

Meaning and Gender Differences*

Jonathan Bezalel, Yevgeny Mugerman, and Eyal Winter[†]

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Abstract

This study utilizes the crowdfunding setting, and examines gender differences with regard to the perceived meaning of donations. The crowdfunding mechanism creates a singular reciprocal interaction where motivations can be examined and compared. We show that women's perceived meaning is more sensitive to the existence of gift rewards than that of men. When the gift incentive is nonexistent, women attribute a greater sense of meaning to their contribution, whereas this effect is largely absent or even reversed in men. Our findings have far-reaching implications in all aspects of donor retention strategies. Specifically, our findings indicate that women are more aligned with the Kantian doctrine of rejecting self-interest considerations of altruistic behavior than men.

Keywords: meaning, donation, gender gap, support, altruistic behavior, donor retention, crowdfunding;
JEL classification: D12, D64, G40

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[†] Bezalel: School of Management, University of Leicester, e-mail: jmb81@leicester.ac.uk
Mugerman: Graduate School of Business Administration, Bar-Ilan University. mugi@huji.ac.il
Winter: Department of Economics, Lancaster University and The Hebrew University of Jerusalem. eyal.winter@mail.huji.ac.il

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Abstract

This study utilizes the crowdfunding setting, and examines gender differences with regard to the perceived meaning of donations. The crowdfunding mechanism creates a singular reciprocal interaction where motivations can be examined and compared. We show that women's perceived meaning is more sensitive to the existence of gift rewards than that of men. When the gift incentive is nonexistent, women attribute a greater sense of meaning to their contribution, whereas this effect is largely absent or even reversed in men. Our findings have far-reaching implications in all aspects of donor retention strategies. Specifically, our findings indicate that women are more aligned with the Kantian doctrine of rejecting self-interest considerations of altruistic behavior than men.

1. Introduction

A fundamental question concerning the crowdfunding phenomenon, and more specifically reward-based crowdfunding, is why people give to campaigns for little or no obvious tangible reward. We use Viktor Frankl's concept of "will to meaning" (WTM) to address this puzzle.¹ While the word "meaning" can be interpreted differently by different people (and perhaps even by the same person under different circumstances), in the context of contributions "meaning" broadly refers to the nonpecuniary satisfaction from one's deed, which is closely related to the intrinsic motivation to make the contribution. Still "meaning" is a more neutral concept and less framed than almost any other close synonym of intrinsic motivation – at least as far as moral sentiments are concerned – and hence can serve as a useful proxy to elicit information about intrinsic motivation. The main tenet of WTM is that people have a psychological need for purpose. To live in true happiness and contentment, human beings must attach meaning to their actions (Frankl, 1969). Participating in philanthropic and altruistic activities such as crowdfunding may, to some extent, satisfy this basic need.

Reward-based crowdfunding is a reciprocal mechanism that enables simultaneous examination of motivation. In this research, we categorize rewards (proxies for motivations)² into two types: (1) extrinsic motivations (gift rewards) and (2) intrinsic motivations (participation and influence) (Allison et al., 2014; Ariely et al., 2009; Bénabou and Tirole, 2006; Deci, 1972; Roberts et al., 2006).

This paper employs a set of experiments featuring different campaign settings: an arts festival, a musician wishing to record an album, a small media company, and a philanthropic association. We consider these settings to represent some of the main categories of reward-based crowdfunding platforms (Gerber et al., 2012; Gerber and Hui, 2013; Thürridl and Kamleitner, 2016; Gafni et al., 2019; Gafni et al., 2021). We analyze the subjects' contribution choices, as well as their responses to a meaning-related question, in order to determine the effect of meaning on financial contribution to crowdfunding campaigns. Our main goal is to examine gender differences in meaning and contribution, with particular emphasis on differences resulting from the gift reward. Whereas previous research has largely focused only on gender differences in monetary support decisions, the primary novelty of our approach is that it shows that gender differences exist not only in terms of the objective contribution, but also in the subjective sense of meaning attributed to the contribution. In other words, men and women respond differently to gift incentives, both in terms of their financial contribution and even more importantly in terms of their subjective experience of supporting a cause.

¹ Frankl states that meaning can be discovered experientially (our subjective experience and interpretations).

² We identified these two groups of rewards as representing the common sets of perks that are proposed to funders in most reward-based crowdfunding platforms.

We found that when the extrinsic motivation is highlighted (in the form of material reward), it tends to destroy the positive experience of the donation for women more than for men. In view of these findings our own results may yield conjectures about gender differences in attitude toward intrinsic motivation. We conjecture that women are more “Kantians” than men in their attitude toward decisions involving intrinsic motivation (primarily those involving altruistic behavior).

One of the prominent challenges of online crowdfunding platforms is donor attrition (Althoff and Leskovec, 2015). Our findings may provide a possible remedy for this problem. The more meaning a donor attributes to her contribution, the greater the chances she will continue to make contributions in the future. We found that, on average, women attribute almost 9% more meaning to their contribution when a gift incentive is removed. According to Sargeant (2008), improvement in donor retention could yield up to a factor of 20. Assuming that a 10 percent increase in the donors’ perceived meaning will result in a 5 percent increase in the probability of donors continuing to donate for longer periods, the removal of the gift incentive can have a significant financial impact of as much as 100 percent.

The paper proceeds as follows. Section 2 reviews the related literature. Section 3 describes the experimental design. Section 4 describes the methodology and results. Section 5 concludes.

2. Related Literature

The existing literature relevant to this research can be divided into the following streams: crowdfunding, motivation, overjustification effect, and gender gap.

2.1. Crowdfunding

In recent years crowdfunding has grown exponentially in scope, as has the research investigating it. Some of this research has concentrated on the fundraisers, and some on the funders. Examining the motivations that influence funding behavior, and in particular the role of intrinsic and extrinsic incentives, Allison et al. (2014) found that funders prefer to help others (intrinsic motivation) rather than to gain profits (extrinsic motivation), and that, in general, crowdfunding is prosocially motivated.

There are several different types of mechanisms for crowdfunding: reward-based crowdfunding (Kuppuswamy and Bayus, 2013; Thürridl and Kamleitner, 2016), which is the type examined in this paper; donation-based crowdfunding, which offers the funder a return on investment (Agrawal et al., 2013; Belleflamme et al., 2014); and lending-based crowdfunding, which repays credit with interest (De Buysere et al., 2012).

Some studies have recognized that there is much more to the motivations behind crowdfunding than a desire to receive tangible or intangible rewards (Cordova et al., 2015; Zheng et al., 2014). Funders seem to desire something beyond monetary gain, recognition, or involvement. Zhao et al. (2017) claimed that “in the crowdfunding context, people exchange not only money and products, but also feelings, sympathy and encouragement” (Zhao et al., 2017: 371).

Gerber, Hui, and Kuo (2012) were the first to examine the motivations behind crowdfunding. They used “grounded theory” to reveal the motivations of both fundraisers and funders, and defined the following types of motivation: recognition, tangible reward, experience, willingness to help, identity formation, and support of own beliefs. In a follow-up study, Gerber and Hui (2013) identified being part of a community and supporting a cause as additional motivations for support. They inferred that participation in crowdfunding cannot be explained only as a platform for monetary exchange. Ryu and Kim (2016) tried to generate a typology of crowdfunding funders based on the funders’ motivations for contributing to the crowdfunding campaign. They analyzed six motivations for funding: interest, playfulness, philanthropy, reward, relationship, and recognition.

2.2. Motivation

Motivations are derived from needs. While some motivations have a physical basis, all of them have an emotional basis that compensates for the insufficiency of reason. In other words, this emotional foundation assists humans in tackling issues that reason alone is unable to resolve (De Sousa, 1987).

At the base of these emotional motivations is the search for meaning. This search for meaning is present in every behavioral decision made by humans, even in such cases where the prominent motivation appears to be merely “material self-interest” (Oakley, 1997: 813).

Behavioral economists have also considered the implications of meaning. Several papers (Heyman and Ariely, 2004; Ariely et al., 2008; Ariely et al., 2009) have argued that meaning is an inner need that can replace or reduce more tangible needs such as monetary gain. While Ariely et al. (2008) considered meaning to be an inner need alongside identity and pride, Chandler and Kapelner (2013) identified meaning with recognition and purpose. Moreover, Norton et al. (2012) defined meaning as the result of an effort (“effort justification”).

The four main aspects of meaning examined in this study are gifts, recognition, participation, and influence.

2.2.1 Gifts

Mauss (1925) was one of the pioneers who investigated the concept of gifts. He explored the phenomenon of gift exchanges in modern primitive societies and suggested that such

exchanges have a significance beyond their obvious and practical uses. Crowdfunding straddles the thin line between charity and gift exchange, and the main reason for that is that the gifts offered in reward-based crowdfunding are usually merely symbolic. As Fehr and Falk (2002) emphasized, it is important to acknowledge the role of reciprocity. Reciprocity and “social exchange” (Heath, 1968; Akerlof, 1982; Rabin, 1993; Fehr et al., 1997; Fehr and Gächter, 1998; Fehr and Falk, 2002) may offer an explanation of the motivation behind gift exchanges. Gifts exchanges have also been examined through the lens of “utility theory” (Arrow, 1972), consumer culture theory (Bird-David and Darr, 2009), and exchange interaction theory (Prendergast and Stole, 2001). An essential notion is that receiving gifts satisfies a social and emotional need far beyond the tangible utility that an individual can derive from any practical use of the gift (Callon et al., 2002; Tiu Wright et al., 2006).

2.2.2 Recognition

The desire for recognition is a common motivation for offering funds. Ariely et al. (2009) introduced the concept of “image motivation” and showed the importance of recognition. Roberts et al. (2006) referred to recognition as “status motivation.” Fehr and Falk (2002) used the term “social approval,” which is recognition that, once received, engenders feelings of social acceptance. In many studies examining the topic of donations, recognition features as a common motivation (Bénabou and Tirole, 2006; Roberts et al., 2006; Winterich et al., 2013).

2.2.3 Participation

The need for participation, or affiliation, is driven by the tendency to receive satisfaction from harmonious relationships and from a sense of “togetherness” (Murray, 1938). Deci and Ryan (1985) introduced self-determination theory, which establishes three basic psychological needs: competence, relatedness, and autonomy. Relatedness is similar to Murray’s (1938) need for togetherness, except that it emphasizes effectiveness and the sense of being a part of something greater than oneself rather than satisfaction and harmoniousness. Additionally, psychological research has identified social relationships in the form of relatedness (Hicks and King, 2009) and a sense of belonging (Lambert et al., 2013) as factors that contribute to the creation of meaning. Jackson et al. (1995) and Schervish and Havens (1997) used “we-ness” to describe participation and people’s desire to belong to some form of community. They also coined the term “participation effect” in relation to charitable giving.

2.2.4 Influence

The need for influence, or empowerment, derives from the need to control others (Joshi et al., 2014; Winter, 1973). Influence is the desire to feel psychological control (Fuchs et al., 2010). Füller et al. (2009) asserted that empowerment is “one of the most important themes in the economic history of the next century” (Malone, 1999; Fuchs et al., 2010: 74). The ability of

consumers to control their choices is considered a crucial element of empowerment (Wathieu et al., 2002). An essential characteristic of empowerment is the ability and authority to effect change and influence outcomes (Fuchs et al., 2010).

2.3. Overjustification Effect

Motivation crowding theory (Belleflamme et al., 2015) relates to intrinsic and extrinsic motivations and is also referred to as the “overjustification effect” (Titmuss, 1970; Bénabou and Tirole, 2006). This effect describes what happens when the introduction of an extrinsic motivation, such as money, results in the crowding out of a positive behavior caused by an intrinsic motivation (Gneezy and Rustichini, 2000; Fehr and Falk, 2002; Kamenica, 2012). Gneezy and Rustichini (2000) discovered that in certain circumstances it is better not to pay individuals at all for their efforts than to pay them an insufficient amount. In crowdfunding, the participants have the ability to choose between different rewards (intrinsic and extrinsic incentives), and therefore crowdfunding appears to contain some aspects that can be explained by the overjustification effect.

2.4. Gender Gap

There are numerous gender differences in the behavior and motivations of men and women. There are gender differences in the domain of financial literacy (Hurwitz et al., 2020), where women tend to be less likely to search for financial information on their own (Meir et al., 2016). Societal gender attitudes may even have a profound impact on stock markets, and specifically on the quality of the information environment (Abudy et al., 2021).

Gender can act as a dominant independent variable that can explain funding decision-making (Eckel and Grossman, 2001; Galak et al., 2011; Gafni et al., 2021). Wong and Csikszentmihalyi (1991) claimed that gender affects behavior due to two main factors. First, for sociological reasons, people tend to behave as they believe they are supposed to behave, in accordance with societal expectations for their gender. Second, for practical reasons, people tend to develop skills and beliefs appropriate for the role society has assigned them to.

The growing literature on gender differences can be categorized into general psychological and financial literacy differences, and to observed gender differences in investment, donation, and consumption behavior.

2.4.1. Sociological and Psychological Differences

From a sociological standpoint, women are often found to be more prosocial and group-oriented than men (Eisenberg et al., 1998). Men place greater emphasis on individual position (Gilligan, 1982) and show more competitiveness than women (Spence et al., 1975; Niederle and Vesterlund, 2007; Croson and Gneezy, 2009; Gneezy et al., 2009; Andersen et al., 2013;

Buser et al., 2014). Generally, women are found to be less selfish and more cooperative than men (Eckel and Grossman, 1996, 1998; Selten and Ockenfels, 1998), who are seen as more dominant and less nurturing than women (Williams et al., 1999).

From a psychological standpoint, women tend to be less confident of their performance and more risk averse than men (Brush, 1992; Coleman, 2000; De Bruin et al., 2007; Langowitz and Minitti, 2007; Croson and Gneezy, 2009; Morales-Camargo et al., 2013, Mohammadi and Shafi, 2018). The lower general confidence of women compared to that of men has been documented (Beyer et al., 1997; Niederle and Vesterlund, 2007). This fact can explain women's greater tendency to avoid competitive environments and the process of negotiating compared to men (Niederle and Vesterlund, 2007; Gneezy et al., 2009; Andersen et al., 2013). However, a more recent paper, Filippin and Crosetto (2016), shows that in most of the cases it studies women do not exhibit higher risk aversion than men.

2.4.2. Differences in Altruism, Consumption Behavior, Reciprocity, and Motivations

Regarding altruism, men are more sensitive to the material cost of altruistic behavior than women (Andreoni and Vesterlund, 2001). Women seem to disregard the extrinsic (negative) motivation to act altruistically more than men. Moreover, the introduction of financial incentives is likely to invoke a crowding-out effect among women, who consequently donate significantly less, while having only a marginal effect on men (Lacetera and Macis, 2010). Conversely, the withdrawal of financial incentives appears to have little effect on women, while substantially reducing the contribution of men (Benndorf et al., 2019). In general, Eckel and Grossman (2001) found that women tend to give more monetary support than men.

Regarding consumption behavior, Dittmar and Drury (2000) discovered that in buying processes, men are more interested in the practical use of the goods in question, while women tend to focus more on the emotional and psychological aspects of the goods. Men are expected to respond more to functional and individual incentives (Campbell, 2000; Dittmar and Drury, 2000; Dittmar et al., 2004), while women are expected to respond more to emotional and social incentives (Dittmar et al., 2004).

Regarding reciprocity interactions, women tend to negotiate less than men due to nervousness (Bowles et al., 2007) and modesty (Gould and Slone, 1982; Heatherington et al., 1993), which in turn can undermine perceived competence (Bowles et al., 2007: 85). Women are often portrayed as less competent than men, especially in the context of equity investment, and are also underrepresented in entrepreneurship (Treichel and Scott, 2006; Coleman and Robb, 2009; Malaga et al., 2018; Mohammadi and Shafi, 2018; Ewens and Townsend, 2019). Gafni et al. (2021) found male investors to be biased in favor of male-led startups. They found only weak (nonsignificant) evidence of such a bias among female investors.

Regarding gender differences in motivations, Gneezy et al. (2021) found that motivations in funding vary between genders. Men are driven more by the offered gift reward, whereas women are driven more by (the idea of) supporting the person who is seeking the funding. Baer (1998) found that rewards (extrinsic motivations) seem to crowd out creativity (intrinsic motivation) more noticeably when women are observed. Hence, the overjustification effect appears to be stronger among women than among men.

Gafni et al.'s (2021) latest and most relevant study examines the participation of women in crowdfunding both as funders and fundraisers. They show that the motivations that affect the funders' choice vary by gender (Gafni et al., 2021: 258). Specifically, more men than women report that the main reason for their contribution is the gift reward. Alternatively, more women report that the main reason for their contribution is satisfaction from supporting the individual fund-seeker.

Based on this literature review of gender differences in several relevant areas, we derive and test the following *hypothesis*:

Women feel more affiliated with a crowdfunding campaign if a gift reward is not offered because it lends a purer altruistic character to the campaign.

It is worth noting, however, that many studies are inconclusive. Some studies have found no significant gender differences (Bolton and Katok, 1995; Brown–Kruse and Hummels, 1993; Dawes et al., 1977; Deaux, 1976; Eckel and Grossman, 2001; Orbell et al., 1994; Stockard et al., 1988). Some studies find women to exhibit greater cooperation (Meux, 1973; Ortmann and Tichy, 1999), whereas others conclude that men do so (Kahn et al., 1971; Mack et al., 1971).

3. Research Design

This research project consists of two experiments. The participants in the experiments were recruited through the data collection service provider Prolific,³ and received online questionnaires designed using SurveyMonkey. Its design replicates a crowdfunding website in order to provide the participants with a genuine crowdfunding experience. Participants were given a real sum of money with which they could support the crowdfunding campaign, and were offered real rewards in return for their contribution to the campaign.

3.1. Experiment 1: Basic Model

³ The participants were screened by age, first language (English), and gender (in order to achieve an equal men–women distribution).

156 subjects participated in Experiment 1. The participants were told that the experiment involved a crowdfunding platform, and that they would receive a GBP 1 participation fee, as well as an additional GBP 3 of which they could choose how much (GBP 1–3) to donate to the crowdfunding campaign. It was emphasized that the campaign described, the rewards offered, and the monetary support given were all genuine (for details, please refer to Appendix C).⁴

Participants were randomly assigned to one of four types of crowdfunding campaigns, and requested to contribute to the campaign: (1) Art – the Jerusalem Biennale Festival of Contemporary Jewish Art, (2) Music – an aspiring musician seeking monetary support that would enable him to record his first album, (3) Media – a small internet-based media company by the name of Yamaka Media, and (4) Non-profit – a philanthropic organization called Good Neighbour. Out of the GBP 3 provided to the participants, they were given a choice of donating a sum of GBP 1, 1.5, 2, 2.5, or 3 to the campaign, and allowed to choose a reward in return for the donation. These rewards serve as a proxy for the following types of motivations: gift, recognition, participation, or influence. The four different rewards offered in each campaign are detailed in Appendix A.

In order to assess the impact of the amount of monetary support on the meaning attributed to the contribution, participants were presented with the following statement: “Overall, I feel I did something meaningful by supporting this campaign.” They were requested to rank their level of agreement with the statement on a five-point Likert scale: 5 – strongly agree, 4 – agree, 3 – undecided, 2 – disagree, 1 – strongly disagree.

3.2. Experiment 2: Omitting the Gift Option

131 additional subjects took part in Experiment 2. This experiment was identical to Experiment 1, with one exception: the gift was omitted from each campaign category, leaving only the options of recognition, participation, and influence.⁵

3.3. Variables

The variables addressed in this experiment are the treatment (0 – with gift option, 1 – without gift option), campaign type (1 – art, 2 – music, 3 – media, 4 – non-profit), gender (0 – male, 1 – female), age category, reward type (1 – gift, 2 – recognition, 3 – participation, and 4 – influence), monetary support level (GBP 1, 1.5, 2, 2.5, and 3), and meaning (on an integer

⁴ Note that much like real-life crowdfunding decisions, the money given comes out of the participants’ own pocket in that they receive between GBP 1 (by donating GBP 3, the maximum) and GBP 3 (by donating GBP1, the minimum), depending on their generosity.

⁵ The media campaign was omitted in this experiment, as the Yamaka managers didn’t allow us this option.

scale of 1–5, with 1 representing the lowest perceived meaning and 5 the highest). For a more detailed overview of the variables, see Appendix B.

Tables 1 and 2 show the descriptive statistics for the three main independent variables in this study, gender, age category, and campaign type, with the distribution of participants shown both for each experiment separately (with and without the gift incentive) and in total for both experiments combined. As can be seen from the data, participants were made up of an even split of men and women, and were distributed equally, or almost equally, between the different campaign types.

Table 1: Descriptive Statistics – Gender

Gender	Gift	No Gift	Total
Female	78 (50.00%)	66 (50.38%)	144 (50.17%)
Male	78 (50.00%)	65 (49.62%)	143 (49.83%)
Observations	156	131	287

Table 2: Descriptive Statistics – Campaign Category

Campaign	Gift	No Gift	Total
Art	37 (23.72%)	48 (36.64%)	85 (29.62%)
Music	40 (25.64%)	42 (32.06%)	82 (28.57%)
Media	41 (26.28%)	–	41 (14.29%)
“Good Neighbour”	38 (24.36%)	41 (31.30%)	79 (27.53%)
Observations	156	131	287

3.4. Quality of Responses

As mentioned above, our participants were recruited through a data collection service named Prolific, which offers a participant sample. Prolific users must answer a set of questions prior to their entry into Prolific’s official pool of participants. As an online research platform Prolific (ProA) competes with Amazon’s Mechanical Turk (MTurk) and shows comparable data quality (Peer et al., 2017). “ProA seems to be the most viable alternative to MTurk. ProA users showed only slightly lower levels of attention as compared to MTurk, which did not significantly affect measures of reliability. Furthermore, [ProA participants have] a higher level of naivety and lower frequencies of weekly participation as compared to MTurk ... [W]e observed a lower propensity on the part of ProA participants to engage in dishonest behavior,

as compared to MTurk [and a] lower propensity towards cheating, as compared to MTurk” (Peer et al., 2017: 158).

We conduct a textual analysis of responses to the open-ended question “What made you decide on the specific monetary amount?” as a robustness check on the sample quality of answers. The textual analysis is used to identify themes and to create frequencies, thus shifting the qualitative method toward a quantitative one (Boyatzis, 1998; Holloway and Todres, 2003; Lesmy et al., 2019). We employ a specific thematic analysis (TA) method (Braun and Clarke, 2006, 2017; Guest et al., 2012).

Our thematic analysis of the aforementioned open-ended question allows an additional (direct) observation on the seriousness of the funders in taking part in our research. Specifically, it reveals seven main themes that explain the essential elements in the participants’ pledging decision: willingness to help, rationality, affiliation with the cause, lack of affiliation with the cause, lack of information, need for money, fairness, and indefinite answer. This thematic diversity shows the high degree of consideration that participants in this research gave to their decision.

- (1) Willingness to help – The “willingness to help” theme represents a monetary support decision that shows a willingness to help someone in need. Some answers explicitly mentioned the notion of helping: “To be kind and help companies grow into strong successful companies”; “To help as much as possible. It appears to be a good cause that I would like to get behind...”; “The more money they receive the more they will be helped,” Other answers implied helping in a more implicit manner: “I think that they really need that money”; “Not everyone receives many chances in life, 3 pounds may make a difference”; “There is no point in wasting the money and so I may as well give it all to him.”
- (2) Rationality – The “rationality” theme represents a monetary support decision that is based on a thinking process. Although the rationality theme does not exclude other themes, such as willingness to help, need for money, etc., it additionally explains the motivation behind the participant’s level of monetary support. Examples: “It was the most reasonable choice I could think of given my options”; “I thought it made logical sense to donate half the amount I was given to donate”; “I give the minimum amount because if people are volunteering, they only need minimal funding”; “I gave the minimum amount because he is not a proven artist and so it is a gamble whether his recording will be any good .”
- (3) Affiliation with the campaign – The “affiliation with the campaign” theme represents a monetary support decision based on a feeling of identification with the campaign agenda. Examples: “It seemed like a good amount to donate to the cause”; “I feel that

GBP 3 is a more acceptable amount than GBP 1 for such an important festival as the Jerusalem Biennale Arts Festival”; “Social change initiatives that are inherently inclusive and empowering are, in my opinion, very worthy causes.”

- (4) Lack of affiliation with the campaign – The “lack of affiliation with the campaign” theme represents a monetary support decision based on a demonstrated aversion toward the campaign agenda. Examples: “I donated the minimum amount because it is a new company, and I would not purchase their good”; “I do not believe in the crowdfunding model as I have seen it fail more times than I have seen it succeed. If there was an option of £0, I would have picked that”; “I would not really want to support a religious event.”
- (5) Lack of information – The “lack of information” theme represents a monetary support decision where participants indicated a need for more information about the campaign, or a dissatisfaction with the level of information offered. Examples: “I did not understand what the company was offering”; “The information details are very limited. I would have been inclined to give more if I had a better understanding of how the funds will be put to use”; “I have not heard of the company and there was limited information about what they are doing.”
- (6) Need for money – The “need for money” theme represents a monetary support decision influenced by the participant’s economic situation, mainly his or her shortage of money. Examples: “I am struggling with money and I need it”; “Not currently employed. The less money spent on non-essentials, the more for the essentials”; “I need money and any little bit counts towards making it through each day”; “I am trying to be budget-conscious with my own finances.”
- (7) Fairness – The “fairness” theme represents a monetary support decision involving “fairness” or strongly predicated on the need for equality and justice. Examples: “I felt like it was a fair amount to donate”; “I think half the reward is fair for the company”; “I think it is a fair amount to give: if everyone gave a pound you would end up with a decent amount”; “I feel that choosing the middle amount is the correct thing to do.”
- (8) Indefinite answer – The “indefinite answer” theme represents a monetary support decision unaccompanied by a clear justification for the amount of support given. Some answers explicitly mentioned uncertainty as to the reason the participant chose the specific monetary amount: “I do not even know. I thought this would be a good amount. That why I chose it”; “Unsure of what would be appropriate amount.” Other answers were such that we, subjectively, could not categorize the participant’s answer into any of the above-mentioned themes: “My decision on the specific monetary amount is perfect”; “I went into this assuming 1 quid, 1 quid is fine.”

Table 3: The Reasons for Providing Funds – Thematic Analysis by Gender

Theme	Male Share	Female Share
Willingness to help	13.4%	15.9%
Rationality	23.9%	13.9%
Affiliation with the campaign	10.4%	17.4%
Lack of affiliation with the campaign	15.9%	16.4%
Lack of information	11.9%	10.7%
Need for money	6.5%	7.0%
Fairness	12.4%	17.3%
Indefinite answer	5.5%	1.4%
Total	143	144

Table 3 shows that the reasons for providing funds differ by gender. Men tend to give more rational answers than women (23.9% compared with 13.9%, respectively). On the other hand, one can observe a tendency of women toward affiliation with the campaign and fairness compared with men, and a tendency of men toward indefinite answers when explaining their support decisions.

Accordingly, men, compared to women, have a greater tendency to explain their support decisions with rational justifications. Women, on the other hand, show a slight tendency to base monetary support on affiliation with the campaign and fairness. These results are in line with the survey results from Gafni et al. (2021, Table 6: 258).

4. Methodology and Results

4.1. Regression Models

In order to estimate the influence of the presence or absence of the gift incentive on the contribution and meaning of the participants, we will use the following specifications.

First, we add a binary variable for the experiment (0 – with gift incentive, 1 – without gift incentive) to control for differences between the overall results of the two experiments. Second, we introduce a variable for the interaction between the experiment and gender to control for the contrasting effect of gender on the contribution and meaning of the participants in the two experiments. This variable is ultimately the primary focus of our research.

The basic regression models employed in this study are as follows:

$$(1) \quad \text{Support} = \alpha + \beta_1 \text{ Gender} + \beta_2 \text{ Age Category} + \beta_3 \text{ Campaign Category} + \beta_4 \text{ No_Gift} + \beta_5 \text{ Gender} * \text{No_Gift} + \varepsilon_{\text{support}}$$

$$(2) \quad \text{Meaning} = \alpha + \beta_1 \text{ Gender} + \beta_2 \text{ Age Category} + \beta_3 \text{ Campaign Category} + \beta_4 \text{ No_Gift} + \beta_5 \text{ Gender} * \text{No_Gift} + \varepsilon_{\text{meaning}}$$

It is possible, however, that $\text{covar}(\varepsilon_{\text{support}}, \varepsilon_{\text{meaning}}) \neq 0$. To allow for this estimation, we selected an econometric method that provides estimation for equations in which residuals are correlated: namely, seemingly unrelated regression (SUR).

$$(3) \quad \begin{cases} \text{Support} = \alpha + \beta_1 \text{ Gender} + \beta_2 \text{ Age Category} + \beta_3 \text{ Campaign Category} + \beta_4 \text{ No_Gift} + \beta_5 \text{ Gender} * \text{No_Gift} + \varepsilon_{\text{support}} \\ \text{Meaning} = \alpha + \beta_1 \text{ Gender} + \beta_2 \text{ Age Category} + \beta_3 \text{ Campaign Category} + \beta_4 \text{ No_Gift} + \beta_5 \text{ Gender} * \text{No_Gift} + \varepsilon_{\text{meaning}} \end{cases}$$

It is plausible that monetary support has a substantial influence on meaning. Hence, our additional specification for meaning controls for monetary support. We estimate a linear equation of the form:

$$(4) \quad \text{Meaning} = \alpha + \beta_1 \text{ Gender} + \beta_2 \text{ Age Category} + \beta_3 \text{ Campaign Category} + \beta_4 \text{ No_Gift} + \beta_5 \text{ Gender} * \text{No_Gift} + \beta_6 \text{ Support} + \varepsilon$$

Again, our main interest is β_5 , which captures the gender gap. Notice that a positive estimate of β_6 in equation (4) might not be an accurate measure of such a causal effect. An issue is the so-called reflection problem: β_6 represents not only the effect of *Support* on *Meaning*, but also the possible effect of *Meaning* on *Support*. To address this issue, we exploit the fact that we have information on the timing of the decision. As designed, following the decision regarding the monetary support, the subjects made the decision regarding the subjective meaning of this support. This plausibly alleviates a significant part of the reflection problem.⁶

For specifications with a categorical dependent variable, a linear probability model (estimated by OLS), an ordered probit model, and an ordered logit model yield qualitatively similar result. In particular, our main coefficients of interest (interaction term of gender and no-gift treatment) have the same sign and similar levels of statistical significance across all three estimation techniques.

⁶ We note, however, that this may not fully solve the problem. This means that our estimates of the size of this effect should be interpreted with care.

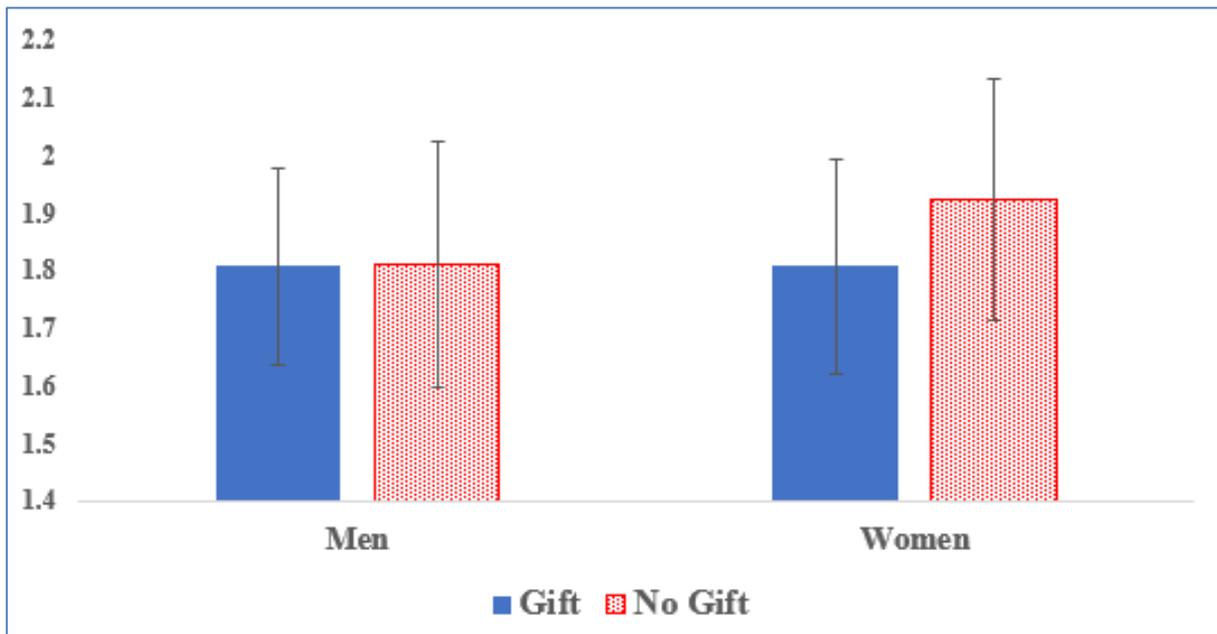
4.2. Results

Figure 1 and Figure 2 show that the results point to higher levels of meaning for women than for men, and, to a lesser extent, higher monetary support levels, when the gift incentive is absent.⁷ However, the latter finding is not statistically significant. Despite the lack of a precise estimation, this result does seem to be in line with those of Lactera and Macis (2010), who documented that the introduction of financial incentives is likely to invoke a crowding-out effect among women but not among men. When the gift incentive is present, women seem to attribute lower levels of meaning to their contribution than men, whereas the actual contribution levels are almost identical. Moreover, when the gift option is available, there is no statistical difference between genders in their propensity to opt for the gift.

One might have expected gender differences between the different campaign types (cause A versus cause B) and especially between beneficiaries of different genders (male versus female) (Gafni et al., 2021). Our research design is not aimed at testing this effect primarily because the issue has been studied. With that being said, we did examine the gender dynamics toward a specific campaign in our sample. The interaction variable of gender with a specific campaign, compared to other categories, turns out not to be statistically significant. Hence, we don't observe any statistically significant differences between genders in support of any category. The lack of gender effect in our setting has to do with the fact that the campaign type, or the beneficiary's gender, could not be purely attributed to the funder's gender.

⁷ In all comparisons between groups the Student's *t*-test was used, and a *p*-value of <.05 was considered significant.

Figure 1: Monetary Support Levels by Gender and Treatment Group
(Means. Capped ranges indicate 95% confidence intervals)

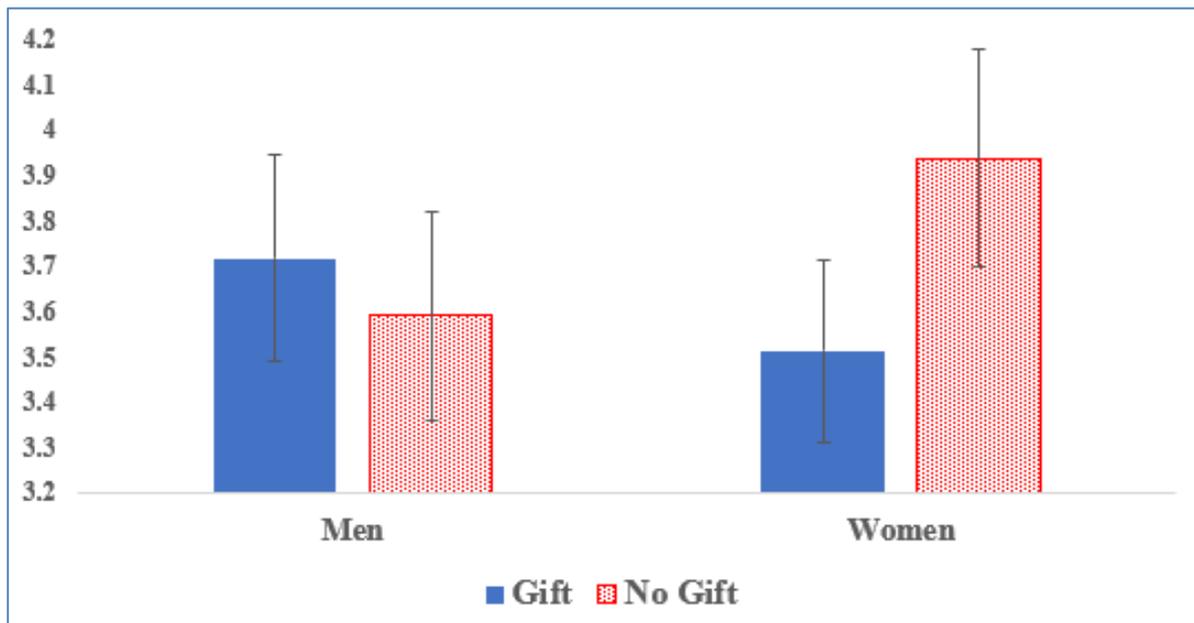


This figure shows the participants' actual monetary support (in GBP).

The clear statistical difference in the women's subsample between the experiments, as presented in Figure 2, was observed in the dependent variable: 3.61 in the control vs. 3.92 in the no-gift treatment (p -value of $<.04$).⁸

⁸ As meaning is a discrete variable, we performed a further analysis using a non-parametric test. Across this testing, the difference (in the female subsample with versus without gift) is also statistically significant at the 5 percent level. Interestingly, for the male subsample, the difference (in the opposite direction) is statistically significant as well: when the gift incentive is present, men seem to attribute higher levels of meaning to their contribution.

Figure 2: Meaning Levels by Gender and Treatment Group
 (Means. Capped ranges indicate 95% confidence intervals)



This figure shows the participants perceived meaning associated with their support. The meaning is presented in a five-point Likert scale: 5 – strongly agree, 4 – agree, 3 – undecided, 2 – disagree, 1 – strongly disagree.

Table 4 summarizes our main results, employing regression models (1), (2), (3), and (4). Columns 1 and 4 look at whether gender correlates with meaning and support, respectively. The gender coefficients are not statistically significant, indicating that there is no association between gender and meaning or gender and support. Columns 2 and 5 add to the specifications age category and campaign type. Column 3 indicates that the interaction variable for female and no-gift experiment is statistically significant. The magnitude of this effect is also quite robust. In terms of the standard deviation of the dependent variable, the measure is 64.9%. However, the results in the respective Column 6 (for monetary support) indicate insignificant effects.

Columns 7 and 8 report the results of the SUR estimation method (model 3). The results seem to suggest that cross-equation error correlation is not a major concern in our setting.

Columns 9 and 10 report the results of the regression estimation method (model 4). Column 9 presents the linear approximation. The results remain unchanged. Lastly, Column 10 reports odds ratios for each of the independent variables from the ordered logistic regression estimation method. The odds ratio of the “strongly agree” category option versus all the other category options combined is almost 4 times higher for females (versus males) in the no-gift experiment. As expected, actual monetary support has a positive effect on perceived meaning.

Table 4: Support, Meaning and Gender Gaps

Notes: OLS regressions are reported in Columns 1–6 and Column 9, where each of the seven columns represents an independent regression with a dependent variable for support or meaning in the column title. The SUR estimation is reported

Variable	Meaning	Meaning	Meaning	Support	Support	Support	Meaning	Support	Meaning	Meaning
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Experiment with a gift (indicator=1)			-.377* (.158)			-.032 (.140)	-.377* (.156)	-.032 (.138)	-.366* (.152)	.430* (.142)
Female (indicator=1)	.019 (.108)	.018 (.109)	-.255 (.146)	.048 (.097)	.050 (.095)	-.003 (.129)	-.255 (.143)	-.003 (.127)	-.254 (.140)	.519* (.157)
Interaction variable (Female*Experiment)			.594** (.215)			.116 (.191)	.594** (.211)	.116 (.187)	.556** (.206)	3.909** (1.772)
Support									.331** (.065)	2.062** (.306)
R ² / Pseudo R ²	0.01%	2.87%	5.64%	0.09%	2.73%	6.56%	5.64%	6.56%	13.75%	5.86%
Observations	287	287	287	287	287	287	287	287	287	287
Age categories (Fixed Effects)	N	Y	Y	N	Y	Y	Y	Y	Y	Y
Campaign types (Fixed Effects)	N	Y	Y	N	Y	Y	Y	Y	Y	Y
Estimation method	OLS	OLS	OLS	OLS	OLS	OLS	SUR	SUR	OLS	Ordered Logit

in Columns 7–8, and an ordered logistic regression is reported in Column 10. This column reports odds ratios. **=Significant at the 1 percent level *=Significant at the 5 percent level.

To sum up, our results indicate that women associate significantly more meaning with their support when a gift option is removed. One possible reason is that women conceive of the gift rewards as extrinsic motivations that crowd out the intrinsic motivations that presumably generate higher levels of meaning. Conversely, it appears that men do not exhibit this perceived meaning disparity between the absence and presence of a gift option. The gift rewards (extrinsic motivations) seem to crowd out intrinsic motivations more evidently among women than among men.

5. Conclusion

This research builds upon the existing literature, providing further support for the claim that men tend to be unaffected by, or perhaps are even encouraged by, extrinsic incentives, whereas these same extrinsic incentives create a crowding-out effect among women. Furthermore, while previous research has largely focused on the differences in the economic decisions of men and women, this study sheds light on the motivations for these differences as well, by showing that the gender differences may manifest not only in the objective contribution, but also – and indeed more so – in the subjective meaning attributed by men and women to their contributions. When a gift reward is excluded, women associate significantly higher perceived meaning with the contribution. This critical and meaningful finding posits that gift rewards are more important for men than for women. Presumably, the need for reciprocity is stronger for men than for women. Moreover, whereas women might perceive gift rewards as extrinsic incentives that can be dismissed, men observe them as inducements that are essential. Therefore, it can be assumed that women relate more to pure altruism, which is derived mainly from intrinsic incentives, whereas men relate more to impure altruism, which is derived mainly from extrinsic incentives.

These research findings show a deeper exploration of what motivates people to give. People do not give just for the sake of giving, but because they assign significance to what they are giving to, and to the circumstances under which the giving takes place. In short, people are influenced by the will to meaning.

Fundraisers as well as crowdfunding campaign architects should pay attention to the interplay between intrinsic and extrinsic incentives. Although gender – as an isolated factor in crowdfunding regression models in this work – does not seem to influence monetary support, viewing men's and women's behavior in different campaigns as well as in the context of their perceived meaning reveals significant disparities.

One of the most critical and practical conclusions that derives from this paper is that economic exchange mechanisms – such as crowdfunding – must not underrate the players in the exchange game. Human beings – and specifically women as this research shows – aspire to goals that are above and beyond any monetary gain, practical advantage, or tangible benefit that they can receive through reciprocity behavior. The will to meaning is an essential economic factor, and an integral motivation for giving, and therefore must be acknowledged in economics in general.

Finally, as the will to meaning has been shown to be a driving force in people's decision-making processes, we hope this research will generate insights that will influence studies on the various aspects of human endowment of actions with meaning, and perhaps even

contribute to the development and growth of philanthropic mechanisms through constructive strategies that will maximize involvement and monetary support. This study emphasizes and illustrates the essential role of meaning in behavior studies, and calls for an examination of the will to meaning in broader research areas.

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