This pattern of results is aligned with previous studies reporting that group rationality is in general higher than the average individual rationality, yet, lower than the rationality of the most rational member in the group (Curşeu et al., 2013, 2015; Meslec & Curşeu, 2013). Moreover, this pattern is aligned with previous research showing that groups (as collectives) make more principled, complex, and informed moral judgments than the average of their individual members (Duckermuth et al., 1990; Nichols & Day, 1982). These results open fruitful research avenues for exploring further the interplay between individual differences and group level decision-competencies, especially in the case of group moral choices (Treviño et al., 2006). A valuable framework that could be used to further explore the interplay between individual differences and emergent group moral choices is the Ethics Position Theory (Forsyth, 1980) arguing that idealism and relativism are individual attributes that shape moral preferences and decisions. Future research could explore, on the one hand, the possible association between relativism and utilitarian preferences in moral dilemmas, and on the other hand, the plausible accentuating effect of the average individual relativism within groups on the positive association between average individual utilitarianism and emergent group utilitarianism. As relativists typically disapprove the universal use of moral principles (Mudrach & Mason, 2020), one would expect that, if groups are composed of members scoring high on relativism, such groups would be inclined to foster the positive association between average individual utilitarianism and emergent group utilitarianism.

Our emergent results point toward two ways in which group fragmentation impacts group utilitarianism. First, our results show that cognitive dissent captures a plausible cognitive activation mechanism that explains the positive influence of group fragmentation on group utilitarianism. In other words, group fragmentation triggers minority influence processes that eventually increase the depth of information processing in groups and ultimately fosters group utilitarianism. Second, our results point toward a strong negative association between group fragmentation and group utilitarianism, probably underlined by negative emotional dynamics triggered by individual differences in utilitarianism. The negative association between group fragmentation and group utilitarianism is only partially explained by the cognitive dissent through the normative deviation mediation path. In other words, cognitive dissent triggers violations of the group’s normative system, thus generating a negative emotional climate that distracts the group from the decision task and leads to rather superficial analysis of the decision situation. Normative deviance could threaten group cohesion, its distinctiveness and positivity and, as a consequence, group members may engage in protective pro-social behavior that ultimately leads to deontological rather than utilitarian choices. Additionally, motivational aspects could play an important role in explaining this negative association, as, under high fragmentation,

### TABLE 3 OLS regression results for group utilitarianism (summed score and dominant factor scores)

|                      | GU (summed score) | GU (dominant factor score) |
|----------------------|-------------------|---------------------------|
|                      | Model 1 | Model 2 | Model 1 | Model 2 |
| Compositional variables |
| Group size            | .05     | .09     | .06     | .11     |
| Group elevation (mean IU) | .77*** | .81*** | .76     | .81***  |
| Group fragmentation (SD IU) | -12    | -11*    | -11*    | -21*    |
| Social influence processes |
| Cognitive dissent     | .31**   | .33**   |
| Majority influence    | -.14    | -.16    |
| Normative deviance    | -.19*   | -.19*   |
| $R^2$ (Adjusted)      | .61 (.60) | .68 (.65) | .59 (.57) | .66 (.63) |
| F change              | 32.93*** | 4.09*   | 29.22*** | 4.22**  |

Note: Standardized regression coefficients are presented in the table. Abbreviations: GU, group utilitarianism; IU, individual utilitarianism. ***$p < .001$; **$p < .01$; *$p < .05$.

### FIGURE 2 Results of the exploratory mediation analysis. GF, group fragmentation (within group standard deviation of individual utilitarianism); group size, average individual utilitarianism, and majority influence were entered as covariates; unstandardized path coefficients are presented in the figure with the standard errors in-between brackets; **$p < .01$ *$p < .05$.
group members might tend to follow their affiliation needs and opt for (socially desirable) deontological instead of utilitarian choices in order to preserve their position in the group. Future research could use the antecedents-benefit-costs framework (Busse, Mahlendorf, & Bode, 2016) to disentangle these two mechanisms. We believe our results open new avenues for exploring the depth of information processing in groups as a plausible explanatory mechanism for the association between group fragmentation and group utilitarianism. Future studies could, for example, explore the contingencies that influence the transformation of cognitive dissent in normative deviance. As indicated by our results, the positive association between the cognitive and normative deviance partially explains the negative association between group fragmentation and group utilitarianism. The moderating variables that impact on the positive association of the two types of minority influence could give more insights into the association between group fragmentation in individual utilitarianism and the emergence of group utilitarianism.

Our results supported only partially the hypothesized negative effect of majority influence on group utilitarianism, as only the results for groups having RWGs higher than .70 were significant. As argued above, a more fine-grained analysis of the cognitive, affective, and motivational mechanisms triggered by social influence processes could lead to more insights on the emergence of group utilitarianism.

5.1 | Limitations and directions for future research

Next to its contributions our study has several limitations. First, no causal claims are warranted because of the cross-sectional nature of our design. Nevertheless, the effects of group composition in individual utilitarianism (considered as an independent variable) are unlikely to be influenced by the group utilitarianism given that they have been measured at different time points. In order to be able to draw causal conclusions about minority and majority influence on group utilitarianism, one needs to manipulate these social influence variables. Second, our results are susceptible to the common method bias as all independent (and mediator) variables were evaluated from the same source, namely the individual group members. However, the main dependent variable reflects the group as a whole and was evaluated at the group level of analysis, therefore, reducing the concerns referring to the role of the common method bias. Third, given the nature of our design, our participants were university students and this could limit the generalizability of our findings to other settings. We argued that the focus on social and normative issues could explain the negative association between majority influence and group utilitarianism. However, in these short-lived groups, emergent normative systems could be less prominent than in established groups (Curşeu & Schruijer, 2012). Future studies could replicate these results in other organizational settings and use different moral dilemmas, possibly related to the general organizational settings. Plausible alternative contexts are the multidisciplinary emergency medical teams or organizational crisis management teams. Fourth, although we controlled for group size, other variables including individual differences (e.g., the dark personality triad, antisocial personality traits) could have impacted our results. Future research should try to account for the plausible effect of such individual differences on group utilitarianism, although we suspect that their likely influence on group utilitarianism is mediated by individual utilitarianism (accounted for in our analyses). Fifth, our study used a typical design used in exploring the interplay of individual and group preferences (we have evaluated first individual, and then, the group preferences) and group utilitarianism as we evaluated it might confute an individual learning effect. Finally, in using the moral dilemmas, we have used a traditional perspective on coding individual and group answers in that we opposed deontological and utilitarian choices. This opposition served our purpose to explore group utilitarianism as group rationality. Ample research, however, exists on variants of the moral dilemmas, including the exploration of congruence versus incongruence in the utilitarian and deontological choices (Conway & Gawronski, 2013). Future research could explore the ways in which these variants of moral dilemmas impact the emergence of group level decision-making competencies and collective moral choices. Moreover, as also mentioned in a comprehensive review on research in behavioral ethics by Treviño, and colleagues (2006) future research could explore the association between group preferences in moral decisions, for instance the emergent group utilitarianism (as proxy for group rationality), and overall group performance.

5.2 | Practical implications

Nowadays groups are key decision makers in organizations and society in general. Our results represent a first attempt to explore compositional and process factors that influence utilitarianism in collective choices, using a moral dilemmas approach. The strongest predictor of group utilitarianism is the group elevation in individual utilitarianism. Therefore, the core insight of our paper is that groups composed of members with utilitarian preferences tend to ultimately make utilitarian choices as groups. It would be flawed however, to train and socialize group members based on a utilitarian logic and ultimately expect them to come up with deontological choices as a group. Organizations in which profitability norms prevail may push group members in a utilitarian mind-set and ultimately set the stage in which principles of justice and fairness are overlooked. In other words, the organizational contexts in which individual preferences are shaped, play a critical role in the way moral dilemmas are dealt with. A large car manufacturer involved in a major scandal concerning fake pollution tests exonerated leadership and the company as a whole and attributed this “utilitarian” choice to erroneous group decisions (van Rooij & Fine, 2018). As indicated in the framework of group ethical decision-making (de Leede et al., 1999) the organizational context with its values, norms, prescriptions, and training procedures plays a very important role in shaping the “ethical mind-set” of its members. Moreover, group fragmentation drives cognitive dissent, therefore, diversity is needed in order to experience dissent and generate cognitive conflict in groups.
Another key finding with important practical implications refers to the positive effect of cognitive dissent on group utilitarianism. In order to stimulate the depth of information processing, group leaders or managers could increase the use of cognitive dissent. Cognitive dissent can easily be induced by using decision techniques such as devil’s advocacy. This technique assigns a rotating dissenter role to one of the group members instructed to criticize the opinions expressed by the others and to challenge their decision preferences. Moreover, group members can be instructed to openly engage in open dissent by using ground rules or normative interventions (“see initial agreement as suspect,” “do not conform to a majority just in order to reduce conflict” and so forth) (Hall & Watson, 1970). These simple normative interventions have been shown to be effective in influencing the information elaboration during group decision-making (Curşeu & Schruijer, 2012; Curşeu et al., 2013). Another important finding refers to the negative effect of normative deviance on group utilitarianism. Group leaders and managers should pay attention to the deviant behavior related to group norms and prevent the generation of a negative affective climate in groups. Collective emotional regulation norms could be effective ways in which groups can deal with the negative affect triggered by normative deviants.

6 | CONCLUSIONS

Our study tests the influence of group composition with respect to group members’ preferences in moral dilemmas on the emergent, group-level moral preferences. We show that average individual utilitarianism has a positive influence on group utilitarianism, while group fragmentation with respect to its members’ individual utilitarianism has a negative influence on group utilitarianism. To our knowledge, this is one of the first empirical studies to show that the cognitive form of minority influence (cognitive dissent) fosters group utilitarianism, while normative deviance reduces group utilitarianism, and thus, reflects the prevalence of moral principles in collective choices. Finally, we show that the negative influence of group fragmentation on group utilitarianism is mediated by the two forms of minority influence, namely cognitive dissent and normative deviance. These results open valuable avenues for future research on how groups make moral decisions and how group preferences in moral decisions relate to overall group performance. Finally, our results point toward relevant ways in which managerial interventions aimed at stimulating cognitive dissent could increase group rationality, and in particular group utilitarianism.

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CONFLICT OF INTEREST

The authors have declared no conflicts of interest for this article.

COMPLIANCE WITH ETHICAL STANDARDS

The study was approved by the Ethical Review Board of Babes-Bolyai University and the procedures performed were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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REFERENCES

Austin, W., Kelecevic, J., Goble, E., & Mekechuk, J. (2009). An overview of moral distress and the paediatric intensive care team. Nursing Ethics, 16(1), 57–68. https://doi.org/10.1177/0969733008097990

Bagus, P., & Howden, D. (2013). Some ethical dilemmas of modern banking. Business Ethics: A European Review, 22(3), 235–245. https://doi.org/10.1111/beer.12025

Baron, J. (2012). The point of normative models in judgment and decision making. Frontiers in Psychology, 3, 577. https://doi.org/10.3389/fpsyg.2012.00577

Beu, D. S., Buckley, M. R., & Harvey, M. G. (2003). Ethical decision-making: A multidimensional construct. Business Ethics: A European Review, 12(1), 88–107. https://doi.org/10.1111/1467-8608.00308

Busse, C., Mahlendorf, M. D., & Bode, C. (2016). The ABC for studying the Too-Much-of-a-Good-Thing effect a competitive mediation framework linking antecedents, benefits, and costs. Organizational Research Methods, 19(1), 131–153. https://doi.org/10.1177/1094428115579699

Carmona-Perera, M., Caracuel, A., Perez-Garcia, M., & Verdejo-Garcia, A. J. (2015). Brief moral decision-making questionnaire: A Rasch-derived short form of the Greene dilemmas. Psychological Assessment, 27(2), 424–432. https://doi.org/10.1037/pas0000049

Chaiken, S., & Trope, Y. (1999). Dual-process theories in social psychology. New York, NY: Guilford Press.

Cialdini, R. B., & Goldstein, N. J. (2004). Social influence: Compliance and conformity. Annual Review of Psychology, 55, 591–621. https://doi.org/10.1146/annurev.psych.55.090902.142015

Cialdini, R. B., & Trost, M. R. (1998). Social influence: Social norms, conformity and compliance. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), The handbook of social psychology (Vol. 2, 4th ed., pp. 151–192). Boston, MA: McGraw-Hill.

Collins, S. (2019). Collective responsibility gaps. Journal of Business Ethics, 154(4), 943–954. https://doi.org/10.1007/s10551-018-3890-0

Conway, P., & Gawronska, B. (2013). Deontological and utilitarian inclinations in moral decision making: A process dissociation approach. Journal of Personality and Social Psychology, 104(2), 216–235. https://doi.org/10.1037/a0031021

Curşeu, P. L., Jansen, R. J. G., & Chappin, M. M. H. (2013). Decision rules and group rationality: Cognitive gain or standstill? PLoS ONE, 8(2), e56454. https://doi.org/10.1371/journal.pone.0056454

Curşeu, P. L., Meslec, N., Plut, H., & Lucas, G. (2015). Cognitive synergy in groups and group-to-individual transfer of decision-making competencies. Frontiers in Psychology, 6, 1375.

Curşeu, P., & Schruijer, S. (2012). Normative interventions, emergent cognition and decision rationality in ad hoc and established groups. Management Decision, 50(6), 1062–1075.
Greene, J. D., Morelli, S. A., Lowenberg, K., Nystrom, L. E., & Cohen, J. D. (2008). Cognitive load selectively interferes with utilitarian moral judgment. Cognition, 107, 1144–1154. https://doi.org/10.1016/j.cognition.2007.11.004

Greene, J. D., Nystrom, L. E., Engell, A. D., Darley, J. M., & Cohen, J. D. (2004). The neural bases of cognitive conflict and control in moral judgment. Neuron, 44(2), 389–400. https://doi.org/10.1016/j.neuron.2004.09.027

Greene, J. D., Sommerville, R. B., Nystrom, L. E., Darley, J. M., & Cohen, J. D. (2001). An fMRI investigation of emotional engagement in moral judgment. Science, 293, 2105–2108. https://doi.org/10.1126/scien ce.1062872

Haidt, J., & Kesebir, S. (2010). Morality. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), Handbook of social psychology (pp. 797–832). John Wiley & Sons Inc.

Hall, J., & Watson, W. H. (1970). The effects of a normative intervention on group decision-making performance. Human Relations, 23(4), 299–317. https://doi.org/10.1177/00187267002300404

Harrison, D. D., & Klein, K. J. (2007). What’s the difference? Diversity constructs as separation, variety, or disparity in organizations. Academy of Management Review, 32(4), 1199–1228. https://doi.org/10.5465/amr.2007.26586096

Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. New York, NY: Guilford Press.

Hinzs, V. B., Tindale, R. S., & Vollrath, D. A. (1997). The emerging conceptualization of groups as information processors. Psychological Bulletin, 121(1), 43–64. https://doi.org/10.1037/0033-2909.121.1.43

Hunt, T. G., & Jennings, D. F. (1997). Ethics and performance: A simulation analysis of team decision making. Journal of Business Ethics, 16, 195. https://doi.org/10.1023/A:1017987224590

Jetten, J., & Hornsey, M. J. (2014). Deviance and dissent in groups. Annual Review of Psychology, 65, 461–485. https://doi.org/10.1146/annurev-pych-010213-115151

Kruglanski, A. W., & Mackie, D. M. (1990). Motivation and minority influence: A judgmental process analysis. European Review of Social Psychology, 1(1), 229–261. https://doi.org/10.1080/14792779108401863

 Larson, J. R., Jr. (2007). Deep diversity and strong synergy: Modeling the impact of variability in members’ problem-solving strategies on group problem-solving performance. Small Group Research, 38, 413–436. https://doi.org/10.1177/1046496407301972

Larson, J. R. (2010). In search of synergy in small group performance. New York, NY: Psychology Press.

Larson, J. R., & Christensen, C. (1993). Groups as problem-solving units: Toward a new meaning of social cognition. British Journal of Social Psychology, 32(1), 5–30. https://doi.org/10.1111/j.2044-8309.1993.tb00983.x

Lee, W. S., & Chuang, Y. H. (2018). Experimental investigation into the role of trust in collusion. Business Ethics: A European Review, 27(1), 81–94. https://doi.org/10.1111/beer.12175

Lehnert, K., Park, Y., & Singh, N. (2015). Research note and review of the empirical ethical decision-making literature: Boundary conditions and extensions. Journal of Business Ethics, 129(1), 195–219. https://doi.org/10.1007/s10551-014-2147-2

List, C. (2005). Group knowledge and group rationality: A judgment aggregation perspective. Episteme, 2(1), 25–38. https://doi.org/10.3366/epi.2005.2.1.25

Maclagan, P. (2012). Conflicting obligations, moral dilemmas and the development of judgement through business ethics education. Business Ethics: A European Review, 21(2), 183–197. https://doi.org/10.1111/j.1467-8608.2011.01645.x

Maclagan, P. (2015). Moral dilemmas, moral reasons and moral learning: Interpreting a real case in terms of particularistic theory.
Ethics: A European Review, 24(3), 221–236. https://doi.org/10.1111/beer.12071

Marks, M. A., Mathieu, J. E., & Zaccaro, S. J. (2001). A temporally based framework and taxonomy of team processes. *Academy of Management Review, 26*(3), 356–376. https://doi.org/10.5465/amr.2001.4845785

Martin, R., & Hewstone, M. (2008). Majority versus minority influence, message processing and attitude change: The Source-Context-Elaboration Model. *Advances in Experimental Social Psychology, 40*, 237–326. https://doi.org/10.1016/S0065-2601(07)00005-6

Meslec, N., & Curseu, P. L. (2013). Too close or too far hurts: Cognitive distance and group cognitive synergy. *Small Group Research, 44*(5), 471–497. https://doi.org/10.1177/1046496413491988

Mihelčič, K. K., & Culiberg, B. (2019). Reaping the fruits of another’s labor: The role of moral meaningfulness, mindfulness, and motivation in social loafing. *Journal of Business Ethics, 160*(3), 713–727. https://doi.org/10.1007/s10551-018-3933-z

Moscovici, S. (1980). Toward a theory of conversion behavior. In *Toward a Theory of Conversion Behavior*. New York, NY: Academic Press.

Mudrach, P. E., & Mason, E. S. (2020). A relativistic approach to moral judgments in individuals: Review and interpretation. *Business Ethics: A European Review, 29*(2), 403–416.

Nemeth, C. (1995). Dissent as driving cognition, attitudes and judgments. *Social Cognition, 13*, 273–291. https://doi.org/10.1521/soco.1995.13.3.273

Nemeth, C., Brown, K., & Rogers, J. (2001). Devil’s advocate versus authentic dissent: Stimulating quantity and quality. *European Journal of Social Psychology, 31*, 707–720. https://doi.org/10.1002/ejsp.58

Nemeth, C. J., & Wachtler, J. (1983). Creative problem solving as a result of majority vs minority influence. *European Journal of Social Psychology, 13*(1), 45–55. https://doi.org/10.1002/ejsp.2420130103

Nichols, M. L., & Day, V. E. (1982). A comparison of moral reasoning of groups and individuals on the “Defining Issues Test”. *Academy of Management Journal, 25*(1), 201–208.

Pratkanis, A. R. (2006). Editorial: An inaugural issue. *Social Influence, 1*(1), 1–2. https://doi.org/10.1080/15534510500444386

Queiroz, R. M. D. C. (2015). Putting ethics and economic rationality together: An Aristotelian and philosophical approach. *Business Ethics: A European Review, 24*(3), 332–346. https://doi.org/10.1111/beer.12077

Rai, T. S., & Fiske, A. P. (2011). Moral psychology is relationship regulation: Moral motives for unity, hierarchy, equality, and proportionality. *Psychological Review, 118*(1), 57–75. https://doi.org/10.1037/a0021867

Sarkar, H. (1982). A theory of group rationality. *Studies in History and Philosophy of Science Part A, 13*(1), 55–72. https://doi.org/10.1016/0039-3681(82)90004-8

Schminke, M., & Wells, D. (1999). Group processes and performance and their effects on individuals’ ethical frameworks. *Journal of Business Ethics, 18*(4), 367–381.

Shafir, E., & LeBoeuf, R. A. (2002). Rationality. *Annual Review of Psychology, 53*, 491–517. https://doi.org/10.1146/annurev.psych.53.100901.135213

Treviño, L. K., Weaver, G. R., & Reynolds, S. J. (2006). Behavioral ethics in organizations: A review. *Journal of Management, 32*(6), 951–990. https://doi.org/10.1177/0149206306294258

van Rooij, B., & Fine, A. (2018). Toxic corporate culture: Assessing organizational processes of deviancy. *Administrative Sciences, 8*(3), 1–38.

Wurtzmann, K. (2020). How group and perceiver characteristics affect collective blame following counterproductive work behavior. *Business Ethics: A European Review, 29*(1), 212-226. https://doi.org/10.1111/beer.12251

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**APPENDIX**

**MORAL DILEMMAS EXAMPLES**

**Situation 1**

You are on a cruise ship when there is a fire on board, and the ship has to be abandoned. The lifeboats are carrying many more people than they were designed to carry. The lifeboat you are in is sitting dangerously low in the water, a few inches lower and it will sink.

The seas start to get rough, and the boat begins to fill with water. If nothing is done it will sink before the rescue boats arrive and everyone on board will die. However, there is an injured person who will not survive in any case. If you throw that person overboard the boat will stay afloat and the remaining passengers will be saved. Do you throw this person overboard in order to save the lives of the remaining passengers? (YES/NO).
Situation 2

Enemy soldiers have taken over your village. They have orders to kill all remaining civilians. You and some of your townspeople have sought refuge in the cellar of a large house. Outside you hear the voices of soldiers who have come to search the house for valuables. Your baby begins to cry loudly. You cover his mouth to block the sound. If you remove your hand from his mouth his crying will summon the attention of the soldiers who will kill you, your child, and the others hiding out in the cellar. To save yourself and the others you must smother your child to death.

Do you smother your child in order to save yourself and the other townspeople? (YES/NO).