**Donors’ Giving Decisions towards Nonprofit Commercialization: Do Commercial Form and Intensity Matter?**

ChiaKo Hung\*, University of Hawaii at Manoa, chung35@hawaii.edu

Ben Suykens\*, Ghent University, Ben.Suykens@UGent.be

\*Both authors have contributed equally

**Abstract**

By now, commercialization is an established, yet contested practice in the nonprofit sphere. Whereas proponents point to increased financial stability, opponents warn for exclusion mechanisms inducing mission drift. This ambiguity raises the question under which conditions nonprofit commercialization is (un)likely to purposefully ‘work’ in a nonprofit context. Drawing on institutional theory, we conduct a survey experiment with US-based individuals (N = 1,031) to examine the impact of nonprofit commercialization form (i.e., mission-related/mission-unrelated) and intensity (high/low) on individual donation likelihood. Contrary to our theoretical expectations, we find that individual donors (a) prefer mission-unrelated over mission-related commercial income, and (b) do not consider nonprofit commercialization intensity when deciding whether, and how much, to donate. This study advances our understanding of donors’ giving decisions toward nonprofit commercialization, and offers guidance to nonprofit practitioners on how to commercialize for better financial health.

**Keywords** Nonprofit commercialization; individual donors; mission-related; mission-unrelated; institutional theory

## **Introduction**

In the past decades, it has been argued that nonprofit organizations (NPOs) in Anglo-Saxon countries became more commercial by increasing their reliance on the profitable sale of services and products (e.g., Brown, 2018; Salamon, 1993; Weisbrod, 2000). Commercial activity can be mission-related (e.g., service fees) or mission-unrelated (e.g., sale of gadgets like candy, t-shirts and pens). Commonly referred to as nonprofit commercialization, this trend is typically viewed as a double edged sword (Suykens, De Rynck, & Verschuere, 2019). Whereas some scholars argue that nonprofit commercialization can lead to improved (a) financial stability (Suykens, George, De Rynck, & Verschuere, 2020), (b) organizational autonomy (Gras & Mendoza-Abarca, 2014) (c) operational efficiency (Dart, 2004; Toepler, 2006), and (d) revenue growth (Enjolras, 2002), others warn that commercialization can hamper NPOs’ contributions to society (Eikenberry & Kluver, 2004; Hustinx & De Waele, 2015). The presence of commercial income, for instance, is linked to lower levels of (a) free access at performing arts nonprofits (Kim, Pandey, & Pandey, 2018) and (b) health service provision to disadvantaged groups (Park, Lu, & Shon, 2021). Essentially, the argument is that commercialization is likely to contribute to NPOs’ financial base at the potential cost of deteriorating its social effectiveness, and ultimately, eroding its organizational legitimacy (Carré, Suykens, & Verschuere, 2021). Given this trade-off, a central question for nonprofit managers, when commercializing, is how to do so in a *responsible* manner, i.e. reaping the potential advantages while avoiding loss of organizational legitimacy due to mission creep.

However, insight under what conditions nonprofit commercialization is (un)likely to ‘work’ remains largely absent to date. This is surprising, given that commercialization is a reality for many NPOs across the world (e.g., Brown, 2018; Hung, 2021; Khieng & Dahles, 2015; McKay, Moro, Teasdale, & Clifford, 2015; Salamon, 1993; Suykens, George, et al., 2020; Vaceková, Valentinov, & Nemec, 2017). This paper takes a first step at this issue by examining under what conditions nonprofit commercialization is likely to increase individual donations, which resonates with the promise of increased financial stability (Froelich, 1999; Guo, 2006; Toepler, 2006). A recent meta-analysis by Hung (2020) shows that this is far from evident, as nonprofit commercialization is most likely to crowd out donations, albeit to a moderate extent. In specific, we focus on two key aspects of nonprofit commercialization, and ask:

**To what extent does the *form* (i.e., mission-related/mission-unrelated) and the *intensity* (i.e., high/low) of nonprofit commercialization impact individual donation likelihood?**

This research question is of great importance and interest to nonprofit management scholars and practitioners. First, from the perspective of institutional theory, NPOs must meet donors’ expectations to be perceived as legitimate. However, the theory delivers two sorts of legitimacy that are in conflict when it comes to nonprofit commercialization: cognitive legitimacy and socio-political legitimacy. Scholars have long been interested in which legitimacy better explain donors’ expectations of nonprofit commercialization (Zimmerman & Dart, 1998). Second, although social entrepreneurship is on the rise, nonprofit practitioners have little guidance on how to commercialize in the way that won’t crowd-out private donations and would enhance financial health (Hung, 2020). Since private donations represent the public’s support behind nonprofits (Froelich, 1999), practitioners are often concerned about donors’ reactions toward nonprofit commercialization (Herman & Rendina, 2001; Smith, Cronley, & Barr, 2012). Donors could negatively react to commercialization by not donating to NPOs, resulting to weaker financial health. Donors might be sensitive to (1) the extent to which NPOs’ commercial activities are related to their respective mission, and (2) the intensity to which NPOs commercialize. However, empirical evidence about these observations is less conclusive (Gras & Mendoza-Abarca, 2014; Herman & Rendina, 2001; Smith et al., 2012). Without understanding donors’ reactions to these key aspects of commercialization, NPOs may put themselves in a vulnerable situation when commercializing.

To answer the question, we conducted a pre-registered survey experiment with 1,031 US-based individuals. The US constitutes a particular salient research context, as US-based NPOs have long relied on commercial income (Brown, 2018; Kerlin & Pollak, 2011; Salamon, 1993). In our experiment, participants were asked to read a fictitious call for support from the forest conversation NPO ‘GreenForest’. In this call, varying degrees of information were given on the form and/or intensity of GreenForest’s commercial income (see Figure 1). After reading this scenario, participants were asked about their giving intentions towards GreenForest.

Our study contributes to the nonprofit management literature twofold. First, this study offers evidence that donors, to some extent, are sensitive to ways that NPOs commercialize. Our results show that donors prefer mission-unrelated commercial revenue over mission-related (i.e., the form), thereby suggesting that socio-political legitimacy has more explanatory power over cognitive legitimacy when it comes to nonprofit commercialization. This speaks and contributes to institutional theory that emphasizes stakeholders’ expectations of NPOs by investigating donors’ giving decisions to nonprofit commercialization. Second, this study offers concrete guidelines to nonprofit practitioners under which configuration commercial activity is (un)likely to bolster donative income.

In the following, we draw on institutional theory to develop our hypotheses and discuss our research design. We then present our research findings and conclude by discussing the implications for nonprofit management theory, research and practice.

## **Nonprofit Commercialization and Donors’ Reactions: An institutional perspective**

Institutional theory constitutes a purposeful lens to study donors’ giving decisions toward nonprofit commercialization (Zimmerman & Dart, 1998). This theoretical perspective argues that NPOs have to meet institutional values, believes, and expectations by reproducing system-wide social factors to obtain legitimacy, which in turn is likely to induce support among constituents for NPOs’ actions (Baum & Oliver, 1991; Meyer, 2008; Zucker, 1987). Thus, in order to be supported by donors, NPOs must present themselves as ‘legitimate’ by understanding and reproducing donors’ values, believes, and expectations. When it comes to nonprofit commercialization, studies have documented two sorts of legitimacy that are in conflict (Zimmerman & Dart, 1998): cognitive and socio-political legitimacy. Each reflect a different set of donors’ values, believes, and expectations toward nonprofit commercialization.

On the one hand, cognitive legitimacy “*refers to the way that certain ideas of organization and organizational practices are almost fully taken for granted and accepted as normal or correct*” (Zimmerman & Dart, 1998, p.53). With regard to nonprofit commercialization, cognitive legitimacy emphasizes that it is government funding or private donations rather than commercial revenue that should fund NPOs (Weisbrod, 2000). NPOs are not businesses and should not behave business-like. Resonating with many critical management studies, the key argument is that commercial activity threatens the traditional institutional logic of NPOs that pursue charitable spirits (Eikenberry, 2009; Eikenberry & Kluver, 2004; Froelich, 2012; Frumkin & Andre-Clark, 2000; Zimmerman & Dart, 1998). This in turn might induce reservations among individual donors to donate to commercialized NPOs (Hung, 2020).

Socio-political legitimacy, on the other hand, “*refers to the way that organizations conform to some prevailing social or political norms*” (Zimmerman & Dart, 1998, p.53). From this perspective, nonprofit commercialization may reflect the rise of social entrepreneurship in the nonprofit sector (Suykens, George, et al., 2020). For instance, Dart (2004) contends that “*If business values, business models, and business language have become dominant and are the sociocultural environment’s preferred modes of problem solving and preferred structures of organizing, then it follows that even social-sector organizations can be accorded legitimacy by adopting the language, goals, and structures of this ideologically ascendant form*” (p. 419). From this point of view, it is clear that nonprofit commercialization is not only about pursuing earned income, but also about meeting constituents’ expectations on how to pursue social goals, which in turn would make constituents more likely to support said NPOs. As Zimmerman and Dart (1998) hold, increased socio-political legitimacy by commercializing would actually increase NPOs’ grant-raising potential from some funders. They quote Skloot (1987) and argue that successful commercial ventures make NPOs look like winners and thereby increase the likelihood of donor or grantor support. Coined by Andersson and Self (2015) as the ‘social-entrepreneurship advantage’, recent studies add empirical depth to this argument by observing that self-acclaimed social enterprises hold a legitimacy advantage over NPOs as these are more likely to receive financial support from public (Dey & Teasdale, 2016) and private resource holders (Willems, Waldner, Dere, Matsuo, & Högy, 2017). Hence, given that commercial income constitutes a key characteristic of social entrepreneurship in the US (Defourny & Nyssens, 2010), donors are likely to reward commercial NPOs by donating (more).

Importantly, cognitive and socio-political legitimacy are not mutually exclusive. It is not that cognitive legitimacy used to dominate peoples’ ideology and that socio-political legitimacy recently took over. Rather, both exists simultaneously to different extents in different donors’ minds. Although previous studies have greatly contributed to our understanding of the effect of nonprofit commercialization on donations (e.g., Kingma, 1995; Wicker, Breuer, & Hennigs, 2012), little insight is offered under which conditions these can go hand in hand. Put simply: individual donors are likely to react differently to different commercial configurations.

In this study, we focus on two configurational aspects: nonprofit commercialization form and intensity. First, individual donors might react differently to different forms of nonprofit commercialization. Herman and Rendina (2001), for instance, observe that donors who pay attention to NPOs’ commercial activities are likely to (a) approve mission-related commercial activity, and (b) disapprove mission-unrelated commercial activity. This resonates with the study of Levine Daniel and Kim (2018), who find that mission-unrelated commercial income is associated with poorer program outcomes among US-based arts and culture NPOs. Moreover, experimental research by Smith et al., (2012) finds that the negative effect of commercial income on donation likelihood is mitigated when donors perceive commercial activity to be mission consistent. From this logic, mission-related commercial income is likely to signal service quality (Brown, 2018), i.e. ‘people are willing to pay so it must be good’. Engaging in mission-unrelated income schemes on the other hand – one may think of NPOs selling t-shirts, raffle tickets, wine, and so forth – might come across as ‘doing the wrong things’ (e.g., Suykens, George, et al., 2020). Therefore, for those donors who hold that nonprofits should not be business-like (i.e., cognitive legitimacy), they are unlikely to support commercial NPOs. In terms of commercialization form, only mission-related commercial might be tolerated to a limited extent given that this can be perceived as a quality mark (cf. Brown, 2018). However, for those donors who consider that NPOs should behave business-like (i.e., socio-political legitimacy), they are likely to support commercial NPOs. Here, existing research suggests that donors mostly reward mission-related commercial activity (cf. Herman & Rendina, 2001; Smith et al., 2012). Yet, similar to mission-related commercial income, mission-unrelated commercial activity is also suited to strengthen NPOs’ financial stability by means of revenue diversification (Froelich, 1999) and cross-subsidization (Guo, 2006), and thus also likely approved by adherents of a socio-political legitimacy logic to some extent (cf. Herman & Redina, 2001; Smith et al, 2012). In sum, both cognitive and socio-political legitimacy adherents are likely to approve mission-related commercial activity. However, cognitive legitimacy adherents are less likely to approve mission-unrelated commercial activity and socio-political legitimacy adherents only approve it to some extent. Accordingly, we hypothesize that:

*H1. Individual donations are likely to (a) increase when nonprofits generate mission-related income, and (b) decrease when nonprofits generate mission-unrelated income.*

In addition to nonprofit commercialization form, and second, donors are likely cued by the intensity to which NPOs commercialize. Essentially, even though donors may prefer mission-related business, it does not necessarily mean they would support NPOs that are highly commercialized. That is, a high level of commercialization may reverse donors’ giving decisions with regard to NPOs with mission-related commercial activity. Moreover, in the case where nonprofits generate mission-unrelated income, a high level of commercialization may further steer donors away. Although no existing research has empirically demonstrated these effects, Gras and Mendoza-Abarca (2014) argue that commercialization is only likely to strengthen NPOs’ financial stability – and thus organizational survival – up to a certain extent (Gras & Mendoza-Abarca, 2014). Drawing on the metaphor of Icarus, they find that the competitive advantage of resource diversification through commercialization is nullified when generating more than half of the organizational income via commercial activities. Two distinct mechanisms might be at play here. First, high dependency on commercial income might signal to potential donors that their donation is no(t) (longer) needed; the organization at hand is financially able to stand on its own feet. Second, and more problematic, high dependency on commercial might equally signal that financial motives are taking precedence over the prosocial agenda. This resonates with the critique that commercialization contributes to NPOs’ to losing their soul by drifting away from their prosocial underpinnings (e.g., Eikenberry, 2009; Eikenberry & Kluver, 2004). Hence, although adherents of cognitive legitimacy advocate for no or limited commercialization, it is important to note that also social-political legitimacy does not stand for unbridled commercialization. For these reasons, we hypothesize that

*H2. High dependence on commercial income decreases individual donation likelihood to both (a) mission-related commercial activity, and (b) mission-unrelated commercial activity.*

## **Methods**

### **Data collection, experimental design & independent variables**

Our study employs a pre-registered[[1]](#endnote-1) between-subject experiment to understand individual donors’ giving decisions towards nonprofit commercialization. In the spring of 2021, we surveyed 1,097 US-based individuals via the crowdsourcing platform Prolific. Contrasting with others, this platform offers clear guidelines on the rights, duties and compensation of participants[[2]](#endnote-2), which is a requirement for the validity of research results (Palan & Schitter, 2018). After closing our survey experiment, we excluded respondents who (a) needed a completion time over 30 minutes (7 respondents), and (b) displayed duplicate identification numbers (50 respondents)[[3]](#endnote-3). Given that the projected completion time was estimated at ten minutes, a completion time over 30 minutes suggests that respondents were likely distracted by other activities (Chandler, Mueller, & Paolacci, 2014). In a similar vein, identical identification numbers indicates that the same respondent filled in the survey more than once. Moreover, we excluded respondents who disagreed that we used their survey data (9 respondents). Taken together, this resulted in a final sample of 1,031, which suffices to detect an effect size of *f*=.11 across five conditions at *α* = .05, and a power of .08.[[4]](#endnote-4)

After some introductory questions, respondents were presented with a solicitation letter from the fictitious forest conservation initiative ‘GreenForest’. Our choice to utilize a forest conservation NPO was not arbitrary. Contrasting with the politicized climate change debate (Poortinga, Whitmarsh, Steg, Böhm, & Fisher, 2019), forest conservation in itself – without any explicit reference to climate change – arguably constitutes a more neutral scenario. Likewise, the use of a fictitious organization over an existing nonprofit initiative avoids contamination by respondents’ prior knowledge on conservation nonprofits (Coleman, 2018). The solicitation letter consisted of two sections: (a) a brief impression of the main organizational goals, and (b) additional information on the treatments (see Figure 1). For the treatment on the form of nonprofit commercialization, we added information on the presence of mission-related or mission-unrelated commercial activity. To test whether the intensity of nonprofit commercialization negatively impacts the relationships as theorized by hypothesis 1, we added that the revenue generated through commercial activity amounted 50% of the annual organizational income (cf. Gras & Mendoza-Abarca, 2014). Consequently, our experiment contained five distinct scenarios. Group 1 served as the control group, as they only were provided with basic information on the organization. Group 2 and 3 was provided with information on the form of nonprofit commercialization in addition to the basic information. Lastly, Group 4 and 5 received an identical scenario as respectively Group 2 and 3, with the difference that they learned that organizational dependence on commercial income was high.

<Figure 1 Here>

Respondents were equally distributed over the five groups. To check randomization, we checked the distribution of the following demographic characteristics: participants’ age, gender, educational attainment, race, religiosity, work experience, volunteer and giving experience, household income, marital status, and children (Lwin, Phau, & Lim, 2014; Robson & Hart, 2021). The results showed that the means among the experimental conditions are similar for all of the demographic variables except the number of children, *χ*2(4) = 13.16, *p* = 0.01 (See Table 1). Hence, we included the number of children in our regression model as a robustness check to examine if its inclusion affected the results. The results show that this was not the case.

<Table 1 Here>

### **Dependent variable**

Our dependent variable is individual donor giving behavior. We measure this by progressively gauging the respondents’ intention to donate: from more hypothetical to more real. In the following order, we asked the respondent (a) whether he/she would be willing to donate to GreenForest (yes/no), (b) how much he/she would donate from an imaginary $100 (0-100), (c) whether he/she would be willing to donate from their own wallet (6-point ordinal scale, ranging from ‘no’ to ‘yes, over $100’), (d) whether he/she would be willing to donate monthly from their own wallet (6-point ordinal scale ranging from ‘no’ to ‘yes, over $100’), and ultimately (e), to what percentage he/she would be willing to donate the monetary reward tied to survey participation to GreenForest (%) (Table 2). Descriptive analysis shows that the more ‘real’ the asked donation becomes, the less likely that respondents were willing to donate (a substantial sum).

<Table 2 Here>

### **Manipulation checks**

We conducted three manipulation checks. First, we asked respondents what kind of services is GreenForest offering, followed by the questions: “which business activities is GreenForest running?”, and “how much revenue do GreenForest's business activities generate on average?”. Respondents’ responses should match the treatment used to pass the manipulation checks. Most participants pass our manipulation checks(Please see the pass numbers and rates in Table 3).

<Table 3 Here>

Those participants who did not pass the manipulation checks are very likely not receiving the information this study delivered. In the result section, we first test the hypotheses by including the full sample. We then checked if our results hold by examining the hypotheses on those responses that failed the manipulation checks in the robustness check section.

## **Results. The Effect of Nonprofit Commercialization on Donors’ giving Decisions**

The participants of this study on average were 32.39 years old. 49.90% of the participants were male while 50.10% were female. 54.12% of the participants had a college degree and above. 64.79% of the participants were Caucasian/White, followed by Asian American, Latino(a)/Hispanic, and African American/Black. 20.37% of the participants ever worked in a nonprofit for pay. 58.49% of the participants never attended religious services. 24.54% of the participants ever volunteered for a nonprofit organization in the past 12 months. 61.01% of the participants ever made a charitable donation to a nonprofit organization. Around the half of the participants’ annual household income was below $60,000. 37.24% of the participants were married or in a domestic partnership. Finally, 74.15% of the participants had no children.

Depending on the nature of the dependent variable, we used binary, ordinal or linear regression analysis to test our hypotheses. In specific, we adopted a block-wise approach. In a first model, we only considered the experimental conditions. Subsequently, we added the number of children as a covariate for the second model since it failed the randomization checks, and ultimately the covariates such as age, race, and giving in the past 12 months were added to the regression analyses for the third model because these covariates significantly affect the participants’ giving behavior. On the whole, this study ran 15 regression models (3 models for 5 dependent variables).

To test Hypothesis H1(a) and Hypothesis H1(b), we start by comparing the mission-related condition to the control condition using regression analyses, we observe no change in donative behavior when nonprofits generate mission-related commercial income. The only exception was the result from the regression model that test the first, and most general, dependent variable asking participants if they are willing to donate to GreenForest (yes/no). Here, we find that individual donations decrease, rather than increase, when NPOs generate mission-related commercial income (Table 4).

Second, we compared the mission-unrelated condition to the control condition. Our results show that individual donations increase when nonprofits generate mission-unrelated commercial income, compared to when nonprofits have no commercial income. The only exception was the results from the regression models that test the fourth dependent variable asking participants if they are willing to make a monthly recurring donation to GreenForest from their own wallet. On this dependent variable, this study found that individual donative behavior is unrelated to mission-unrelated commercial income (Table 4).

<Table 4 Here>

The results from the above examinations suggested that individual donors prefer mission-unrelated commercial activity over mission-related commercial activity. Verifying this, we used regression models to compare the giving decisions of participants assigned to the mission-unrelated condition with that of participants assigned to the mission-related condition. Thus, in terms of nonprofit commercialization *form*, we find that respondents prefer mission-unrelated commercial activity over mission-related commercial activity when asked if (a) they are willing to donate to GreenForest (yes/no), (b) they have an imaginary $100 dollars to spend, and (c) they are willing to make a charitable donation to GreenForest using money from their own wallets. There is no significant giving difference between the mission-unrelated- and mission-related commercial activity when the respondents are asked to make a monthly recurring donation to GreenForest from their own wallet and make a donation to GreenForest using their experiment compensation (Table 5). Therefore, our results do not support H1(a) and H1(b).

<Table 5 Here>

To test Hypothesis H2(a) and H2(b), we compared the groups with high intensity of commercial revenue with the groups without high intensity of commercial revenue. The results from our regression analyses show that high dependence on commercial income is unrelated to individual donation likelihood in the case of mission-related commercial activity. The only exception was the result from the regression models that test the first dependent variable asking participants if they are willing to donate to GreenForest. However, on this dependent variable, this study found that high dependence on commercial income increases individual donation likelihood to mission-related commercial activity (Table 6). Overall, our results do not support Hypothesis H2(a). Moreover, the results from our regression analyses show that high dependence on commercial income is yet again unrelated to individual donation likelihood in the case of mission-unrelated commercial activity (Table 7). Thus, our results do not support Hypothesis H2(b) either.

<Table 6 Here>

<Table 7 Here>

**Robustness Checks**

The purpose of the manipulation checks is to confirm that experiment participants comprehend the information studies deliver. In this robustness check, this study removed those responses that failed the manipulation checks to test if the results persist. There were 15 participants that failed the manipulation question asking them what kind of services GreenForest provides. 92 participants failed the questions regarding the business activities GreenForest is running, as well as 92 participants failed the questions regarding how much revenue GreenForest was generating through said activities. There were some overlaps among the wrong responses of the three manipulation questions. This study eventually removed 150 participants who failed the manipulation test from the data and conduced the regression analysis on the sample size of 881 responses. The results were consistent with that from the full sample albeit coefficients and *p* values on some variables slightly changed.

## **Discussion**

This study aims to shed light on the conditions under which nonprofit commercialization can purposefully work. In specific, we examine under what configuration commercialization is most (un)likely to uphold its promise of strengthening NPOs’ financial stability by examining whether individual donors react differently to different commercialization forms and intensity. Based on regression analyses of data collected among US-based individuals via a random survey experiment (N = 1,088), our results indicate that individual donors prefer mission-unrelated income over mission-related income. The intensity to which NPOs commercialize does not affect individual donative behavior. Our findings have several implications for nonprofit management research, theory, and practice.

First, our results run counter previous survey experiments on this topic. Here, the explanation is arguably methodological in nature. Although common practice, earlier survey experiments relied on small-N[[5]](#endnote-5) convenience samples of volunteers (Herman & Rendina, 2001) and students (Smith et al., 2012) as surrogates for individual donors. This is questionable, as these surrogates are likely to exhibit higher levels of donative behavior (i.e., in the case of the volunteers) (Van Slyke & Johnson, 2006) and/or lower levels of socioeconomic resources (i.e., in the case of university students) in comparison to the ‘average’ individual donor. Hence, while useful to explore internal validity (i.e., does this particular mechanism hold in a controlled environment?), external validity (i.e., does a particular mechanism hold in the day-to-day reality?) might suffer because of it (Hooghe, Stolle, Mahéo, & Vissers, 2010). That said, taking stock of the existing literature, our study offers two important nuances. On the one hand, our findings indicate that there are limits to the social entrepreneurship advantage. While individual donors are indeed more likely to donate to self-acclaimed social enterprises (cf. Andersson & Self, 2015; Willems et al., 2017) – and thus commercial NPOs – they do so only when commercial income is generated through ancillary activities (i.e., those activities distant to the core activities). On the other hand, our findings nuance the critique surrounding nonprofit commercialization, as donors are not found to give significantly less to highly commercialized NPOs. The overall absence of significant negative associations with regard to nonprofit commercialization *form* and *intensity* suggests that commercialization does not systematically impair nonprofit credibility among individual US-based donors.

Second, the observation that individual donors prefer the presence of commercial ancillary activities ties in with the argument drawn from sociopolitical legitimacy that social entrepreneurship is increasingly viewed as a legitimate practice in the nonprofit domain (Dart, 2004; Willems et al., 2017). However, it may be too early to speak of a social enterprise turn in donors’ minds. For one, contrasting with existing research (Herman & Rendina, 2001; Smith et al., 2012), donative behavior is unaffected – and thus not positively related to – by the presence of mission-related commercia activity. Moreover, from an individual donors’ perspective, the profitable sale of pens, flags, t-shirts and other goods alike may be interpreted as traditional fundraising efforts (Zimmerman & Dart, 1998), and thus be perceived as something that NPOs inherently ‘do’ (Brown, 2018; Child, 2010). Indeed, although the research literature emphasizes that a profit motive discerns commercialization from fundraising (Guo, 2006; Suykens, George, et al., 2020; Tuckman, 1998), the distinction might not always be as clear for individual donors in day-to-day life. Future research can unravel to what extent the sale of mission-unrelated goods are perceived by (which) individual donors as a traditional fundraising activity (resonating with cognitive legitimacy) or as a commercial activity signaling business-like behavior (resonating with sociopolitical legitimacy).

Third, in addition to nonprofit management research and theory, our findings hold relevant implications for nonprofit practitioners. However, before formulating recommendations for practice, it is important to point to the limitations of our study. For one, it is essential to emphasize that nonprofit commercialization impacts many organizational aspects (see e.g., Maier, Meyer, & Steinbereithner, 2016), of which only one is examined here in one specific context: nonprofit dependence on individual donations in a forest conservation nonprofit. This fictitious setting was chosen for its neutrality. Contrasting with the highly politicized topic of global warming, forest conservation constituted a nonprofit aim to which people of all political leanings could rally behind. Future research can test whether the relationships observed hold in different – and perhaps, more politicized – fields of activity. The more politicized the issue at hand, the more likely personal opinions may take precedence over the particularities of the resource mix when deciding (not) to donate. Adding to this, and consistent with the existing literature (Herman & Rendina, 2001; Hung, 2020), our findings show that nonprofit commercialization is merely one of many factors that individual donors consider when deciding (not) to donate (i.e., low R2’s). This in mind, we should be very careful to recommend NPOs to engage in unrelated-business income schemes, as other aspects like organizational survival (Gras & Mendoza-Abarca, 2014) and goal achievement (Thompson & Williams, 2014) might be put at risk (cf. supra). This said, several cues for nonprofit practice can be derived from this study. Most interestingly, Hung (2021, p. 8) finds that the crowding-out mechanism between commercial income and donations is in part explained by “*the organizations’ reduced efforts in running fundraising activities”*. This resonates with the idea that the vast majority of NPOs cannot do it all. Due to limited professional capacity, focusing on fundraising campaigns and commercial activity presents itself as a choice – and not a combination – for many NPOs (Suykens et al., 2019). However, our findings indicate that mission-unrelated commercial income is synergetic with individual donations, and thus constitutes a potent remedy to counteract the crowding-out dynamic between commercialization and nonprofit donations (Hung, 2020). For nonprofit practitioners, our findings suggest that it is literally ‘worth’ to up their organizational capacity to realize this harmonious resource combination.

## **Conclusion**

Despite the ever-growing research on nonprofit commercialization (Maier et al., 2016), little is known under what conditions this financial strategy is (un)likely to crowd out individual donations (Hung, 2020). This is important, as nonprofit practitioners around the world are challenged to commercialize due to increasing resource uncertainty (e.g., Hung, 2021; Khieng & Dahles, 2015; Suykens, George, et al., 2020; Vaceková et al., 2017). Drawing on institutional theory and experimental survey data, we find that NPOs are most likely to overcome the crowding out of individual donations if they focus on mission-unrelated business scheming. Although a valuable cue for nonprofit practitioners, we realize that this is only the tip of the iceberg. Other factors at the organizational- (e.g., task, size), sector (e.g., field of activity) and institutional level (e.g., to what extent is commercial a traditional element of the nonprofit resource mix; compare for instance Brown (2018); Suykens, De Rynck, and Verschuere (2020); Vaceková et al. (2017); Yu and Chen (2018)) arguably all impact nonprofit commercialization effectiveness. We encourage future research to examine the interrelationship between commercialization and nonprofit performance while accounting more explicitly how this relationship is impacted by contextual conditions. Doing so would produce a more situated understanding of commercialization, which in turn would lead to more usable knowledge for nonprofit practitioners (Perry, 2012).

## **References**

Andersson, F. O., & Self, W. (2015). The social-entrepreneurship advantage: An experimental study of social entrepreneurship and perceptions of nonprofit effectiveness. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, *26*(*6*), 2718-2732.

Baum, J. A., & Oliver, C. (1991). Institutional linkages and organizational mortality. *Administrative Science Quarterly*, 187-218.

Brown, M. (2018). The Moralization of Commercialization: Uncovering the History of Fee-Charging in the US Nonprofit Human Services Sector. *Nonprofit and Voluntary Sector Quarterly*, 47(5), 960-983.

Carré, B., Suykens, B., & Verschuere, B. (2021). Balancing Legitimacy in a Context of Nonprofit-Business Hybridity: The Case of the Flemish Wellbeing and Social Economy Sector. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*. doi:10.1007/s11266-021-00320-2

Chandler, J., Mueller, P., & Paolacci, G. (2014). Nonnaïveté among Amazon Mechanical Turk workers: Consequences and solutions for behavioral researchers. *Behavior Research Methods*, *46*(*1*), 112-130.

Child, C. (2010). Whither the turn? The ambiguous nature of nonprofits' commercial revenue. *Social Forces*, *89*(*1*), 145-145-162.

Coleman, R. (2018). Designing experiments for the social sciences: How to plan, create, and execute research using experiments. Sage publications.

Dart, R. (2004). The legitimacy of social enterprise. *Nonprofit Management & Leadership*, *14*(*4*), 411-424.

Defourny, J., & Nyssens, M. (2010). Conceptions of social enterprise and social entrepreneurship in Europe and the United States: Convergences and divergences. *Journal of Social Entrepreneurship*, *1*(*1*), 32-53.

Dey, P., & Teasdale, S. (2016). The tactical mimicry of social enterprise strategies: Acting ‘as if’in the everyday life of third sector organizations. *Organization*, *23*(*4*), 485-504.

Eikenberry, & Kluver. (2004). The Marketization of the Nonprofit Sector: Civil Society at Risk? *Public Administration Review*, *64*(*2*), 132-140. doi:10.1111/j.1540-6210.2004.00355.

Eikenberry. (2009). Refusing the Market: A Democratic Discourse for Voluntary and Nonprofit Organizations. *Nonprofit and Voluntary Sector Quarterly*. doi:10.1177/0899764009333686

Enjolras, B. (2002). The commercialization of voluntary sport organizations in Norway. *Nonprofit and Voluntary Sector Quarterly*, *31*(*3*), 352-376.

Froelich, K. A. (1999). Diversification of Revenue Strategies: Evolving Resource Dependence in Nonprofit Organizations. *Nonprofit and Voluntary Sector Quarterly*, *28*(*3*), 246-268. doi:10.1177/0899764099283002

Froelich, K. A. (2012). Hospice of the Red River Valley: A nonprofit's response to for-profit competition. *Nonprofit Management & Leadership*, *23*(*2*), 237-257. doi:10.1002/nml.21044

Frumkin, P., & Andre-Clark, A. (2000). When Missions, Markets, and Politics Collide: Values and Strategy in the Nonprofit Human Services. *Nonprofit and Voluntary Sector Quarterly*, 29(suppl 1), 141-163. doi:10.1177/089976400773746373

Gras, D., & Mendoza-Abarca, K. I. (2014). Risky business? The survival implications of exploiting commercial opportunities by nonprofits. *Journal of Business Venturing*, *29*(*3*), 392-404.

Guo, B. (2006). Charity for Profit? Exploring Factors Associated with the Commercialization of Human Service Nonprofits. *Nonprofit and Voluntary Sector Quarterly*, *35*(*1*), 123-138. doi:10.1177/0899764005282482

Herman, R. D., & Rendina, D. (2001). Donor reactions to commercial activities of nonprofit organizations: an American case study. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, *12*(*2*), 157-169.

Hooghe, M., Stolle, D., Mahéo, V.-A., & Vissers, S. (2010). Why can’ta student be more like an average person?: Sampling and attrition effects in social science field and laboratory experiments. *The Annals of the American Academy of Political and Social Science*, *628*(*1*), 85-96.

Hung, C. (2020). Commercialization and nonprofit donations: A meta‐analytic assessment and extension. *Nonprofit Management and Leadership*, *31*(*2*), 287-309.

Hung, C. (2021). Decomposing the effect of commercialization on nonprofit donations. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, *32*(*2*), 448-459.

Hustinx, L., & De Waele, E. (2015). Managing hybridity in a changing welfare mix: Everyday practices in an entrepreneurial nonprofit in Belgium. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, *26*(*5*), 1666-1689.

Kerlin, J. A., & Pollak, T. H. (2011). Nonprofit Commercial Revenue: A Replacement for Declining Government Grants and Private Contributions? *American Review of Public Administration*, *41*(*6*), 686-704. doi:10.1177/0275074010387293

Khieng, S., & Dahles, H. (2015). Commercialization in the non-profit sector: The emergence of social enterprise in Cambodia. *Journal of Social Entrepreneurship*, *6*(*2*), 218-243.

Kim, M., Pandey, S., & Pandey, S. K. (2018). Why do nonprofit performing arts organizations offer free public access? *Public Administration Review*, *78*(*1*), 139-150.

Kingma, B. R. (1995). Do profits “crowd out” donations, or vice versa? The impact of revenues from sales on donations to local chapters of the American Red Cross. *Nonprofit Management and Leadership*, *6*(*1*), 21-38.

Levine Daniel, J., & Kim, M. (2018). The scale of mission-embeddedness as a nonprofit revenue classification tool: Different earned revenue types, different performance effects. *Administration & Society*, *50*(*7*), 947-972.

Lwin, M., Phau, I., & Lim, A. (2014). An investigation of the characteristics of australian charitable donors. *Journal of Nonprofit & Public Sector Marketing*, *26*(*4*), 372-389.

Maier, F., Meyer, M., & Steinbereithner, M. (2016). Nonprofit organizations becoming business-like: A systematic review. *Nonprofit and Voluntary Sector Quarterly*, *45*(*1*), 64-86.

McKay, S., Moro, D., Teasdale, S., & Clifford, D. (2015). The marketisation of charities in England and Wales. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, *26*(*1*), 336-354.

Meyer, J. W. (2008). Reflections on institutional theories of organizations. *The Sage Handbook of Organizational Institutionalism*, 790-811.

Palan, S., & Schitter, C. (2018). Prolific. ac—A subject pool for online experiments. *Journal of Behavioral and Experimental Finance*, 17, 22-27.

Park, Y. J., Lu, J., & Shon, J. (2021). Does non-profit commercialization help reduce social inequality? Revisiting the cross-subsidization hypothesis. *Public Management Review*, 1-23. doi:10.1080/14719037.2021.1945668

Perry, J. L. (2012). How can we improve our science to generate more usable knowledge for public professionals? *Public Administration Review*, 479-482.

Poortinga, W., Whitmarsh, L., Steg, L., Böhm, G., & Fisher, S. (2019). Climate change perceptions and their individual-level determinants: A cross-European analysis. Global Environmental Change, 55, 25-35.

Salamon. (1993). The marketization of welfare: Changing nonprofit and for-profit roles in the American welfare state. *The Social Service Review*, 16-39.

Skloot, E. (1987). Survival time for nonprofits. *Foundation news*, *28*(*1*), 38-42.

Smith, B. R., Cronley, M. L., & Barr, T. F. (2012). Funding Implications of Social Enterprise: The Role of Mission Consistency, Entrepreneurial Competence, and Attitude Toward Social Enterprise on Donor Behavior. *Journal of Public Policy & Marketing*, *31*(*1*), 142. Retrieved from http://search.proquest.com/docview/1015345699?accountid=29104

Suykens, B., De Rynck, F., & Verschuere, B. (2019). Examining the influence of organizational characteristics on nonprofit commercialization. *Nonprofit Management and Leadership*, *30*(*2*), 339-351.

Suykens, B., De Rynck, F., & Verschuere, B. (2020). Examining the Extent and Coherence of Nonprofit Hybridization Toward the Market in a Post-corporatist Welfare State. *Nonprofit and Voluntary Sector Quarterly*, 0(0), 0899764020908344. doi:10.1177/0899764020908344

Suykens, B., George, B., De Rynck, F., & Verschuere, B. (2020). Determinants of non-profit commercialism. Resource deficits, institutional pressures or organizational contingencies? *Public Management Review*, 1-23. doi:10.1080/14719037.2020.1764083

Thompson, P., & Williams, R. (2014). Taking Your Eyes Off the Objective: The Relationship Between Income Sources and Satisfaction with Achieving Objectives in the UK Third Sector. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, *25*(*1*), 109-137. doi:10.1007/s11266-012-9326-5

Toepler, S. (2006). Caveat Venditor? Museum Merchandising, Nonprofit Commercialization, and the Case of the Metropolitan Museum in New York. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, *17*(*2*), 95-109. doi:10.1007/s11266-006-9012-6

Tuckman, H. P. (1998). Competition, commercialization, and the evolution of nonprofit organizational structures. *Journal of Policy Analysis and Mnagement*, *17*(*2*), 175-194. Retrieved from http://search.proquest.com/docview/839127540?accountid=29104

Vaceková, G., Valentinov, V., & Nemec, J. (2017). Rethinking nonprofit commercialization: The case of the Czech Republic. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, *28*(*5*), 2103-2123.

Van Slyke, C., Shim, J. T., Johnson, R., & Jiang, J. J. (2006). Concern for information privacy and online consumer purchasing. *Journal of the Association for Information Systems*, *7*(*6*), 16.

Weisbrod. (2000). *To profit or not to profit: the commercial transformation of the nonprofit sector. Cambridge*: Cambridge University Press.

Wicker, P., Breuer, C., & Hennigs, B. (2012). Understanding the interactions among revenue categories using elasticity measures—Evidence from a longitudinal sample of non-profit sport clubs in Germany. *Sport Management Review*, *15*(*3*), 318-329.

Willems, J., Waldner, C. J., Dere, Y. I., Matsuo, Y., & Högy, K. (2017). The role of formal third-party endorsements and informal self-proclaiming signals in nonprofit reputation building. *Nonprofit and Voluntary Sector Quarterly*, *46*(*5*), 1092-1105.

Yu, J., & Chen, K. (2018). Does nonprofit marketization facilitate or inhibit the development of civil society? A comparative study of China and the USA. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, *29*(*5*), 925-937.

Zimmerman, B., & Dart, R. (1998). Charities doing commercial ventures: Societal and organizational implications.

Zucker, L. G. (1987). Institutional theories of organization. *Annual Review of Sociology*, *13*(*1*), 443-464.

## **Figures**

Figure 1. *Survey experiment design*

## **Tables**

Table 1 *Randomization Checks of the Final Sample (N=1,031)*

|  |  |  |  |
| --- | --- | --- | --- |
| Potential Covariates | Min | Max | *p* Value |
| Age | 18 | 79 | .16 |
| Gender | 0 | 1 | 1.00 |
| Education | 1 | 8 | .89 |
| Race | 1 | 9 | .64 |
| Religiosity | 0 | 5 | .20 |
| Work Experience in the Nonprofit Sector | 0 | 1 | .51 |
| Volunteer Experience in the Past 12 Months | 0 | 1 | .94 |
| Giving Experience in the Past 12 Months | 0 | 1 | .98 |
| Household Income | 1 | 13 | .89 |
| Marital Status | 0 | 1 | .73 |
| Children | 0 | 6 | .01 |

Table 2 *Descriptive Statistics for the Dependent Variables*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Dependent Variables | Mean | SD | Min | Max |
| 1.Willing to Donate | .58 | .49 | 0 | 1 |
| 2. How Much from an Imaginary $100 | 21.95 | 24.45 | 0 | 100 |
| 3. Willing to Donate from Their Own Wallet | 1.81 | .80 | 1 | 6 |
| 4. Willing to Donate Monthly from Their Own Wallet | 1.26 | .57 | 1 | 6 |
| 5. Willing to Donate from Experiment Compensation | 17.35 | 25.31 | 0 | 6 |

Note: N = 1,031 Participants

Table 3 *Manipulation Checks*

|  |  |  |
| --- | --- | --- |
| Questions | Pass Number | Pass Percentage |
| 1.What kind of services is GreenForest offering? | 1016 | 98.54 |
| 2.Which business activities is GreenForest running? | 939 | 91.07 |
| 3. How much revenue do GreenForest's business activities generate on average? | 939 | 91.07 |

Note: N = 1,031 Participants

Table 4 *Results of Regression Models Estimating the Effects of Mission-Related and Mission-Unrelated Commercial Income on Individual Donations*

|  |  |  |
| --- | --- | --- |
| Dependent Variables | Willing to Donate | How Much from an Imaginary $100 |
| Models | (1) | (2) | (3) | (1) | (2) | (3) |
| Mission-Related | -.54\*\*\*(.19) | -.55\*\*\*(.19) | -.56\*\*\*(.20) | -.96(2.26) | -1.02(2.27) | -.96(2.25) |
| Mission-Unrelated | .34\*(.20) | .34\*(.20) | .35\*(.21) | 4.54\*\*(2.36) | 4.63\*\*(2.36) | 4.13\*(2.36) |
| Children |  | .07(.07) |  |  | -.01(.86) |  |
| Age |  |  | -.02\*\*\*(.01) |  |  | .04(.07) |
| Race |  |  | -.10\*\*(.05) |  |  | -.04(.46) |
| Giving in the Past 12 Months |  |  | .85\*\*\*(.13) |  |  | 6.46\*\*\*(1.52) |
| Constant | .33\*\*(.14) | .30\*\*(.14) | .97\*\*\*(.30) | 19.83\*\*\*(1.56) | 19.83\*\*\*(1.59) | 14.92\*\*\*(3.26) |
| Dependent Variables | Willing to Donate from Their Own Wallet | Willing to Donate Monthly from Their Own Wallet |
| Models | (1) | (2) | (3) | (1) | (2) | (3) |
| Mission-Related | -.16(.19) | -.17(.19) | -.16(.19) | .06(.24) | .08(.25) | .06(.25) |
| Mission-Unrelated | .32\*(.17) | .31\*(.18) | .30\*(.18) | .37(.23) | .38(.24) | .36(.24) |
| Children |  | .09(.07) |  |  | .23\*\*\*(.08) |  |
| Age |  |  | -.01\*\*\*(.01) |  |  | -.01\*\*(.006) |
| Race |  |  | -.05(.04) |  |  | -.06(.06) |
| Giving in the Past 12 Months |  |  | .91\*\*\*(.12) |  |  | .67\*\*\*(.16) |
| Constant | N/A | N/A | N/A | N/A | N/A | N/A |
| Dependent Variables | Willing to Donate from Experiment Compensation |  |  |  |
| Models | (1) | (2) | (3) |  |  |  |
| Mission-Related | 1.18(2.31) | 1.11(2.32) | 1.28(2.26) |  |  |  |
| Mission-Unrelated | 5.19\*\*(2.45) | 5.27\*\*(2.46) | 4.72\*\*(2.41) |  |  |  |
| Children |  | .66(.98) |  |  |  |  |
| Age |  |  | -.01(.07) |  |  |  |
| Race |  |  | -.47(.51) |  |  |  |
| Giving in the Past 12 Months |  |  | 10.23\*\*\*(1.49) |  |  |  |
| Constant | 14.18\*\*\*(1.55) | 13.88\*\*\*(1.63) | 10.35\*\*\*(3.28) |  |  |  |

Note: N = 1,031 participants; Reference group is the control group; Robust standard errors are in parentheses; \* p ≤ .10, \*\* p ≤ .05, \*\*\* p ≤ .01.

Table 5 *Results of Regression Models Comparing the Effects of Mission-Unrelated with Mission-Related Commercial Income*

|  |  |  |
| --- | --- | --- |
| Dependent Variables | Willing to Donate | How Much from an Imaginary $100 |
| Models | (1) | (2) | (3) | (1) | (2) | (3) |
| Mission-Unrelated | .89\*\*\*(.20) | .89\*\*\* (.20) | .91\*\*\*(.21) | 5.50\*\*(2.41) | 5.65\*\*(2.43) | 5.09\*\*(2.40) |
| Children |  | .07(.07) |  |  | -.01(.86) |  |
| Age |  |  | -.02\*\*\*(.01) |  |  | .04(.07) |
| Race |  |  | -.10\*\*(.05) |  |  | -.04(.46) |
| Giving in the Past 12 Months |  |  | .85\*\*\*(.13) |  |  | 6.46\*\*\*(1.52) |
| Constant | -.21(.13) | -.25\*(.14) | .41(.30) | 18.86\*\*\*(1.64) | 18.81\*\*\*(1.68) | 13.96\*\*\*(3.51) |
| Dependent Variables | Willing to Donate from Their Own Wallet | Willing to Donate Monthly from Their Own Wallet |
| Models | (1) | (2) | (3) | (1) | (2) | (3) |
| Mission-Unrelated | .49\*\*\*(.19) | .49\*\*\* (.19) | .46\*\*(.20) | .31(.24) | .29(.24) | .29(.24) |
| Children |  | .09(.07) |  |  | .23\*\*\*(.08) |  |
| Age |  |  | -.01\*\*\*(.01) |  |  | -.01\*\*(.01) |
| Race |  |  | -.05(.04) |  |  | -.06(.06) |
| Giving in the Past 12 Months |  |  | .91\*\*\*(.12) |  |  | .67\*\*\*(.16) |
| Constant | N/A | N/A | N/A | N/A | N/A | N/A |
| Dependent Variables | Willing to Donate from Experiment Compensation |  |  |  |
| Models | (1) | (2) | (3) |  |  |  |
| Mission-Unrelated | 4.00 (2.55) | 4.15(2.57) | 3.44(2.50) |  |  |  |
| Children |  | .66(.98) |  |  |  |  |
| Age |  |  | -.01(.07) |  |  |  |
| Race |  |  | -.47(.51) |  |  |  |
| Giving in the Past 12 Months |  |  | 10.23\*\*\*(1.49) |  |  |  |
| Constant | 15.37\*\*\*(1.70) | 14.99\*\*\*(1.66) | 11.64\*\*\*(3.33) |  |  |  |

Note: N = 1,031 participants; Reference group is mission-related commercial income; Robust standard errors are in parentheses; \* p ≤ .10, \*\* p ≤ .05, \*\*\* p ≤ .01.

Table 6 *Results of Regression Models Comparing the Effects of High Intensity Mission-Related Commercial Income with Mission-Related Commercial Income*

|  |  |  |
| --- | --- | --- |
| Dependent Variables | Willing to Donate | How Much from an Imaginary $100 |
| Models | (1) | (2) | (3) | (1) | (2) | (3) |
| High Intensity Mission-Related | .50\*\*\*(.19) | .50\*\*\* (.19) | .48\*\*\*(.20) | 3.15(2.31) | 3.21 (2.32) | 2.92(2.31) |
| Children |  | .07(.07) |  |  | -.01(.86) |  |
| Age |  |  | -.02\*\*\*(.01) |  |  | .04(.07) |
| Race |  |  | -.10\*\*(.05) |  |  | -.04(.46) |
| Giving in the Past 12 Months |  |  | .85\*\*\*(.13) |  |  | 6.46\*\*\*(1.52) |
| Constant | -.21(.13) | -.25\*(.14) | .41(.30) | 18.86\*\*\*(1.64) | 18.81\*\*\*(1.68) | 13.96\*\*\*(3.51) |
| Dependent Variables | Willing to Donate from Their Own Wallet | Willing to Donate Monthly from Their Own Wallet |
| Models | (1) | (2) | (3) | (1) | (2) | (3) |
| High Intensity Mission-Related | .16 (.19) | .17 (.19) | .12(.19) | .04 (.24) | .02(.24) | .01(.24) |
| Children |  | .09(.07) |  |  | .23\*\*\*(.08) |  |
| Age |  |  | -.01\*\*\*(.01) |  |  | -.01\*\*(.01) |
| Race |  |  | -.05(.04) |  |  | -.06(.06) |
| Giving in the Past 12 Months |  |  | .91\*\*\*(.12) |  |  | .67\*\*\*(.16) |
| Constant | N/A | N/A | N/A | N/A | N/A | N/A |
| Dependent Variables | Willing to Donate from Experiment Compensation |  |  |  |
| Models | (1) | (2) | (3) |  |  |  |
| High Intensity Mission-Related | 2.90 (2.42) | 2.99(2.43) | 2.47(2.39) |  |  |  |
| Children |  | .66(.98) |  |  |  |  |
| Age |  |  | -.01(.07) |  |  |  |
| Race |  |  | -.47(.51) |  |  |  |
| Giving in the Past 12 Months |  |  | 10.23\*\*\*(1.49) |  |  |  |
| Constant | 15.37\*\*\*(1.70) | 14.99\*\*\*(1.66) | 11.64\*\*\*(3.33) |  |  |  |

Note: N = 1,031 participants; Reference group is mission-related commercial income; Robust standard errors are in parentheses; \* p ≤ .10, \*\* p ≤ .05, \*\*\* p ≤ .01.

Table 7 *Results of Regression Models Comparing the Effects of High Intensity Mission-Unrelated Commercial Income with Mission-Unrelated Commercial Income*

|  |  |  |
| --- | --- | --- |
| Dependent Variables | Willing to Donate | How Much from an Imaginary $100 |
| Models | (1) | (2) | (3) | (1) | (2) | (3) |
| High Intensity Mission-Unrelated | -.04 (.20) | -.03(.20) | -.09(.20) | .36 (2.56) | .26 (2.57) | .47 (2.55) |
| Children |  | .07(.07) |  |  | -.01(.86) |  |
| Age |  |  | -.02\*\*\*(.01) |  |  | .04(.07) |
| Race |  |  | -.10\*\*(.05) |  |  | -.04(.46) |
| Giving in the Past 12 Months |  |  | .85\*\*\*(.13) |  |  | 6.46\*\*\*(1.52) |
| Constant | .68\*\*\*(.14) | .64\*\*\*(.15) | 1.33\*\*\*(.31) | 24.37\*\*\*(1.77) | 24.47\*\*\*(1.83) | 19.05\*\*\*(3.70) |
| Dependent Variables | Willing to Donate from Their Own Wallet | Willing to Donate Monthly from Their Own Wallet |
| Models | (1) | (2) | (3) | (1) | (2) | (3) |
| High Intensity Mission-Unrelated | -.06 (.18) | -.06(.18) | -.08(.19) | .12 (.22) | .11 (.22) | .10(.22) |
| Children |  | .09(.07) |  |  | .23\*\*\*(.08) |  |
| Age |  |  | -.01\*\*\*(.01) |  |  | -.01\*\*(.01) |
| Race |  |  | -.06(.04) |  |  | -.06(.06) |
| Giving in the Past 12 Months |  |  | .91\*\*\*(.12) |  |  | .67\*\*\*(.16) |
| Constant | N/A | N/A | N/A | N/A | N/A | N/A |
| Dependent Variables | Willing to Donate from Experiment Compensation |  |  |  |
| Models | (1) | (2) | (3) |  |  |  |
| High Intensity Mission-Unrelated | .17 (2.68) | .09 (2.68) | .17 (2.62) |  |  |  |
| Children |  | .66(.98) |  |  |  |  |
| Age |  |  | .01(.07) |  |  |  |
| Race |  |  | -.47(.51) |  |  |  |
| Giving in the Past 12 Months |  |  | 10.23\*\*\*(1.49) |  |  |  |
| Constant | 19.37\*\*\*(1.90) | 19.15\*\*\*(1.99) | 15.08\*\*\*(3.69) |  |  |  |

Note: N = 1,031 participants; Reference group is mission-unrelated commercial income; Robust standard errors are in parentheses; \* p ≤ .10, \*\* p ≤ .05, \*\*\* p ≤ .01.

## **Endnotes**

1. Pre-registered online with ‘As Predicted’ on March 10, 2021 (#60487). [↑](#endnote-ref-1)
2. In our study, participants were rewarded with $1,5 after completion of the survey. [↑](#endnote-ref-2)
3. The survey and consent forms were approved by an Institutional Review Boards on February 17, 2021 (2020-00849). [↑](#endnote-ref-3)
4. G\*Power 3.1 software indicates that minimum 955 respondents are required to detect significant effects. [↑](#endnote-ref-4)
5. In this case, samples of less than 200 participants. [↑](#endnote-ref-5)