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## Rational altruism vs. moral foundations: What drives Polish youth to help Ukrainian refugees?

Racjonalny altruizm a fundamenty moralne: co skłania polską młodzież do pomocy ukraińskim uchodźcom?

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### Abstract

This paper examines the moral factors that motivate altruistic behavior on the part of Polish students toward Ukrainian war refugees within the context of economic theories on altruism. An online survey is used to itemise the students' altruistic activities, explore what they see as their moral obligations, and elicit their views on supporting refugees. The data are analyzed in relation to Jonathan Haidt's five moral foundations using correlation analysis and logistic models. The findings suggest that Haidt's care/harm foundation significantly influences altruistic conduct towards refugees. The fairness/reciprocity foundation is negatively correlated with supporting refugees when such support is perceived as unfair. Expanding the circle of moral obligations (referred to as loyalty circles) is shown to have a positive and mostly significant effect on altruistic behavior. Moreover, the study shows that some Polish students acted contrary to their stated social preferences by supporting Ukrainian refugees despite believing that it is unfair. The paper concludes that these findings challenge the mainstream economic theories on altruism.

**Keywords:** optimization, harm, altruism, war refugees, Moral Foundations Theory.

**JEL:** D63, D64, J15

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### Streszczenie

Celem artykułu jest analiza moralnych czynników motywujących altruistyczne zachowania polskich studentów wobec uchodźców wojennych z Ukrainy w kontekście ekonomicznych teorii altruizmu. Za pomocą ankiety internetowej zbadano altruistyczne działania studentów, ich przekonania na temat obowiązków moralnych oraz poglądy dotyczące wsparcia uchodźców. Dane analizowano w odniesieniu do pięciu fundamentów moralnych Jonathana Haidta z wykorzystaniem metod statystycznych: analiza korelacji, modele logitowe. Wykazano, że fundament troska/krzywda istotnie wpływa na altruistyczne działania wobec uchodźców, fundament sprawiedliwość/wzajemność jest negatywnie skorelowany z udzielaniem pomocy, gdy ta pomoc jest uważana za niesprawiedliwą, a poszerzanie kręgu zobowiązań moralnych ma istotny pozytywny wpływ na altruistyczne zachowania. Ujawniono również, że niektórzy polscy studenci działali wbrew swoim deklarowanym preferencjom społecznym i wspierali ukraińskich uchodźców, mimo że uważali to za niesprawiedliwe. Uzyskane wyniki stanowią wyzwanie dla dominującego w ekonomii podejścia do altruistycznych zachowań.

**Słowa kluczowe:** optymalizacja, altruizm, uchodźcy wojenni, krzywda, teoria fundamentów moralnych.

**JEL:** D63, D64, J15



## 1. Introduction

Several million Ukrainian war refugees have arrived in Poland since Russia launched a full-scale invasion of that country on February 24, 2022. Many Poles, including students, donated their time and financial resources in an attempt to help Ukrainian refugees at the beginning of the conflict.<sup>1</sup> In light of such an unprecedented scale of altruism, this paper explores and comprehensively analyzes the moral factors that motivated this benevolence within the framework of economic theories of altruism.

The extensive body of theoretical and empirical evidence emphasizes the roles of compassion, fairness, and identity. To the extent that altruism is analyzed within a behavioral economic framework, this is done chiefly from the standpoint of fairness (often interpreted as reciprocity) and equity. Since compassion, fairness, and identity can be construed as moral dimensions, this paper examines morality as a potential predictor of altruistic behavior toward war refugees on the part of host-country citizens. Jonathan Haidt's (Haidt, Joseph, 2008; Haidt, 2012) moral foundations theory (MFT) is used as the framework for the analysis. Haidt's five moral foundations, viz., *care/harm*, *fairness/reciprocity*, *loyalty/in-group*, *authority/respect*, and *sanctity/purity*, resemble some of the moral dimensions of altruistic behavior examined independently in various studies (Cox, 2019; Hartman, Morse, 2020; Hellmann et al., 2021). However, they appear to go beyond the scope of the available empirical evidence. Haidt's framework allows for a comprehensive investigation of the impact of moral dimensions on altruistic behavior. To the best of the authors' knowledge, there have been few attempts to apply Haidt's MFT to analyzing altruistic behavior (O'Grady et al., 2019; Nilsson et al., 2020). The present research therefore derives its motivation from several sources. First, it distills the moral imperatives that compel Poles to offer assistance to Ukrainian war refugees. Second, it challenges the conventional economic analysis of altruistic behavior in terms of utility by demonstrating the importance of moral sentiment. Finally, it contributes to the relatively small body of literature on the links between moral foundations and various types of altruistic behavior.

The empirical part of the paper is based on an online survey of Polish university students conducted in the initial stage of the Russian invasion of Ukraine. The collected data include information on the respondents' charitable activities in aid of Ukrainian refugees, the socio-demographic characteristics of the respondents (gender, age, income, etc.), and the moral dimensions of these activities as specified by MFT. While this research is primarily exploratory, examining the host community's response(s) to the influx of Ukrainian refugees as a natural experiment inevitably raises certain expectations as to which factors are likely to influence altruistic behavior on the part of Polish youth. For example, empathy and perceived closeness, rather than expected reciprocity, are expected to inspire charitable activities. Correlation analysis and logit modeling are employed to analyze

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<sup>1</sup> In March 2022, the EU activated the "Temporary Protection Directive" for Ukrainian refugees, granting them special legal status for protection and travel within EU countries, <https://www.consilium.europa.eu/en/infographics/ukraine-refugees-eu/> (access: September 2023).

the data and establish robust links between moral foundations and charitable aid to refugees. Hopefully, this investigation will lay the groundwork for formulating more precise and impactful future hypotheses.

The remainder of the paper is structured as follows: Section 2 reviews the literature on altruistic behavior in economics and empirical research on altruistic behavior toward refugees. Section 3 elaborates on MFT as a framework for altruistic behaviors. Section 4 describes the data and the results. Section 5 discusses the main findings. Section 6 summarizes and concludes.

## 2. Literature review

### 2.1. How economists address altruistic behavior: a brief diagnosis and criticism

Economic science recognizes the existence of altruistic motives, prosocial behavior, and charity. It should be noted, however, that such behavior is generally viewed as the outcome of deliberate self-optimization (since mainstream economics is deeply rooted in the idea of utilitarianism). The previous generation of studies on altruism was typically predicated on “teleological behaviorism” (Rachlin, 2002), which asserts that rational agents are willing to make sacrifices so long as the discounted future rewards are expected to offset the costs. However, the modern approach emphasizes the “internal” reward(s) for altruism, and views altruistic behavior as indicative of social preferences (alternatively, other-regarding preferences). For instance, Becker (1974; 1981) and Stark (1995) assumed that an individual’s utility is proportionate to the pay-off (in Becker’s case) or utility (in Stark’s case) of other agents (both Becker and Stark examined the exchange within the family). In a seminal paper, Andreoni and Miller (2002) tested the rationality of altruistic preferences using the dictator game. The authors made a similar assumption, hypothesizing that each player’s utility was positively dependent on the pay-offs assigned to the other players. They then attempted to determine whether altruistic preferences are rational (i.e., consistent with the General Axiom of Revealed Preferences, or GARP). Fehr and Schmidt (1999), and Bolton and Ockenfels (2000), undertook a slightly different approach, assuming that an individual’s utility was not determined by the utility of other agents per se but by the equality of wealth distribution across the population (in the former case) or equity and reciprocity among the counterplayers (in the latter case). To summarize, all the studies discussed above assessed every act of altruism (including charitable donations) as an attempt to maximize utility. Agents exhibit certain preferences, and altruism is considered to be an economic good, as it increases utility (often referred to as the “warm glow of giving” – Andreoni, 1990), but incurs an opportunity cost (since to give to others is *ipso facto* to deny oneself something). To put it succinctly, the most popular positive theory of altruism in economics posits that we help others because it contributes to our happiness (the question of why helping others should make us happy is left open).

As a normative idea, utilitarian ethics recognizes pleasure as the ultimate goodness. Bentham (1834a; 1834b), who is commonly referred to as the father of utili-

tarianism, was primarily concerned with justifying the greatest pleasure as a valid normative principle. Mill (1863) polished his ideas, introducing the “hierarchy” of pleasures and claiming that a decent human derives happiness from acts of decency (e.g., self-sacrifice). The growing recognition of the philosophy of effective altruism can be seen as the next stage in the evolution of utilitarianism. Although the present paper places greater emphasis on analyzing the patterns of altruism than on evaluating them, the authors contend that this topic is nevertheless relevant. In one of his most famous works, Singer (1972) argues that we have a moral duty to distribute resources in a way that maximizes aggregate happiness. For instance, we often purchase a luxury good (i.e., one not essential for our survival or well-being) whose price could be used to save someone from hunger. Nowadays, we do not even need to communicate with people in need, as there are numerous international organizations we can donate to. To summarize: effective altruism is the pragmatic use of scarce resources to prevent or mitigate objectively bad outcomes, such as illness and hunger, on a global scale (Singer, 2009). Although effective altruism has a pragmatic appeal, it is nigh impossible to put into practice. Supporting a familiar member of the local community, or at least someone with whom we can communicate face-to-face, comes more naturally than supporting a stranger from another continent. Moreover, effective altruism presupposes that we can always foresee the consequences of our charitable actions and choose the best of the available alternatives. This assumption is obviously untenable. Finally, effective altruism views charitable actions as no more than a means of redistributing essential goods. Any agency on the part of the beneficiary is downplayed or ignored. There is no social exchange anymore – merely a pragmatic and (presumably rational) altruist deciding on how best to distribute resources.

To return to the main topic, despite its popularity in applied and theoretical research, the utilitarian approach to altruism has attracted a great deal of criticism. First, “rationality as consistency” appears to be a questionable premise, considering the high cognitive costs of self-optimization (Smith, 2010). It would therefore make more sense to conceptualize prosocial behavior as the product of social norms or “social heuristics” (Sunstein, 2013). The experimental evidence provided by Rand et al. (2014) and Guazzini et al. (2019) suggest that agents tend to follow heuristics rather than optimization principles in a complex and uncertain environment, in line with the “social heuristics” hypothesis. In addition, the argument posed by Sugden (2018) emphasizes the role of “sympathy” in social interaction. This is often overlooked in mainstream discourse. Sympathy, or fellowship, does not arise solely from the act of giving; instead, it is always the product of social interaction. Moreover, according to Sugden (2018), charitable giving is strongly contextual. To a significant extent, our willingness to share depends on whether we are observed by others and on the kind of behavior we believe is expected of us. The social heuristics approach posits that altruism is part of the “social contract”. We demonstrate kindness towards others when it is in line with mutual expectations.

The “social heuristics” model of altruistic behavior seems more compelling than the mainstream self-optimization approach. People are more inclined to utilize readily available social scripts and protocols than they are to conduct a complex

cost-benefit analysis that takes all the relevant factors into account in an attempt to determine the optimal course of action. Social norms are the product of evolutionary selection; being shaped by society, they deliver a survival benefit by facilitating cooperation. The present authors, however, believe that relying on social norms as the primary mechanism of altruistic behavior is a biased strategy. Under this model, a moral sentiment appears as a convention that is only valid if it serves a specific function (such as avoiding injustice and preventing harm). Those who hold secular, individualistic values and believe in the social contract are not likely to take issue with it, as it implies that liberty can only be constrained by the negative liberties of others (e.g., not to be harmed or obstructed). However, as Haidt (2012) points out, this belief is not universally held. For many people (as reported by Haidt, typically from non-Western cultures and deprived social classes), morality is broader and not confined to considerations of justice and harm. Our emotional response (or “gut feeling”) typically comes first and governs our social impulses, which are justified *ex-post*. There is no fundamental contradiction between the idea of social norms as social self-regulating mechanisms and Haidt’s (2012) insights (after all, Haidt has consistently emphasized that morality is the product of adaptive challenges). Both the self-optimization and the social heuristic models of rational behavior are discernible in empirical studies on helping refugees. This is discussed in the next section.

## **2.2. Altruistic behavior towards refugees: empathy, reciprocity, shared identities**

There is a growing body of literature focusing on the attitudes and actions of host-country citizens toward refugees (rather than on the experiences of refugees, their reasons for leaving their home countries, and their impact on their host countries). This section examines the factors that influence altruism toward refugees. Three factors seem particularly promising as predictors of altruistic behavior toward refugees on the part of host-country citizens: perceived identity proximity and closeness; perceived willingness on the part of refugees to reciprocate the benefits they receive; and empathy.

To begin with identity proximity, Hellmann et al. (2021) used the dictator game with a sample of hosts and refugees in their experimental study. The authors reported that hosts are more willing to behave altruistically toward refugees if they share the same local identity (i.e., live in the same city) and if there is a perceived closeness between them. At the same time, shared identity (e.g., if both the host and the refugee are students) and difference in economic status did not exhibit a uniform effect on voluntary giving. Nyeste (2017) also confirmed the importance of perceived closeness as a stimulus for philanthropic giving. On the basis of survey data, Hager and Valasek (2022) established a positive relationship between the proximity of host-country citizens to, and trust toward, refugees. Similarly, Cox (2019) underlined the importance of shared culture and, more generally, social identity, in shaping host-country citizens’ attitudes toward refugees. In the context of the Russia-Ukraine war, Politi et al. (2023) observed that a shared superordinate European identity motivated Belgian students to help Ukrainian refugees.

Regarding the second strand of research, on the basis of survey data and an experimental study, Jeworrek et al. (2021) demonstrated that the willingness of host-country citizens to support refugees will increase substantially if they learn that the refugees are reciprocating by volunteering for the community. Their results support the findings that host-country citizens are more likely to help refugees who make an effort to integrate, e.g. by attending integration courses (Böhm et al., 2018) or who are seen to be contributing to society (Thravalou et al., 2021). Similarly, in his study exploring the reception of Ukrainian refugees within the Swedish sports movement, Blomqvist Mickelsson (2023) found that the refugees were perceived as potential contributors to the host society, demonstrating a willingness to work and integrate. Looking at costs and benefits as potential predictors of altruistic behavior toward refugees is a standard economic approach. As Böhm et al. (2018) demonstrate, members of host societies are less inclined to help refugees if it is costly to do so, but more inclined if the refugees are in need and if helping them might alleviate their suffering or reduce their losses. The question of whether aiding refugees is viewed as fair depends on the closeness of their identity to that of the host-country citizens and the extent to which they reciprocate the assistance they are given. As Kals and Strubel (2017) point out, the scope of justice is essential in explaining the willingness to support refugees.

As for the third strand of research developing within social psychology, empathy among host-country citizens was investigated by Hartman and Morse (2020), who found that their own experiences of violence (suffering in previous military conflicts) induced empathetic feelings toward refugees. Although Klimecki et al. (2016) did not investigate host-country citizens and refugees, their experimental study reported that empathy significantly increased altruistic behavior. They also found that prosocial behavior is more strongly related to empathic feelings than to empathic traits in individuals. They ultimately concluded that “in order to promote altruism – whether it is for charities, refugees, or in other economic and political contexts – it is essential to appeal to a person’s empathy for specific recipients.” (Klimecki et al., 2016, p. 4). As Thravalou et al. (2021) demonstrated in the context of the 2015 European refugee crisis, the Greeks, who felt more sympathy for asylum seekers, declared more aid. Empathy for Ukrainian refugees was also identified as the primary motivator for Belgian students (Politi et al., 2023) and Polish volunteers to offer assistance (Domaradzki et al., 2022).

The finding that the willingness of host-country citizens to support refugees increases significantly if they learn about the refugees’ reciprocal response is consistent with the self-optimization model of rationality. However, the reference to empathy and shared identities may indicate that host-country citizens often use specific, ready-made social scripts when acting altruistically.

### 3. Theoretical framework

Haidt’s MFT was chosen as the theoretical framework for this study for two reasons. Firstly, MFT interprets the moral foundations that govern personal behavior as heuristics rather than the result of rational deliberation. This goes beyond the self-optimization model of rational behavior. Secondly, some of these foundations

appear to have been found in earlier empirical studies of altruistic behavior towards refugees (even if they are not interpreted as such).

Haidt (2012) stresses that the distinction between social and moral norms arises from the belief in the social contract, i.e., the need for a mechanism that allows for cooperation between atomistic agents. The following line of thinking may well resonate with many: “*Am I doing anything unjust? Am I harming anyone else? If not, then no one has the right to infringe my sacred freedom to do whatever I want.*” However, while this viewpoint is typical of secular Western culture (especially among the higher social classes), it is by no means universally held. Haidt and Joseph (2008) discuss the idea of an “innate” moral sense, i.e., moral reasoning “organized in advance of experience” (Haidt, 2012, uses the more intuitive term, “gut feeling”). Haidt’s (2012) argument can be used to answer such questions as why we do not torture our parents. It is not because the cost would outweigh the benefits (although this is true). Nor is it because we are restrained by a social norm (although such a norm exists). We do not do it because we find the very thought of such behavior repugnant.

Haidt and Joseph (2008) and Haidt (2012) developed the MFT in order to systematize this innate morality. MFT specifies five essential “building blocks”, or “foundations”, of moral judgment (which are uniform across cultures, albeit weighted differently), viz. *care/harm*, *fairness/reciprocity*, *loyalty/in-group*, *authority/respect*, and *sanctity/purity*. These moral foundations should be viewed as the product of evolution, i.e. as mechanisms developed in response to various adaptive challenges. The *care/harm* foundation arose from the need to protect weak and vulnerable offspring. It is through this mechanism that we recognize distress and suffering in others and wish to alleviate it (e.g., by sharing our endowment with those in need). Similarly, our aversion to unfairness can be seen as a mechanism that fosters cooperation between non-kin group members. Cooperation would be an evolutionarily unstable strategy if there were too many defectors. The *fairness/reciprocity* foundation minimizes this through the imposition of sanctions. The *loyalty/in-group* foundation is what gives a group coherence. This contributes to its effective functioning and makes it more likely to survive conflicts with other groups. Respect for authority allows for consistently reinforcing rules and norms across subordinates (on the one hand) and prevents superiors from abusing power (on the other). And finally, the *purity* foundation evolved as a mechanism to protect us from threats such as bacteria and parasites. Humans are omnivores and live in large groups compared to other mammals. Moreover, our species, being non-endemic, constantly feels the urge to explore new sources of nutrition. The feeling of disgust helps us avoid potential sources of contagious diseases. The module of purity was adopted as a system of moral evaluation; we commonly associate purity with sanctity and holiness. The common practice is to categorize moral foundations into two groups: individualizing values (*care/harm* and *fairness/reciprocity*) and binding values (i.e., values supporting social ties and incorporating the remaining three foundations) (see e.g., Niemi and Young, 2016).

Graham et al. (2011) developed a Moral Foundations Questionnaire (MFQ) comprising 30 statements related to the moral foundations discussed above. The MFQ is commonly used in empirical studies to explore differences in moral judgments among individuals of different political persuasions (Graham et al., 2009,

reported that liberals assigned disproportionately high ratings to the care and fairness foundations, whereas conservatives weighted the five foundations more evenly), cultural backgrounds, and social classes (Haidt, 2012).

To the best of the authors' knowledge, Haidt's theory is primarily used to assess the nature of moral values among different ethnicities, socio-economic groups, etc. However, there is a paucity of evidence linking moral foundations to charitable giving. O'Grady et al. (2019) examined 591 U.S. respondents who had completed the MFQ survey and who had been given the option of donating their participation reward to a veteran or non-veteran charity (a list was provided). Individualizing foundations were found to be decisive when it came to donating to non-veteran charities. By contrast, loyalty had a positive effect on donating to veteran charities, while authority had a negative effect.

Nilsson et al. (2020) studied a sample of 985 Swedish adults who had completed the MFQ. The respondents had the option of answering several additional questions in exchange for a donation to a charitable organization (a list was provided). In addition, they were asked to report their previous charitable donations, as well as any volunteering, and to express their views on charitable giving (i.e., to what extent it was important to them). The study reported a positive correlation between individualizing moral foundations and volunteering and the size and frequency of charitable donations. However, stronger binding intuitions that suppressed both volunteering and charitable giving were also reported.

Although there are few attempts to study the determinants of altruistic behavior within the framework of MFT, the empirical evidence presented in the previous section supports the validity of MFT in this context. Research on the effect of empathy toward refugees on the altruistic behavior of host-country citizens can confirm the importance of the *care/harm* module. The finding that host-country citizens are more likely to act altruistically toward refugees if they know that the refugees are trying to reciprocate validates the *fairness/reciprocity* module. Finally, evidence that shared identity and proximity reinforce behavior is consistent with the workings of the *loyalty/in-group* module.

The present study assesses the nature of moral judgments and explores the ways in which they are manifested through different forms of charitable giving and altruistic behavior toward refugees. Considering all five moral foundations provides an opportunity to examine each module's role comprehensively and evaluate its effect on refugee support.

## 4. The empirical study

### 4.1. Sample

The data were collected online in April 2022 using the MFQ questionnaire<sup>2</sup> alongside a survey explicitly designed for the present study (Kwarciański, Ostasiewicz, 2023).

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<sup>2</sup> The MFQ questionnaire was utilized in its Polish translation, translated by Tomasz Jarmakowski-Kostrzanowski and Lilianna Jarmakowska-Kostrzanowska, [https://docs.google.com/spreadsheets/d/1UflzHkc8g5ohW\\_MIKGzbrGH5bIPiJoWcSvfq7OsoYc/edit#gid=4](https://docs.google.com/spreadsheets/d/1UflzHkc8g5ohW_MIKGzbrGH5bIPiJoWcSvfq7OsoYc/edit#gid=4) (accessed: April 2022).

Both were conducted in Polish (see Appendices 1–3). The sample comprised 574 respondents, mainly students from the Wrocław University of Economics and Business and the Krakow University of Economics. The MFQ questionnaire included two control questions. Inappropriate answers were discarded. This yielded 553 valid responses. The final sample consisted of 339 females (62.55%) and 203 males (37.45%), with 11 respondents opting not to disclose their gender. The sex ratio of the sample is slightly higher than that of the general population of Polish students. According to Eurostat’s 2021 data, 59% of students enrolled in tertiary education in Poland were female (Eurostat 2023a). The descriptive statistics related to the socio-demographic details of the respondents are provided in Table 1.

**Table 1.**  
*Descriptive statistics of the sample*

Feature	Total sample		Women		Men	
	mean	SD	mean	SD	mean	SD
age	22.5	4.7	22.2	4.0	23.1	5.5
	option	fraction of answers (%)	option	fraction of answers (%)	option	fraction of answers (%)
self-estimated financial condition	very poor	0.9	very poor	0.6	very poor	1.5
	poor	3.5	poor	2.9	poor	3.9
	moderate	37.6	moderate	40.4	moderate	34.0
	good	44.	good	44.0	good	44.3
	very good	13.7	very good	12.1	very good	16.3
Parents’ education	basic	1.1	basic	0.9	basic	1.5
	secondary	19.0	secondary	22.7	secondary	12.8
	vocational	17.5	vocational	18.0	vocational	15.7
	higher	62.4	higher	58.4	higher	70.0

Source: own calculation based on survey.

While the sample does not encompass the whole of Polish society, it provides a glimpse into a distinct subset of young Polish adults. Tertiary education in Poland is quite affordable and broadly accessible. According to the 2021 Eurostat data, 39.2% of the Polish population aged 20–24 participated in educational programs (Eurostat 2023b). Furthermore, today’s students are poised to step into local, provincial, and national government roles in the near future, and will therefore influence Poland’s political trajectory (including its refugee policy). Selecting a sample of Polish students to represent Polish youth is therefore not without merit.

**4.2. Dataset**

Five groups of variables were extracted from the survey for further analysis. The first group utilizes the MFQ scale to delineate five moral foundations: (1) *care/harm*; (2) *fairness/reciprocity*; (3) *loyalty/ in-group*; (4) *authority/respect*; and (5) *sanctity/purity*.

The respective variables were calculated as the average score for each subscale (see Table A2, Appendix 4). To corroborate the use of the MFQ scale, its reliability was assessed by calculating a Cronbach's alpha for each of the five foundations. The results align with the acceptability standards set by the scale's original creators (see Table A1, Appendix 4).

The second group of variables (see Appendix 1) describe altruistic behavior as follows: (1) volunteering (*volunt*); (2) financial support (*finance*); (3) material support (*material*), (4) providing accommodation for Ukrainian refugees (*room*); (5) sharing information about the needs of Ukrainian refugees on social media (*socmed*); (6) boycotting firms that continued to do business in Russia (*boycott*); and (7) participating in demonstrations, marches, and protests against Russia's invasion of Ukraine (*protest*). All these variables are measured on a frequency scale. While variables (1) – (5) clearly describe sacrificing resources for the sake of others (the most common description of altruism in economics), including *boycott* and *protest* might seem ambiguous. Although participating in protests might be motivated by reasons other than altruism, altruistic motives remain an essential aspect of political participation (see Jankowski, 2019). Moreover, in view of the novel character of the study, every potentially significant variable was analyzed.

The third group of variables represents opinions of other refugee supporters (see Appendix 3). These are likewise measured using a 6-point Likert scale. These variables were recoded in order to divide the sample into two approximately equal segments: scores of 0,1,2,3 are mapped to 0, while scores of 4,5 are mapped to 1. Using the agglomeration method (see Figure A1, Appendix 3), the following three opinions were clustered: Opinion 2 (those aiding Ukrainian refugees are behaving as any decent person would in the circumstances); Opinion 3 (those aiding Ukrainian refugees are acting in response to seeing harm done to others); and Opinion 4 (those aiding Ukrainian refugees are acting out of sympathy for the vulnerable) into a singular variable labeled *empathy*. Two other perspectives, viz. Opinion 7 (support for Ukrainian refugees unfairly overshadows aid to other refugee groups) and Opinion 8 (the needs of refugees are prioritized over Polish citizens), are merged into a singular variable labeled *unfairness*. The remaining opinions, being distinct, are retained separately: *heroism* for Opinion 1 (highlighting the commendable and heroic actions of those aiding refugees); *religiosity* for Opinion 5 (emphasizing the religious motivations for offering assistance); *gratitude* for Opinion 6 (suggesting aid is given in expectation of gratitude); and *authority* for Opinion 9 (acknowledging that those offering assistance can operate effectively thanks to governmental support).

The fourth group consists of variables formed by combining moral foundations with variables related to opinions and obligations. The *unfairness intensity* variable captures the synergistic effect of believing something is unfair with a strong emphasis on fairness in one's morality. It is constructed by multiplying the value of the *fairness/reciprocity* foundation by the value of the *unfairness* variable. Someone who doesn't value fairness scores a zero on this measure, even if they believe that helping Ukrainians is grossly unfair. Similarly, someone who values fairness highly but doesn't believe that helping Ukrainians is unfair also scores a zero.

Two additional constructed variables, *loyalty circles* and *impure circles*, are derived from the *obligation* variable. The *obligation* variable is calculated by averaging the responses to questions 2–5, which concern perceived moral obligations towards members of various social circles (see Appendix 2). Responses are measured on a 6-point Likert scale. The variable *obligation* reflects the degree of perceived moral obligation toward “strangers” (i.e., people of different countries of origin, ethnicity, or religion).

The *loyalty circles* variable is the product of the *loyalty* and *obligation* variables. Haidt’s *loyalty/in-group* foundation pertains to individuals’ affiliation with their “own group.” Direct questions in Haidt’s questionnaire reference entities such as “country,” “family,” “his/her group,” or “team.” Different individuals are bound to interpret their “own group” in a variety of ways. This definition often aligns with the group towards which an individual feels a moral obligation. Activities benefiting refugees require that two preconditions be met simultaneously: the refugees must be perceived as falling within the potential benefactor’s circles of obligation (as indicated by the *obligation* value), and the potential benefactor’s loyalty must be positive (as described by Haidt’s *loyalty/in-group* foundation). The *loyalty circles* variable is designed to gauge this potential interaction; it takes a nonzero value only when both the *loyalty/in-group* and *obligation* variables are nonzero and mutually reinforce each other.

The *impure circles* variable arises from the interaction between the *sanctity/purity* and *obligation* variables. Haidt suggests that the fundamental concept of purity evolved as a mechanism to protect us from threats such as bacteria and parasites, which humans typically view as disgusting and impure. Therefore, when someone perceives only a small circle as “their own” (a form of “xenophobia” represented by the inverse of the *obligation* variable, calculated as 4 minus the value of the *obligation* variable, where 4 is the maximum value), they tend to strongly perceive strangers through the lens of the purity concept, possibly viewing them as disgusting. This perception could lead to decreased support for Ukrainian refugees. The *impure circles* variable seeks to capture this potential interaction. It assumes a value of zero when an individual either treats everyone as part of their “own circle” or feels no disgust towards strangers.

Finally, the last group consists of demographic variables, including the respondents’ age (*age*), gender (*gender*) – where 0 represents female and 1 denotes male, financial situation (*finsit*) – measured on a scale of 0–4, later recoded as a binary variable: 0 represents “very bad”, “bad”, or “moderate”, while 1 denotes “good” or “very good”. Additionally, the parents’ educational level (*pared*) is measured on a scale of 0–3 and then recoded into a binary variable. In this format, 0 signifies less than higher education, while 1 denotes higher education.

### 4.3. Method

The factors that influence altruistic behavior are identified through logistic regression. Ordered logit models were initially considered. However, as the Brant tests point to non-proportional odds, logits were subsequently used for binary variables.

This approach models the conditional probability of the binary dependent variable  $Y$ , taking the value 1 as:

$$P(Y = 1 | \bar{X}) = \frac{1}{1 + \exp[-\bar{X}^T \bar{\alpha}]}, \quad (1)$$

where  $\bar{X}$  is the vector defined as:  $X_0=1$ , and elements  $X_i$  for  $i=1, \dots, n$  are the  $n$  explanatory variables.  $\bar{\alpha}$  is a vector of coefficients determined using the maximum likelihood method.

The dependent variable represents different forms of altruistic behavior towards Ukrainian refugees in Poland: volunteering (*volunt*); financial support (*finance*); material support (*material*); providing accommodation (*room*); sharing information about their needs on social media (*socmed*); boycotting firms that continue to do business in Russia (*boycott*); and participating in demonstrations, marches, and protests against the war in Ukraine (*protest*). These dependent variables are recorded to a binary format: no action (coded as 0) and action (coded as 1 regardless of frequency). The emphasis is on distinguishing those who help from those who do not, rather than parsing varying intensities of charitable engagement.

In the following estimations of model (1), the explanatory variables include a group encompassing all the variables related to the respondents' moral foundations (*care/harm*; *fairness/reciprocity*; *loyalty/ in-group*; *authority/respect*; *sanctity/purity*), as well as three constructed variables: *unfairness intensity*, *loyalty circles*, and *impure circles*. Given the correlation between the opinion and moral foundation variables (see Table A3, Appendix 4), only the *gratitude* variable from the opinion set is considered as an explanatory variable in the logit models. Additionally, a set of demographic variables is included as control variables.

#### 4.4. Results

This section starts with an overview of how frequently each altruistic behavior was reported by the respondents. It then presents the results of the analyses of the factors that influenced them. First, the outcomes from model (1) estimation are presented. These progress from the baseline models to those incorporating constructed variables and a variable reflecting the expectation of gratitude. This is followed by further analyses exploring the interplay between altruistic behavior toward Ukrainian refugees and the respondents' perceptions of the unfairness of offering assistance.

The frequency of various types of altruistic behavior is presented first. Table 2 displays detailed percentages of these behaviors, as indicated by the respondents, categorized by demographics. The most common forms of support were boycotting firms that continue to do business in Russia and providing financial support. Both were indicated by over 70% of respondents. Providing material support and spreading information on social media were indicated by approximately 50% of respondents. In contrast, volunteering, participating in demonstrations, and offering accommodation were infrequently reported.

**Table 2.**  
*Altruistic behavior frequency by demographic categories (in %)*

		volunt	finance	material	room	socmed	boycott	protest
Gender	Man	20.2	68.5	49.8	9.4	39.4	69.5	14.8
	Woman	22.1	72.0	64.6	12.1	51.6	72.0	17.1
Age	20 or younger	22.4	67.3	56.4	10.3	53.8	70.5	23.7
	21 and 22	20.1	71.0	60.7	8.9	45.5	69.2	10.7
	over 22	22.5	71.7	57.2	13.9	42.2	73.4	17.3
Self-estimated financial condition	poor	21.1	3.2	57.9	10.5	42.1	84.2	15.8
	moderate	17.3	66.8	53.4	7.7	50.5	69.2	13.9
	good	23.3	73.1	59.2	10.2	47.8	69.8	18.0
Parents' education	very good	26.3	73.7	71.1	21.1	34.2	75.0	15.8
	secondary	21.0	71.4	55.2	9.5	51.4	66.7	16.2
	vocational	19.6	66.0	46.4	5.2	40.2	66.0	13.4
	higher	22.3	70.4	62.9	12.8	47.2	73.3	17.4
<b>Total</b>		21.5	70.2	58.4	10.8	46.8	70.9	16.5

Source: own calculation based on survey.

Table 3 presents the estimations of a group of baseline models that explain altruistic behavior using a set of moral foundations and demographic control variables. These results suggest that only the *care/harm* foundation has a consistent and (largely) statistically significant influence on the level of assistance.

**Table 3.**  
*Baseline models*

Parameters estimated from seven logistic regressions for seven kinds of helping refugees. Logit for 1,2,3,4 vs 0.

Variables	volunt	finance	material	room	Socmed	boycott	Protest
const.	-3.755	-3.416	-2.769	-4.460	-1.673	-2.718	-3.038
care/harm	0.360	0.825**	0.378**	0.355	0.571**	0.806**	0.231
fairness/reciprocity	-0.075	-0.057	0.251	-0.051	-0.011	0.126	0.050
loyalty/in-group	0.284	0.381**	0.039	-0.003	0.020	0.206	0.217
authority/respect	-0.185	-0.145	0.251	-0.163	0.111	-0.185	-0.309
sanctity/purity	0.078	-0.152	-0.190	0.064	-0.214	-0.247*	0.164
gender	-0.036	0.078	-0.597**	-0.303	-0.335*	0.161	-0.066
age	0.022	0.034	0.009	0.033	-0.011	0.011	-0.011
finsit	0.302	0.299	0.342*	0.403	-0.228	-0.070	0.125
pared	0.104	-0.004	0.564**	0.577*	0.118	0.339	0.207
Nagelkerk R2	0.029	0.083	0.098	0.045	0.057	0.093	0.020
p-value for Wald test	0.352	0.001	0.000	0.218	0.010	0.000	0.730

Note: statistical significance: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .  
Source: own calculations based on data from survey.

Next, the group of models are estimated when certain explanatory variables from the baseline models are substituted with variables formed by combining some moral foundations with variables related to opinions on assistance provided by others and the extent of obligations (refer to the fourth group of variables in the dataset).

Table 4 displays the estimation results of the unfairness intensity models. In these models, compared to baseline models, the *fairness/reciprocity* foundation is substituted with the *unfairness intensity* variable. This constructed variable captures the combined effect of highly valuing fairness and perceiving assistance to Ukrainian refugees as unfair. The results indicate that this combination has a significant and negative impact on various types of altruistic behavior.

**Table 4.**

*Unfairness intensity models*

Parameters estimated from seven logistic regressions for seven kinds of helping refugees with *fairness/reciprocity* variable replaced by *unfairness intensity*. Logit for 1,2,3,4 vs 0.

Variables	volunt	finance	material	room	socmed	boycott	protest
const.	-3.613	-2.979	-2.067	-4.133	-1.153	-1.554	-2.271
care/harm	0.291	0.748**	0.486**	0.282	0.511**	0.804**	0.189
unfairness intensity	-0.027	-0.060**	-0.021	-0.040	-0.053**	-0.095**	-0.069**
loyalty/in-group	0.290	0.418**	0.061	0.009	0.045	0.267	0.252
authority/respect	-0.181	-0.133	0.250	-0.166	0.119	-0.170	-0.304
sanctity/purity	0.084	-0.159	-0.202	0.073	-0.211	-0.268*	0.168
Gender	-0.064	0.000	-0.617**	-0.350	-0.396**	0.034	-0.134
Age	0.022	0.035	0.007	0.033	-0.012	0.009	-0.013
Finsit	0.282	0.269	0.321*	0.375	-0.271	-0.138	0.074
Pared	0.087	-0.067	0.533**	0.555*	0.072	0.243	0.154
Nagelkerk R2	0.0330	0.1020	0.0973	0.0508	0.0756	0.1430	0.0393
p-value for the Wald test	0.2601	0.0000	0.0000	0.1502	0.0007	0.0000	0.2261

Note: statistical significance: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

Source: own calculations based on data from survey.

Table 5 shows the estimation results of the loyalty circles models. Compared to the baseline models, these models replace the *loyalty/in-group* foundation with the *loyalty circles* variable. This variable represents situations where refugees are seen as part of the potential benefactor's obligation circle (denoted by the *obligation* variable) and where the potential benefactor's level of loyalty is positive (as indicated by the *loyalty/in-group* variable). In the baseline models specifications, the effect of the *loyalty/in-group* foundation on altruistic behavior seem inconsistent and non-significant. However, when substituting with the *loyalty circles variable*, the results shift and consistently become positive across most charitable acts.

**Table 5.**

*Loyalty circles models*

Parameters estimated from seven logistic regressions for seven kinds of helping refugees with *in-group/loyalty* variable replaced by *loyalty circles*. Logit for 1,2,3,4 vs 0.

Variables	volunt	finance	material	room	socmed	boycott	protest
const.	-2.771	-2.665	-2.075	-3.750	-1.574	-2.025	-2.446
care/harm	0.171	0.682**	0.251	0.289	0.428**	0.682**	-0.028
fairness/reciprocity	-0.229	-0.143	0.151	-0.132	-0.106	0.037	-0.136
loyalty circles	0.051**	0.042**	0.037**	0.019	0.037**	0.039**	0.063**
authority/respect	-0.229	-0.077	0.153	-0.256	0.029	-0.202	-0.431**
sanctity/purity	-0.014	-0.203	-0.291**	0.032	-0.338**	-0.328**	0.014
gender	0.030	0.128	-0.556**	-0.267	-0.293	0.210	0.009
age	0.032	0.042	0.012	0.028	0.008	0.016	0.018
finsit	0.110	0.109	-0.068	-0.267	0.358	0.041	0.494
pared	0.217	0.254	0.297	0.384	-0.336*	-0.126	-0.015
Nagelkerk R <sup>2</sup>	0.0527	0.1052	0.1279	0.0470	0.0781	0.1204	0.0192
p-value for the Wald test	0.0364	0.0000	0.0000	0.1900	0.0005	0.0000	0.7441

Note: statistical significance: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Source: own calculations based on data from survey.

Table 6 presents the estimates from the impure circles models. Compared to the baseline models, these models replace the *sanctity/purity* foundation with the *impure circles* variable. This variable captures situations where individuals view only a small group as “their own” (essentially the inverse of the *obligation* variable) and strongly perceive outsiders through the lens of the purity concept (as denoted by the *sanctity/purity* variable), possibly considering them repugnant. In the baseline models specifications, the *sanctity/purity* foundation mostly appears insignificant. However, when replaced with the *impure circles* variable, the results turn negative and are statistically significant. This suggests that the perspective encompassed by the *impure circles* variable typically leads to diminished support for Ukrainian refugees.

**Table 6.**

*Impure circles models*

Parameters estimated from seven logistic regressions for seven kinds of helping refugees with *sanctity/purity* variable replaced by *impure circles*. Logit for 1,2,3,4 vs 0.

Variables	volunt	finance	material	room	socmed	boycott	protest
const.	-3.119	-2.796	-2.053	-4.277	-1.035	-2.118	-3.119
care/harm	0.306	0.725**	0.251	0.353	0.448**	0.687	0.306**
fairness/reciprocity	-0.181	-0.148	0.159	-0.087	-0.088	0.053	-0.181
loyalty/in-group	0.337*	0.367**	0.011	0.020	-0.025	0.153	0.337
authority/respect	-0.090	-0.127	0.253	-0.113	0.082	-0.224	-0.090

Variables	volunt	finance	material	room	socmed	boycott	protest
impure circles	-0.086**	-0.104**	-0.107**	-0.022	-0.089**	-0.091	-0.086**
gender	-0.008	0.106	-0.580**	-0.293	-0.317*	0.185	-0.008
age	0.028	0.038	0.012	0.035	-0.009	0.012	0.028
finsit	0.272	0.265	0.304	0.393	-0.273	-0.107	0.272
pared	0.110	0.046	0.636**	0.566*	0.181	0.411	0.110**
Nagelkerk R2	0.032	0.087	0.098	0.045	0.058	0.094	0.018
p-value for the Wald test	0.278	0.000	0.000	0.221	0.008	0.000	0.774

Note: statistical significance: \*\*\* p <0.01, \*\* p<0.05, \* p <0.1.  
 Source: own calculations based on data from survey.

Table 7 presents the estimation results of the gratitude models. These models are an extension of the baseline models, augmented with an additional variable. This variable, labeled “gratitude” in the set of explanatory variables, represents the opinion that an expectation of gratitude is the motivation for helping Ukrainian refugees. The majority of the coefficients are negative, with two being statistically significant.

**Table 7.**

*Gratitude models*

Parameters estimated from seven logistic regressions for seven kinds of helping refugees with *gratitude* variable included. Logit for 1,2,3,4 vs 0.

Variables	volunt	finance	material	room	socmed	boycott	protest
const.	-3.962	-3.414	-2.390	-4.549	-1.593	-2.334	-3.192
care/harm	0.378	0.825**	0.340*	0.363	0.562**	0.769**	0.245
fairness/reciprocity	-0.076	-0.057	0.263	-0.051	-0.009	0.137	0.049
loyalty/in-group	0.271	0.381**	0.063	-0.007	0.025	0.230	0.208
authority/respect	-0.188	-0.145	0.265	-0.165	0.113	-0.174	-0.312
sanctity/purity	0.080	-0.152	-0.196	0.065	-0.215	-0.252*	0.165
Gender	-0.024	0.078	-0.628**	-0.297	-0.341*	0.132	-0.059
Age	0.023	0.034	0.007	0.033	-0.011	0.009	-0.010
Finsit	0.317	0.299	0.314*	0.408	-0.234	-0.103	0.135
Pared	0.108	-0.004	0.565**	0.579*	0.117	0.344*	0.210
gratitude	0.075	-0.001	-0.160**	0.031	-0.031	-0.161**	0.057
Nagelkerk R2	0.0305	0.0828	0.1106	0.0458	0.0580	0.1060	0.0201
p-value for the Wald test	0.4087	0.0010	0.0000	0.2795	0.0154	0.0000	0.7975

Note: statistical significance: \*\*\* p <0.01, \*\* p<0.05, \* p <0.1.  
 Source: own calculations based on data from survey.

Although the R<sup>2</sup> values for both the baseline logit models and other groups of logit models are relatively low, the objective is to identify those factors that may increase the likelihood of altruistic behavior, rather than to accurately predict individual actions.

Given that perceived unfairness appears to influence altruistic behavior (as indicated in the unfairness intensity models), the relationships between altruistic behavior towards refugees and the respondents’ perceptions of the unfairness of helping them are examined. Table 8 indicates that respondents who perceive support for Ukrainian refugees as unfair toward other refugees or Polish citizens – specifically those scoring 4 or higher on the unfairness scale – typically offer less assistance than the overall sample. However, they do continue to provide help, albeit on a smaller scale. This result is consistent across all types of support mentioned in our survey.

**Table 8.**

*Fractions of individuals offering help in the overall sample compared to groups that view supporting refugees as unfair (in %)*

Altruistic behavior	Total sample	Opinion 7: «People helping Ukrainian refugees unfairly prioritize Ukrainian refugees over other groups of refugees.»	Opinion 8: «People helping Ukrainian refugees put the needs of refugees ahead of the needs of Polish citizens.»
Volunt	21.5	15.3	13.3
Finance	70.2	50.8	6.1
material	58.4	42.4	16.3
Room	10.8	6.8	2.0
Socmed	46.8	32.2	1.0
Boycott	70.9	50.8	17.3
Protest	16.5	10.2	13.3
any kind of help	91.3	74.6	78.6
N	553	99	60

Source: own calculation based on survey.

There is no strong evidence to suggest that perceptions of unfairness are influenced by gender or financial status. When examining the *unfairness* variable, derived from Opinion 7 and Opinion 8 (see the fourth group of variables in the dataset), the values don’t significantly differ by gender (men = 1.57 vs. women = 1.68, not significant with  $p=0.18$ , t-test). While there is a discernible difference in this variable’s values between financially well-off respondents and those who perceive their financial status as below average (rich = 1.49 vs. poor = 1.67), the difference isn’t statistically significant ( $p=0.15$ , t-test). Despite the lack of robust statistical backing, this finding may suggest heightened financial concerns among individuals with limited resources.

Moreover, the *unfairness* variable shows a negative correlation with the *care/harm* and *fairness/reciprocity* foundations. This pattern isn’t unique to this variable; other variables that capture respondents’ opinions about those assisting refugees also exhibit significant correlations with moral foundations. For example, the *empathy* variable positively correlates with other moral foundations (see Table A3 in Appendix 4).

## 5. Discussion

The present study was largely motivated by the desire to explore the determinants of charitable behavior toward Ukrainian refugees in Poland outside the hermetic economic models of altruism. The results of the empirical research presented in the previous section confirm the authors' initial intuition regarding the role of moral foundations. The variable *care/harm* is the only variable that has a positive effect on helping, regardless of the kind of charitable action; it was also mostly statistically significant (except for the *volunt* and *room* variables). Moreover, this variable is positively correlated with *empathy* and *heroism* and negatively correlated with *unfairness*. The *care/harm* foundation is also negatively correlated with *gratitude*. This implies that those who attribute greater importance to this foundation in their judgments refuse to believe that people who support Ukrainian refugees do so for pragmatic reasons.

The variable denoting the *fairness/reciprocity* foundation was reported to have a minor effect on helping refugees. In contrast, the *unfairness intensity* variable, which merges the *fairness/reciprocity* foundation with the *unfairness* variable, exhibited a consistently strong negative influence on charitable actions. In other words, for those respondents who believe that supporting Ukrainian refugees is unfair toward refugees from other countries (e.g. Syria) and vulnerable Polish households, the impact of the *fairness/reciprocity* foundation on providing assistance is more substantial. It should be stressed, however, that such a belief did not prevent them from supporting Ukrainian refugees, although they did so on a smaller scale (see Table 2). This finding may suggest that beyond their notions of fairness, pure empathy for visibly intense suffering plays a significant role in motivating assistance. This finding appears to be supported by the primary motivational role of empathy towards Ukrainian refugees, as documented by Domaradzki et al. (2022).

Similarly, the variable *loyalty circles*, which is the interaction of the *in-group/loyalty* foundation and the *obligation* variable, has a positive influence on charitable actions. This result can be interpreted as follows: the belief that we have moral obligations toward "strangers" (i.e., people of a different country of origin, ethnicity, or religion), combined with the *in-group/loyalty* foundation, positively affect our willingness to help refugees. Alternatively, identifying oneself as a member of the "wider" group increases the likelihood of loyalty-motivated altruism. Although not directly related to the study's objectives, the importance of loyalty considerations poses some challenges to the effective altruism paradigm. As human beings, we are inclined to help those we feel connected with. Therefore, adopting the idea that it is our moral obligation to help vulnerable people all around the globe is constrained by how broadly we understand the group we belong to. As for the *impure circles* variable, which merges the *authority/respect* and *sanctity/purity* foundations, its primary effect is to diminish altruistic support. However, this impact is less evident and less consistent in the data presented here.

Mainstream economic theory explains the motivation for altruistic behavior as the anticipation of a future (external) reward or the "warm glow of giving" (i.e., the internal reward for acting for the benefit of others). To analyze the results presented here through the prism of mainstream economic theory, it could be argued that

Poles who supported Ukrainian refugees were following a rational self-optimization path. In other words, they chose the strategy dictated by their social preferences. The present study finds that the *fairness/reciprocity* foundation, when combined with the *unfairness* variable (forming the *unfairness intensity* variable), influences the altruistic behavior of host-country citizens in line with Bolton and Ockenfels (2000). It can additionally be concluded that altruistic behavior is not motivated by future rewards by virtue of the negative correlation between the *care/harm* foundation and the *gratitude* variable. This result corroborates the findings of Andreoni (1990) and Ng (2022), who emphasize that internal reward may well be a more powerful determinant of altruism than external gratification. The evidence discussed above suggests that altruistic behavior is a rational strategy to maximize personal wellbeing.

Nevertheless, a sizeable proportion of the respondents supported Ukrainian refugees despite believing in the unfairness of such an act. This result flatly contradicts the mainstream economic paradigm of utility-maximizing altruism. Sen's (1997) concept of counterpreferential choices may offer a viable interpretation. It may be that those who believe that supporting Ukrainian refugees is unfair but who nevertheless do so are behaving contrary to their social preferences. Thus, although personal wellbeing is defined by the realization of preferences and people who help refugees are reluctant to do so because of perceived unfairness, they nevertheless act altruistically, contrary to their preferences, for specific reasons. These reasons can be sought in social interaction, which brings to mind contractarian interpretation or social heuristics. They can also be interpreted as the result of the evolution of the human mind, giving rise to the theory of Haidt and Joseph (2008).

The results presented above confirm other empirical studies examining altruistic behavior toward refugees. Empathy, reciprocity, and shared identities are identified as factors influencing acts of altruism. The empirical study also confirmed this: the foundation of *care/harm*, followed by *fairness/reciprocity*, was the most important for instigating the provision of assistance. It is worth noting that the foundations of *care/harm* and *fairness/reciprocity* constitute a group of individualizing values. The results of this study are therefore consistent with research on MFT and altruistic behavior, according to which there is a positive correlation between individualizing moral foundations and volunteering, along with the probability of charitable donations.

## 6. Summary and conclusion

This paper distinguishes the main moral factors facilitating the willingness of Polish youth to help Ukrainian war refugees, investigates their comprehensive impact, and challenges the mainstream economic approach to the analysis of altruistic behavior by demonstrating the importance of moral sentiments. A group of Polish students was surveyed on their charitable activities during the initial stages of the Russian invasion of Ukraine, such as providing financial or material support to refugees, providing accommodation, volunteering for their benefit, and demonstrating against the invasion. MFT was the theoretical framework for the analysis. This identifies five moral foundations: *care/harm*, *fairness/reciprocity*, *loyalty/in-group*, *authority/*

*respect*, and *sanctity/purity*. This framework was supplemented by eliciting the respondents' perceived moral obligations to close relatives and other social circles, as well as their opinions on the motives of others who support refugees.

Only the foundation of *care/harm* appears to have a primarily statistically significant impact on altruistic behavior toward refugees. The foundation of *fairness/reciprocity* is negatively related to helping refugees but only in conjunction with claims about the unfairness of such actions, as indicated by the *unfairness intensity* variable. The *loyalty circles* variable was also observed to have a predominantly positive and significant impact. This variable represents the interplay between the *loyalty/in-group* foundation and the perceived level of obligation towards individuals outside one's immediate social circles, influencing altruistic behavior regardless of the type of charitable action.

There is convincing evidence that a sizeable proportion of Polish students acted contrary to their stated social preferences by supporting Ukrainian refugees despite believing that such support was unfair. This compels the conclusion that the mainstream economic approach to altruistic behavior is not unimpeachable. When discussing human behavior, Haidt (2012) often uses the allegory of someone riding an elephant, where the elephant represents our mind and the rider personifies rational cognition in the narrow sense of the term. The truth is that our "rational" selves might have little in common with our moral and social sentiments. It may be that helping others without expecting any future reward, and even in contravention of our own normative beliefs about fairness, is a good exemplification of Haidt's (2012) ideas.

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## Data availability

The data and materials used in this study are publicly available in the RODBUK repository at: <https://doi.org/10.58116/UEK/V7RCFZ>

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## Appendices

### Appendix 1. Questionnaire regarding helping refugees

#### After the Russian invasion of Ukraine...

Please evaluate each statement using the following scale:

0] = Never

[1] = Rarely

[2] = Occasionally

[3] = Often

[4] = Very often

- \_\_\_\_\_ 1. I worked as a volunteer supporting Ukrainian refugees.
- \_\_\_\_\_ 2. I made financial donations to organizations supporting Ukrainian refugees.
- \_\_\_\_\_ 3. I donated clothes, toys, food, medicine, and other necessities to Ukrainian refugees.
- \_\_\_\_\_ 4. I provided accommodation (room, apartment) to Ukrainian refugees.
- \_\_\_\_\_ 5. I shared social media information about the needs of Ukrainian refugees and opportunities to help.
- \_\_\_\_\_ 6. I boycotted companies that continued to make profits in Russia.
- \_\_\_\_\_ 7. I participated in demonstrations, marches, and protests against the war in Ukraine.

**Appendix 2. Questionnaire regarding obligations towards various social circles**

I have a moral obligation to take care of the well-being of...

*Please evaluate each statement using the following scale:*

[0] = Totally disagree

[1] = Disagree

[2] = Rather disagree

[3] = Rather agree

[4] = Agree

[5] = Totally agree

- \_\_\_\_\_ 1. close people.
- \_\_\_\_\_ 2. people from other countries.
- \_\_\_\_\_ 3. strangers.
- \_\_\_\_\_ 4. people of a different religion.
- \_\_\_\_\_ 5. people of different ethnicity.

**Appendix 3. Questionnaire regarding opinions about those helping refugees**

People helping Ukrainian refugees...

*Please evaluate each statement using the following scale:*

[0] = Totally disagree

[1] = Disagree

[2] = Rather disagree

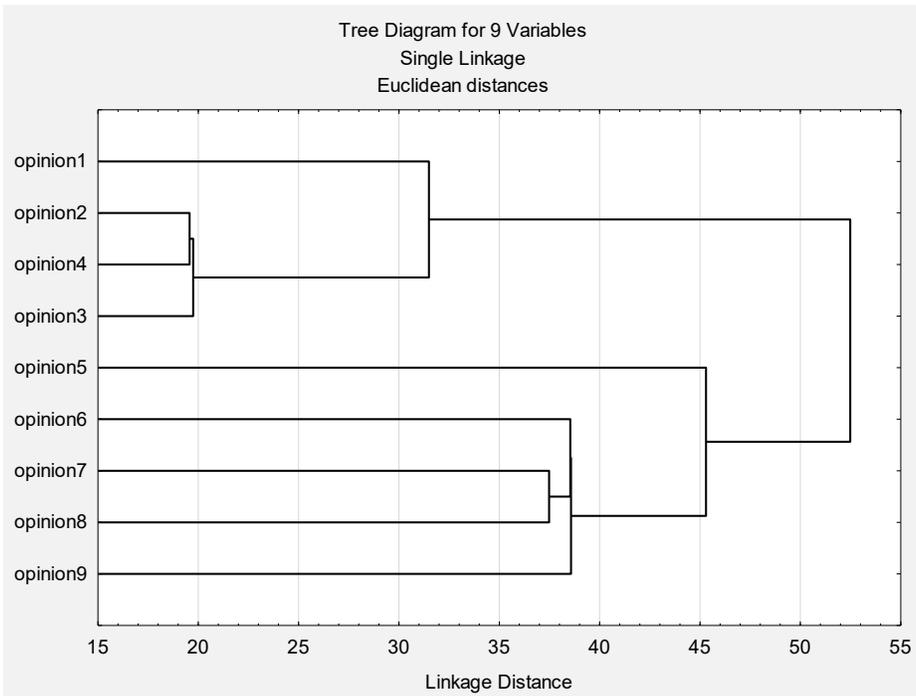
[3] = Rather agree

[4] = Agree

[5] = Totally agree

- \_\_\_\_\_ 1. are acting heroically and are worthy of the highest praise.
- \_\_\_\_\_ 2. are acting as any decent person would in such a situation.
- \_\_\_\_\_ 3. are acting as anyone who sees other people being harmed would do.
- \_\_\_\_\_ 4. are acting as anyone who sympathizes with vulnerable and suffering people would.
- \_\_\_\_\_ 5. are acting as any religious person would in such a situation.
- \_\_\_\_\_ 6. are counting on the gratitude of refugees.
- \_\_\_\_\_ 7. are unfairly prioritizing Ukrainian refugees over other refugees.
- \_\_\_\_\_ 8. are putting the needs of refugees ahead of the needs of Polish citizens.
- \_\_\_\_\_ 9. can only effectively operate with the support of governmental institutions.

**Figure A1.**  
*Grouping opinions on the motivations of those supporting refugees*



Source: own calculations based on data from survey.

**Appendix 4. Selected results**

**Table A1.**  
*α-Cronbach coefficients for moral foundations*

care/harm	fairness/reciprocity	in-group/loyalty	authority/respect	sanctity/purity
0.59	0.56	0.69	0.65	0.68

Source: own calculations based on data from survey.

**Table A2.**  
*Average scores for moral foundations*

	care/harm	fairness/reciprocity	in-group/loyalty	authority/respect	sanctity/purity
Men	3.79	3.64	2.59	2.25	2.66
Women	4.15	3.84	2.60	2.14	2.69
p-value	1.6109*10 <sup>-10</sup>	0.0003	0.9160	0.1211	0.6804
Total	4.01	3.76	2.58	2.17	2.68

Source: own calculations based on data from survey.

**Table A3.**

*Tau-Kendall correlation between respondents' opinions regarding the motivation behind supporting refugees and Haidt's moral foundations*

	care/harm	fairness/reciprocity	loyalty/in-group	authority/respect	sanctity/purity
Empathy	0.270**	0.199**	0.070**	0.064**	0.120**
Unfairness	-0.149**	-0.086**	0.046*	0.080**	0.043*
Heroism	0.320**	0.247**	0.027	0.024	0.055**
Religiosity	0.039*	0.011	0.236**	0.251**	0.299**
Gratitude	-0.076**	-0.035	0.078**	0.087**	0.046*
Authority	-0.002	-0.006	0.209**	0.244**	0.195**

*Note:* \*\* – significant at 0.05. \* – significant at 0.1.

*Source:* own calculations based on data from survey.