The Decoy Effect in Reward-Based Crowdfunding: Preliminary Results from an Online Experiment

Research-in-Progress

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Abstract

Rewards are one of the key mechanisms in crowdfunding, but we know little about how they influence fundraising success. This research-in-progress takes a behavioral-science perspective on crowdfunding and explores how to design reward menus to increase the chances of reaching funding targets. We show that backers' preferences can be influenced with the help of "decoys"—asymmetrically dominated rewards that draw backers' attention to more profitable rewards. We conducted an online experiment with forty participants to pre-test the effect of decoy rewards on crowdfunding success for three scenarios. Across all scenarios, the decoys increased the donations by approximately 11 percent. Mixed-effects logistic regression analysis confirmed the significance of the decoy effect. We are currently developing a mock crowdfunding website that will provide a more realistic environment in which to test alternative decoy-placement strategies in other crowdfunding scenarios with more participants and more rewards.

Keywords: Crowdfunding, decoy effect, rewards, behavioral science

Introduction

The Internet provides promising new opportunities for business funding, so increasing numbers of startups use the Web to collect the money they need to turn their business ideas into reality—a funding practice commonly referred to as "crowdfunding" (Bradford 2012; Schwienbacher and Larralde 2012). Crowdfunding is also becoming increasingly important in the creative industries for funding movies, music, design, and other arts (Agrawal et al. 2014). While conventional funding practices typically involve only a few large investors, crowdfunding websites allow entrepreneurs and artists to raise contributions from large numbers of small investors (Ahlers et al. 2015; Belleflamme et al. 2013; Wheat et al. 2013).

The crowdfunding industry has grown tremendously during the past few years. While $6.1 billion in crowdfunding was raised in 2013, an estimated $34.4 billion was raised in 2015 (Massolution 2015). Crowdfunding is expected to exceed even the venture-capital funding in 2016 (The Economist 2016). However, in spite of crowdfunding's global success, many projects and ventures have remained unfunded. Only 35 percent of all campaigns launched on *Kickstarter*, one of the world's oldest and largest crowdfunding sites (Kuppuswamy and Bayus 2015), have been successfully funded (Kickstarter 2016a). While many projects remained unfunded for good reason, some promising projects also failed (Kunz et al. 2016). Against this background, researchers have started to explore the factors beyond project quality that determine crowdfunding campaigns' success, including funding goals (e.g., Koch and Siering 2015), the duration of the funding campaign (e.g., Mollick 2014), project description like text and videos (e.g., Kunz et al. 2016; Zhou et al. 2015), communication like updates and comments (e.g., Müllerleile and Joenssen 2015; Xu et al. 2014), and characteristics of the project's ownership like gender and social network (e.g., Rhue 2015; Zvilichovsky et al. 2015).

Despite the increasing attention that the design and presentation of projects is receiving in research on crowdfunding success, the rewards offered for donating have not yet been studied in sufficient depth. In reward-based crowdfunding, backers are offered non-financial prizes (e.g., being credited in a movie, a visit to the film set, or a DVD or Blu-ray) in exchange for their money (Mollick 2014). With the increasing use of reward-based crowdfunding websites like *Kickstarter* or *Indiegogo*, rewards have become one of the key mechanisms in crowdfunding, especially for creative projects (Agrawal et al. 2014; Belleflamme et al. 2013). Some researchers have studied how the number of rewards influences fundraising success (e.g., Frydrych et al. 2014; Kunz et al. 2016), but the selection of rewards and the determination of the donation amounts to which they are connected have largely been neglected. Xiao et al. (2014) provided first evidence that higher maximum donations and fewer reward tiers lead to significantly higher success rates, but there is a great deal more to learn about how to design reward menus—a considerable knowledge gap, considering that rewards are the primary mechanism with which to incent backers to provide funding. To contribute to filling this gap, our research takes a behavioral-science perspective on crowdfunding and explores how to design reward menus that increase the chances of funding success.

As a starting point, this research-in-progress evaluates the significance of the decoy effect (Huber et al. 1982) in reward-based crowdfunding. We present preliminary results from an online experiment with forty participants and pre-test the hypothesis that backers' preferences change when a reward is added that creates an asymmetrically dominated choice, that is, a choice in which one of at least two rewards is more valuable than a third reward in all relevant dimensions (i.e., quality and price) (Bateman et al. 2008). The third reward serves as a decoy; although virtually no backer ever chooses the decoy, it increases the number of times the more valuable reward is chosen (Bateman et al. 2008; Huber et al. 1982). Because a more valuable reward can be designed to have a higher donation amount than the other rewards, the use of decoys can help crowdfunding campaigns reach their funding targets.

First, we provide background on reward-based crowdfunding and then explain how decoys can be used to increase fundraising success. Next, we outline the methods we used to collect and analyze the experimental data and present the results. Finally, we discuss implications and limitations and provide an outlook on our future research agenda.

Reward-Based Crowdfunding

The term "crowdfunding" refers to the collection of relatively small amounts of money from a large number of people, typically through Internet websites (Ahlers et al. 2015; Bradford 2012; Schwienbacher and

Larralde 2012). Crowdfunding is closely related to crowdsourcing (Howe 2006), but it collects money instead of ideas and feedback. During the past few years, crowdfunding websites have emerged on the Internet that follow a variety of funding models—donation-based, lending-based, equity-based, and reward-based (Bradford 2012; Bretschneider et al. 2014; Frydrych et al. 2014; Haas et al. 2014). While donation-based crowdfunding websites (e.g., *ammado*, *GlobalGiving*, and *JustGiving*) are typically used for charity-related projects, lending-based crowdfunding (e.g., *Kiva*, *Lending Club*, and *Prosper*) has become popular as a source of private credit, equity-based crowdfunding (e.g., *Crowdcube*, *EquityNet*, and *StartupValley*) has emerged for small-business funding, and reward-based crowdfunding (e.g., *Kickstarter*, *Indiegogo*, and *Crowdfunder*) is used for creative projects (Sharp 2014). These four crowdfunding models are distinguished based on what backers receive in return for their money: nothing (donation-based), interest (lending-based), shares or dividends (equity-based), or a non-financial reward (reward-based) (Bretschneider et al. 2014; Mollick 2014; Kunz et al. 2016).

Reward-based crowdfunding has become the most popular crowdfunding model on the Internet (Belleflamme et al. 2013; Mollick 2014). Most reward-based crowdfunding websites work as follows (Koch and Siering 2015): Project creators post profiles regarding their professional backgrounds and crowdfunding activities (e.g., previous projects, backing history) and use standardized templates to describe their projects (e.g., texts, images, videos). The funding-campaign's duration is fixed, a funding goal is also set, and backers are offered non-financial rewards in return for their money. Funding goals, campaign durations, and project descriptions cannot usually be changed after project launch, but project creators can post updates to inform actual and potential backers about a project's progress. Rewards vary with the amount of the donation and include such offers as copies of the resulting product (e.g., a DVD of the film), creative collaboration (e.g., a role in the film), creative experiences (e.g., a visit to the film set), and creative mementos (e.g., thanks in the film credits) (Kuppuswamy and Bayus 2015). Many reward-based crowdfunding websites follow an "all-or-nothing" principle in which projects are realized only if a predefined funding goal is reached. Another popular crowdfunding principle is "keep-it-all," in which project creators keep whatever they collect, even if they do not reach their fundraising goals (Cumming et al. 2014).

Researchers have explored how these design options influence crowdfunding success. In particular, project characteristics like the funding goal and the campaign's duration have received considerable attention. While higher funding goals lower the chance that a project will be funded successfully (e.g., Koch and Siering 2015), longer campaign durations have been found to decrease funding success rates (e.g., Mollick 2014), but research has also delivered contradictory findings (e.g., Frydrych et al. 2014). Project descriptions have also been studied in depth (e.g., Gao and Lin 2015; Koch and Siering 2015; Kunz et al. 2016; Xiao et al. 2014). For example, Marom and Sade (2013) found that project descriptions that focus on the personage or business idea are positively associated with fundraising success, a finding that Zhou et al. (2015) confirmed in terms of argument quality and source credibility and that Koch and Siering (2015) confirmed in terms of texts, images, and videos. In addition, fundraising success is a function of project ownership, as Zvilichovsky et al. (2015) and Koch and Siering (2015) demonstrated, as being an active backer of other projects increases one's own fundraising success. Finally, communication in, for example, the form of comments, updates, and blog posts has also been confirmed as a success factor (e.g., Kunz et al. 2016; Xiao et al. 2014; Xu et al. 2014).

The literature review shows that researchers have studied several factors related to the design and presentation of crowdfunding projects, but only a few have studied how rewards influence funding success, and the results have been contradictory. For example, Frydrych et al. (2014) could not provide clear implications of the relationship between the number of rewards and crowdfunding success, while Kunz et al. (2016) provided evidence that the number of rewards increases the probability of success, and Xiao et al. (2014) concluded that fewer reward tiers lead to significantly higher success rates. Against this background, the selection of rewards and the determination of the donation amounts to which they are connected have not been studied in sufficient depth. As the next section explains, our research takes a behavioral-science perspective on crowdfunding to explore how to design rewards menus that increase the chances of reaching funding targets.

The Decoy Effect

The objective of crowdfunding campaigns is to collect enough money to fund a particular project, so an important question for project initiators concerns how to encourage backers to select the rewards that

come with the highest donations. Research in the field of behavioral science has demonstrated that people's choices are influenced by how the choices are presented (Johnson et al. 2012). Even simple modifications of the choice set can influence people's decisions, so presenting choices in certain ways—modifying the "choice architecture" (Thaler et al. 2013)—can "nudge" people and alter their behavior in a predictable way (Thaler and Sunstein 2008), a concept that also applies to digital environments (Weinmann et al. 2015). In reward-based crowdfunding, the decoy effect—the effects of asymmetrical dominance in particular—may be used as a nudge to draw backers' attention to the high-priced rewards.

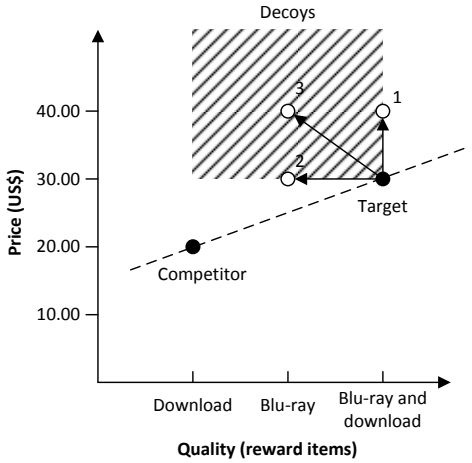

Figure 1. Exemplary choice set for the *Kung Fury* movie (adapted from Huber et al. 1982)

Decoys can shift consumers' preferences by adding an asymmetrically dominated alternative to the choice set (Josiam and Hobson 1995). Most traditional choice models that explain how the introduction of a new product changes existing products' market shares incorporate the two fundamental hypotheses of similarity, where the new product takes disproportionally more market share from similar products than it does from dissimilar products, and regularity, where the new product does not increase the market share of other available products (see Huber et al. 1982 for a discussion). However, Huber et al. (1982) argued that these two hypotheses fail when an asymmetric alternative is offered. An asymmetrically dominated choice refers to situations in which one of at least two options (that do not dominate each other) dominates a third option in all relevant dimensions (e.g., price and quality) (Bateman et al. 2008). Adding an asymmetric alternative like the third option to a choice set increases the number of times the dominant option will be chosen, which violates the regularity assumption and reverses the similarity assumption, so an asymmetric alternative serves as a "decoy" that increases the share of the dominant, more profitable option (Huber et al. 1982).

Research has confirmed the significance of the decoy effect in several consumer-behavior situations, including the selection of restaurants, beer, cars, and tour packages (e.g., Heath and Chatterjee 1995; Hedgcock et al. 2009; Huber et al. 1982; Josiam and Hobson 1995). Some studies have also delivered contradictory findings (e.g., Kim et al. 2006), but the applicability of decoys in reward-based crowdfunding remains to be assessed. In reward-based crowdfunding, rewards vary regarding quality and price, which are the two dimensions that determine backers' choices. The martial arts comedy movie *Kung Fury*, which was crowdfunded through *Kickstarter*, is an example of a crowdfunding campaign that can be used to illustrate how decoys can work in reward-based crowdfunding.

The movie project offered more than thirty rewards to backers, from general project support for US$ 1.00 to a major film role for US$ 10,000 (Kickstarter 2016b). For the purposes of this illustration, and grounded in marketing research on hybrid products and bundling (e.g., Bakos and Brynjolfsson 1999; Koukova et al. 2008; Venkatesh and Chatterjee 2006), let us assume that the project involved only two basic rewards: a download option at US$ 20.00 and a Blu-ray-and-download option at US$ 30.00. (Most of *Kickstarter's* movie projects offer at least these two types of rewards, with higher-tier rewards usually designed to include some lower-tier rewards.) As the Blu-ray-and-download option is more expensive, it is also the preferable option from the filmmakers' viewpoint, so it is the higher-priced, higher-quality "target," using

decoy language, while the download option is the lower-priced, lower-quality "competitor" (Huber et al. 1982). As Figure 1 shows, neither the competitor nor the target dominate the other in terms of quality or price, so the choice set could benefit from adding a decoy within the shaded area.

Table 1 shows three decoy-placement strategies for the *Kung Fury* case. The lower-value decoy may offer the same reward at a higher price (e.g., US$ 40.00 instead of US$ 30.00), a worse reward at the same price (e.g., only the Blu-ray, no download option), and a combination of these two strategies, a worse reward at a higher price (e.g., only the Blu-ray for US$ 40.00). Decoys are rewards that no one would logically choose but that make the Blu-ray-and-download reward look better (Huber et al. 1982). There are two reasons that backers may prefer this reward when a decoy is added to the choice set: the perceptual framing of the decision problem—such as when adding a higher-priced decoy makes the Blu-ray appear less expensive— and the evaluation processes used—such as when the easy choice between the target and the decoy makes it less likely that the download-only option will be considered (Bateman et al. 2008; Huber et al. 1982).

	Price (US$)	Quality (reward items)
Strategy 1		
Target	30.00	Blu-ray and download
Competitor	20.00	Download
Added decoy	40.00	Blu-ray and download
Strategy 2		
Target	30.00	Blu-ray and download
Competitor	20.00	Download
Added decoy	30.00	Blu-ray
Strategy 3		
Target	30.00	Blu-ray and download
Competitor	20.00	Download
Added decoy	40.00	Blu-ray

Table 1. Decoy-placement strategies for the *Kung Fury* movie (adapted from Huber et al. 1982)

The next section explains how we tested placing decoys in crowdfunding projects using the second strategy of a less valuable reward at the same price as that of a more valuable target reward.

Research Method

Participants and experimental design. As our study investigates crowdfunding, an online activity, we conducted an online experiment. We did not collect data about real crowdfunding campaigns from the Internet (Huhtamäki et al. 2015), as most previous studies have done, because the use of decoy rewards is still an uncommon crowdfunding practice. We recruited forty native English speakers of at least eighteen years of age from prolific.ac[1] to ensure sufficient comprehension skills. (*Prolific* allows researchers to filter for participants who were born in the English-speaking countries of the United Kingdom, the United States, Ireland, Australia, Canada, or New Zealand.) The mean age of all participants was 33.9 years, and 65.0 percent of them were men. We conducted a single-factor repeated-measure experimental design with two conditions: a baseline condition and a decoy condition. We randomly assigned the forty participants to the baseline condition and the decoy condition, with each condition consisting of the same three crowdfunding scenarios, resulting in 120 observations (60 observations per condition). Each session lasted an average of six minutes. We excluded participants from the dataset who needed less than four minutes to complete the experiment (which made it unlikely that they have thoroughly read and understood the instructions provided), which resulted in a final dataset of 96 observations (48 observations per condition). Subjects received £1 for participation, the approximate average hourly wage in the UK of £10.

[1] Online recruitment platforms have been found to be appropriate for random-sample populations (Berinsky et al. 2012). For example, Mason and Suri (2012) found that the behavior of respondents on an online recruiting platform closely resembled that of participants in traditional laboratory experiments.

Materials and procedure. We used three *Kickstarter* projects to design the crowdfunding scenarios for the experiment and created project descriptions of similar length (Table 2). These scenarios incorporated a book, a video game, and a movie, so they were designed to represent some of the most common project categories on creativity-oriented crowdfunding websites like *Kickstarter*. We used *Qualtrics.com*, an online survey website, for presentation purposes. Participants read the experiment's instructions and then went through the three scenarios, which were presented in random order. Our experiment was a hypothetical thought experiment, so participants were asked to select the funding options they would chose in real life. After they completed the scenarios, they were surveyed to collect demographic data.

Project	Description
Book[2]	The children's book *Allen and the Wolf Pack* tells the story of Allen, a nine-year old boy who wants to discover the reason for an unnaturally long winter. Although it is end of May, spring has not come, winter storms continue to bluster, and the winds carry the voices of howling wolves. When Allen goes to the forest to find the reason for this confused state, he gets lost, but he survives with the help of wolves that care for him until he is rescued. The book is full of adventure, mystery, excitement, and great characters.
Video game[3]	*Heading to Armageddon* is a third-person-shooter PC game that takes place in the twenty-second century. The world is separated into three unevenly powerful blocs that have competed for years: the Western Alliance, the Russian Regime, and the Restored Caliphate. A nuclear disaster is imminent and deemed unavoidable, and the future of humankind is in the player's hands. The player is the leader of an underground movement whose mission is to rescue the world from the apocalypse by locating all of the world's nuclear devices and destroying them.
Movie[4]	*Ambulance Affairs* is a thriller movie about Dave, a young ambulance technician in New York, on his first shift with his partner Michelle. When they return to the station in their ambulance after their shift, they encounter an injured person lying in the road. They offer assistance but are taken hostage at gunpoint by a group of hooded men, who take them and the injured person to a nearby building and force them to keep the injured patient alive. It turns out that the men are wanted for robbing the Federal Reserve Bank in Manhattan.

Table 2. Descriptions of the three crowdfunding scenarios

Treatment. The reward-choice alternatives in each project category consisted of a target, a competitor, and a decoy. In each scenario, the competitor option was a comparatively cheap reward—a digital-download option for the book, video game, or movie. The more expensive target options included the digital-download option as well as physical versions of the product. (To determine realistic prices for these two options, we reviewed various project descriptions available on *Kickstarter*.) The decoy option had the same price as the target option in all scenarios but did not include the digital-download reward, so we followed the second of the decoy-placement strategies described above. Participants in the baseline condition decided between the competitor and the target options, while we added the decoy as a third option to the decoy condition. Table 3 provides an overview of the choice sets for the book scenario.

Option	Baseline condition	Decoy condition
Competitor	PAY $10 – GET an eBook	PAY $10 – GET an eBook
Decoy	—	PAY $20 – GET a hardcover book
Target	PAY $20 – GET an eBook and a hardcover book	PAY $20 – GET an eBook and a hardcover book

Table 3. Choice sets for the book scenario

Measures. Our outcome variable was binary—participants in the baseline condition could choose either the cheap reward (0 = competitor) or the expensive reward (1 = target). Likewise, participants in the decoy condition could choose between the competitor (cheap) and the target (expensive), or, though unlike-

[2] The scenario is based on the project *Ellen and the Winter Wolves*: https://www.kickstarter.com/projects/567406064/ellen-and-the-winter-wolves-by-jamin-still

[3] The scenario is based on the project *Road to Armageddon – A Modern Military Role Playing Game*: https://www.kickstarter.com/projects/1009649146/road-to-armageddon-a-modern-military-role-playing?ref=category

[4] The scenario is based on the project *Ambulance—A Short Film*: https://www.kickstarter.com/projects/1178516301/ambulance-a-short-film?ref=category

ly, they could decide to take the decoy option (which was also expensive). In line with previous research (Huber et al. 1982), we merged the decoy and target choices into an expensive choice.

Results

In all three scenarios, a higher number of participants selected the expensive option when the decoy was added to the choice set (although four participants selected the decoy). Figure 2 presents histograms for the three funding scenarios, and Table 4 compares the revenues for the three scenarios. In total, the decoys generated additional revenues of US$ 120.00, an increase of approximately 11 percent.

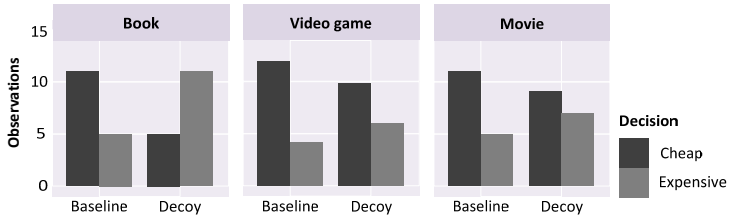

Figure 2. Choices in the three scenarios

We conducted a logistic regression to test the effect of the treatment (i.e., the decoy) on the likelihood that participants would choose the expensive option (*Decision* = 1). Because we tested three scenarios per participant, we had multiple observations for each participant, so we had to assume that the residuals are not independent but clustered within participants. Since observations from the same participant might be correlated (Gelman and Hill 2006), we used mixed-effects logistic regression analysis to account for individual effects (i.e., by allowing the intercept of each participant to vary):

$$\Pr(Decision_s = 1) = \text{logit}^{-1}\,(\alpha_{i[s]} + \beta_1 \cdot Decoy_s + u_i + \gamma' \cdot Controls_i),$$

where *i[s]* indexes the individuals *i* that correspond to each scenario's observations *s* (i.e., book, video game, movie), $\alpha_{i[s]}$ represents the individual intercept, β_1 is the effect of the $Decoy_s$ in each scenario, $Controls_i$ are the control variables *Age*, *Gender*, and *Scenario,* and u_i is a random effect designed to capture the correlation between the decision (i.e., the outcome variable) observed for the same subject *i* across the scenarios *s*.

Total revenues		
Scenario	*Condition*	
	Baseline	*Decoy*
Book	$210	$270
Video game	$460	$490
Movie	$395	$425
Total	*$1,065*	*$1,185*

Table 4. Revenues across scenarios

Table 5 presents the results of three mixed-effects logistic regression models. Model 1 contains only the decoy variable, while Model 2 contains the decoy, the control variables (*Age* and *Gender*), and an interaction term between *Decoy* and *Scenario*.

In another specification (Model 3), we added *Scenario* as a random factor[5] and allowed both the intercept of individuals and the coefficient of *Scenario* (i.e., the slopes) to vary (i.e., varying-intercept, varying-slope model):

$$\Pr(Decision_s = 1) = \text{logit}^{-1}\,(\alpha_{i[s]} + \beta_{i[s]} \cdot Decoy_s + u_i + \gamma' \cdot Controls_i),$$

where $\beta_{i[s]}$ refers to the individual slopes for *Scenario*.

[5] An effect is said to be random if the study contains only a random sample of possible conditions (Field 2013, p. 862). For example, the variable *Scenario* can be considered random because we could have used other/more scenarios than book, video game, and movie.

	Dependent variable: Decision (binary)								
	(1)			(2)			(3)		
Treatment (decoy)	2.43	*	(1.04)	5.31	*	(4.12)	5.30	*	(4.12)
Intercept	.41	**	(.13)	.29		(.30)	.29	*	(.30)
Age	—			1.03		(.02)	1.03		(.02)
Gender	—			.69		(.33)	.69		(.33)
Interaction (decoy * scenario)	NO			YES (n.s.)			YES (n.s.)		
Random intercept (participant)	YES			YES			YES		
Random slope (scenario)	NO			NO			YES		
N	96			96			96		
-2LL	124.5			118.3			118.3		
AIC	128.5			134.3			134.3		
BIC	133.6			154.8			154.8		

Notes: * p < .05, ** p < .01, *** p < .001; standard errors are in parentheses.

Table 5. Mixed-effects logistic regression results

Other than the treatment variable *(Decoy)*, none of the predictor variables (controls and interaction effects) were statistically significant. We chose Model 1 after performing a likelihood ratio test.[6] The results show that, in Model 1, participants in the decoy condition were 2.43 times more likely to choose the expensive option than were participants in the baseline condition. (In Models 2 and 3, participants were 5.3 times more likely to choose the expensive option). Accordingly, our early-stage experiment confirmed the applicability of decoys in reward-based crowdfunding.

Discussion

Our results suggest that the use of decoy rewards can help crowdfunding campaigns increase the size of their average donations. No one is expected to choose a decoy, as they offer the same reward as another funding option at a higher price, a less valuable reward at the same price, or even a less valuable reward at a higher price. Adding a decoy to the set of funding options can make an expensive reward appear more attractive and help crowdfunding campaigns reach their funding targets—and reach them more quickly. (We do not advocate their use for ethically questionable behavior; see Sunstein (2015) for a discussion.)

Our early-stage research on using decoys in crowdfunding has several limitations. First, with forty participants, the sample size was small. Second, we recruited our participants through an online survey platform and did not collect data from real crowdfunding campaigns. Third, we tested the decoy effect using three fictitious and simplified crowdfunding campaigns. As a result, our findings provide only preliminary evidence for the usefulness of decoys in crowdfunding, as 1) there are several strategies for decoy placement, and we tested only one of them; 2) the applicability of decoys in other crowdfunding categories than books, video games, and movies remains to be evaluated; 3) participants did not self-select into supporting a crowdfunding campaign and did not invest real money; 4) we tested the possibility of decoy placement for a limited scheme of only three rewards; 5) crowdfunding sites offer various features related to project design that have been found to influence crowdfunding success, but our experiment accounted for only some of them; and 6) we excluded several individual-level variables from our study that influence backing behavior, including personal preferences and level of income.

[6] We used the likelihood ratio test to compare the model specifications against an intercept-only model. Model 1 was statistically significant ($\chi2(1) = 4.27$, $p < .039$) compared to an intercept-only model. Adding control variables and the interaction effect did not significantly improve the model fit (Model 2: $\chi2(7) = 9.36$, $p < .228$), nor did adding *Scenario* as random effect increase the model fit significantly (Model 3: $\chi2(7) = 9.36$, $p < .228$).

The goal of this early-stage research was to focus on internal validity by isolating the decoy effect in a simple, controlled experiment. To establish ecological validity, we are currently developing a mock crowdfunding website that provides a more realistic environment in terms of look and feel and functionality in order to test alternative decoy-placement strategies in other crowdfunding scenarios with more participants, a higher number of rewards, and a variety of design features. If successful, our study will have important implications for crowdfunding practice and research, as project creators can use our results to select and offer rewards in pursuit of funding targets, while researchers can use our results to theorize on reward-based crowdfunding, especially from a behavioral-science perspective. For information systems research, our results can inform the design of reward menus and crowdfunding projects as well as the design of crowdfunding websites. For example, the use of individual, adaptive rewards (e.g., related to level of income and interest) is a promising direction for future design research.

This research-in-progress is part of a larger research endeavor that will identify and test additional mechanisms that may influence choice behavior in crowdfunding settings, including the middle-option bias (Simons et al. 2017). Kamenica (2008) showed that people tend to take the "middle" option, so designing a choice set with a desirable middle target reward may increase donations. In addition, Kahneman et al. (1991) demonstrated that people tend to stick with the default option, so preselecting target options in crowdfunding contexts may raise funding as well. Finally, the prospect theory suggests that people tend to weigh losses more heavily than gains (Kahneman and Tversky 1979), so they may prefer to choose more expensive rewards if they are offered in limited number. The mock crowdfunding website we are currently developing will provide the technical infrastructure required to evaluate the significance of these and related effects in reward-based crowdfunding.

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