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## Being Good, Doing Good: An Analysis of the Warm Glow Effect

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**Abstract:** The present study is based on the understanding of the scientific literature in the field of Behavioural (Public) Economics. The authors of this study conducted an analysis of three individual articles, which though seem quite different at first glance; all have a common thread of pro-social behaviour and the feeling of “warm glow” connecting their premise and results. After a thorough review and detailed analysis of these selected articles, it is concluded that the purpose of charity compels people to be good and relinquish their self-interest, and the pro-social behaviour leads to prosperity of the community at large. Further, if the cause of donations resonates with the people, they want to donate and experience the warm glow. Better knowledge in these fields is paramount when it comes to policy-making decisions by the government.

**Keywords:** Warm glow, altruism, pro-socialness, social identity

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### 1. Introduction

The basic concept running through the reviewed articles is dealing with is ‘Voting on redistribution’, and the related scientific papers are “Warm glow of giving collectively - An experimental study” (Bischoff & Krauskopf, 2015), “Warm Glow or Cold, Hard Cash? Social Identity Effects on Consumer Choice for Donation Versus Discount Promotions” (Winterich & Barone, 2011), and “Warm glow & the transmission of pro- socialness across generations” (Long, 2020).

The underlying theme followed throughout the above-mentioned papers revolves around the different theories of altruism and pro-social behaviour. While “the concept of pure altruism says that individuals are motivated by the wish to help the needy” (Warr, 1982); pro-social behaviour is “a genuine concern for the situation of someone else and the intention to



improve the well-being of the needy” (Schokkaert, 2006). The very act of giving leads to a good feeling, also called “warm glow” for the donor (Andreoni, 1988). *Warm-glow of giving* is an economic theory that explains the positive emotional return that the giver feels when he/she gives to others. Individuals experience a feeling of bliss and fulfilment for "doing their part" to help other people. This “warm glow” represents the consequential self-interested pleasure derived from “doing good”, paying little heed to the actual impact of one's generosity. This feeling provides an autonomous inspiration for pro-social behaviour that does not allude to the utility of the supported but to the good feeling the supporter receives from the very act of giving (Long, 2020). Another important theme in the analysed papers is that of Kant's categorical imperative, which is a process that helps to derive common and practical moral behaviour. In 1907, Immanuel Kant said, “there is only one categorical imperative, and it is this: Act only on the maxim by which you can, at the same time, will that it should become a universal law” (Kant, 1907).

Section 2 introduces the conceptualisation of all the three papers briefly. Section 3 explains their methodology in detail. Section 4 presents the findings of these analysed papers. Section 5 of our research paper consists of the concluding remarks of the researchers.

## **2. Concept**

### **2.1 Paper 1: “Warm glow of giving collectively – An experimental study”**

The paper deals with the concept of warm glow of giving and tries to assess the same when donations are made collectively, using intervention technique by conducting experiment. The experiment tries to compare the changes in short-run affect (SRA) arising when the charity donations are made in two separate setups. The focus is on the decisions and expectations of participants, and the effect of the resulting warm glow on their SRA state.

### **2.2 Paper 2: “Warm glow or cold, hard cash? Social identity effects on consumer choice for donation versus discount promotions”**

The paper deals with the influence of social identity on consumer choice for discount-based versus donation-based promotions, as noted by the researchers. Prior research has shown that 80% of consumers prefer a brand that not only is similar in price and quality to other brands, but also supports a cause, on the other hand only 19% of consumers showed their willingness



to go for a more expensive brand though it supported a cause while the rest prefer discount-based promotions (Cone, LLC, 2010).

The effectiveness of donations as compared to discounts is more in case of hedonic (luxury) than in utilitarian (normal) goods (Strahilevitz & Myers, 1998). Donations are found to be more efficient than discount due to increased brand preference and low deployment costs (Arora & Henderson, 2007).

### **2.3 Paper 3: “Warm glow and the transmission of pro- socialness across generations”**

In this paper, warm- glow approach is used to assess the percolation of pro- socialness concept from one generation to the next. The elder generation ensures to transmit pro- social values in the younger generation so as to enhance their material security when they become adults. Parents make conscious efforts to teach social values to their children because they know that the children’s generation will be economically sounder if children act morally as cooperative adults. On the other hand, rather than as a community, if parents are required to make individual choice, they choose to teach their children to cheat assuming others are pro- social. This outcome is termed as a prisoner’s dilemma. People inherently try to “do the right thing” because they want to “do their bit”. They are motivated by the fact that they are moral beings, and not because of the warm glow that they tend to experience doing the right thing.

## **3. Methodology**

### **3.1 Paper 1: “Warm glow of giving collectively – An experimental study”**

The main objective of the paper is to evaluate the possibility of a warm glow effect of giving when donation amount is decided collectively. To find the answer, an experiment is conducted. The design of the experiment has been summarised in Table 1.



**Table 1: Design of the Experiment** (Bischoff & Krauskopf, 2015)

<b>Participants</b>	Undergraduate Students (412 participants)	
<b>Treatment Groups</b>	IND: Individual (210 participants)	COL: Collective (202 participants)
<b>Contribution</b>	X €	$X^M$ € (Median Amount)
<b>Initial Endowment</b>	10 €	
<b>Method</b>	PANAS is used to evaluate the change in Short-Run	
<b>Chosen Charity</b>	Kinderschutzbund (KSB)	

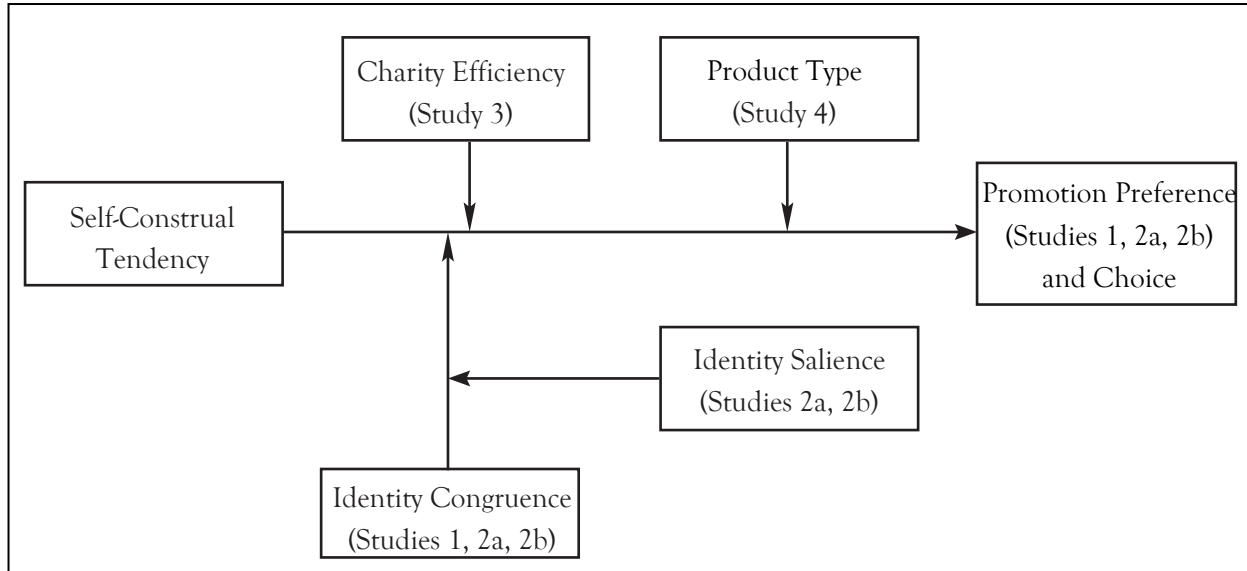
The researchers put forth three hypotheses. The first hypothesis states that in the individual treatment, the change in SRA state is increasing as the amount X donated increases. Each participant decides voluntarily how much to donate which means intention and outcome are congruent. The second hypothesis states that in the collective treatment, the change in SRA condition increases with the amount that an individual expects will finally be donated. The warm glow of giving depends on the amount that they expect will finally be donated. The amount of donation an individual intends to pay mostly may differ from collective decision. Since the median proposed amount is finally donated, the individuals whose intended outcome is on either of the extreme, that is, either a very small amount or a very large one. The third hypothesis states that in the collective treatment, the change in SRA state is high if the amount X proposed are high, other things being equal.

### **3.2 Paper 2: “Warm glow or cold, hard cash? Social identity effects on consumer choice for donation versus discount promotions”**

The authors use various experiments to study the interplay of two different social identities, namely, self-construal and cause-related, as seen in Figure 1.

**Figure 1: Theoretical Framework of the Paper**

Source: (Winterich & Barone, 2011)



The first study focuses on the role of identity-congruence and demonstrates the selection of the promotion, with interdependent consumers preferring donations while the independent ones prefer discounts. Participants were arbitrarily assigned to assess one of three sales promotions; (i) discount-based, (ii) identity-congruent donation-based & (iii) identity-incongruent donation-based. The second study shows the role of identity saliency by demonstrating that it is immaterial whether the consumer is identity-congruent or self-construal; he/she prefers donations over discounts. In the third study, the moderating effect of charity efficiency is observed. If the charity is inefficient, it can reduce the likelihood of consumers to select the donation-based promotion. The last study focuses on the moderating role of product type shows that when the consumers make the purchase of an indulgent product, they tend to be more charitable.

### 3.3 Paper 3: “Warm glow and the transmission of pro- socialness across generations”

The researcher formulates a static model in which a common property resource is exploited in a set up where all households have identical skills, preferences and pro- socialness. A classic maximisation problem is set up to maximise the collective well-being of all individuals.

The maximization problem set up by the researcher is as follows:



$$\pi_i(e_i, E) = e_i \frac{\phi F(E)}{E} - C(e_i)$$

Where,  $\pi_i$  = material well-being of agent  $i$

$e_i$  = fishing effort of fisher  $i$

$E$  = aggregate effort level  $\{E \equiv \sum_{i=1}^n e_i\}$

$\phi$  = productivity parameter of fishing ground

$C(e_i)$  = effort cost of agent  $i$

Maximizing the above problem yields:

$$\phi F'(E^K) = C'\left(\frac{E^K}{n}\right)$$

Where,  $E^K$  = socially optimal aggregate effort level

$n$  = total number of fishers in village

This optimum level is same as the Kantian effort level, because the material well-being of each fisher is maximised, if all of them elect the same effort level.

Assuming that individuals act individually, and not collectively, considering their sense of moral obligations and how they were brought up. In such a case, individuals would choose their effort to maximize their own material well-being. The Nash equilibrium displays that the Marginal Cost of Effort (MCE) is much higher than the Marginal Product of Effort (MPE), and hence, the exploitation effort is excessively leading to the *tragedy of the commons*.

Let us now discuss the pro-social individuals. They are interested in their material well-being as well as in their self-image. As per the researcher, the self-image function takes the following form:

$$S_i(e_i) \equiv \theta_i [\bar{S} - \sigma \max(0, e_i - e^K)]$$

Where,  $S_i$  = self-image function

$\bar{S}$  = constant

$e^K$  = Kantian effort level



$\theta_i$  = degree of shame for engaging in excessive exploitation compared to  $e^K$

$\sigma$  = degree of severity of harm inflicted on others due to excessive exploitation

( $\theta_i$ , which is the fisher's level of pro-socialness, depends on his/her upbringing while  $\sigma$  is an objective indicator)

When  $\max(0, e_i - e^K) > 0$ , there is a loss of self-image and the magnitude of the loss is  $\theta_i \sigma \times (e_i - e^K)$ . When individual reduces  $e_i$  to get closer to  $e^K$ , they would experience a warm glow,  $\theta_i \sigma$ .

When their fishing efforts are excessive, they suffer a loss of self- image, which would prompt them to reduce their effort and bring it closer to the Kantian level. Finally, there will be a warm glow for reduction in this excessive effort.

In the next section, the researcher extends the model to a situation where the generation of parents has motivations to convey pro- social values to the generation of their children. Adults possess a certain pro- socialness level due to their own upbringing. The adult fishers make two decisions: first regarding their utility maximizing effort level and second regarding the investment to be made towards the pro-socialness level of the next generation. The following model is developed to include generational impact into the utility equation of an individual:

$$U_{it} \equiv \left[ e_{it} \frac{\phi F(E_{-it} + e_{it})}{E_{-it} + e_{it}} - C(e_{it}) \right] + \theta_t [\bar{S} - \sigma \max(0, e_{it} - e_t^K)]$$

Where,  $t$  = a specific period of time

$U_{it}$  = Utility of individual  $i$  in period  $t$

$\theta_t$  = level of pro-socialness of an adult in period  $t$ , taken as given (assumed that all individuals have the same level hence,  $\theta_{it} = \theta_t$ ).

$e_{it}$  = effort level of individual  $i$  in period  $t$

$E_{-it}$  = Effort level of all other individuals except  $i$  in period  $t$

The model for the democratic process to determine the amount of investment in the next generation's pro-socialness level is given as follows:



$$\theta_{t+1} = (1 - \delta)\theta_t + I_t$$

Where,  $\theta_{t+1}$  = Level of pro-socialness of next generation

$\delta$  = Natural rate of depreciation,  $\delta \in (0, 1)$

$\theta_t$  = Level of pro-socialness of current generation

$I_t$  = Community's investment in  $\theta_{t+1}$ ,  $I_t \geq 0$

In the final section, moral education is directly linked to the level of pro-socialness of the parent generation.

## 4. Findings

### 4.1 Paper 1: “Warm glow of giving collectively – An experimental study”

After conducting the experiment, the researchers conclude that the utility from a donation increases with the amount proposed. Thus, the feeling of satisfaction from donations motivates the individuals more and it leads to them proposing to donate even more.

The first two hypotheses state that the affective state of the subject improves when he/she proposes to donate. This means that charity or donation has a positive impact on the SRA status of the person making these donations. This change in impact is shown as delta SRA. In the treatments, the individually donated and the collectively proposed donation amount has a positive and very important impact on change in short run affectivity. For small donations such as less than 10 € in the individual case, the impact on the affective state of the donor is found to be significantly positive as compared to the collective case were propositioning less than 10€ is not found to have an influence on donor's affective state. Contributing to charity always increases individuals' short-run affective state and the level of improvement in affective state rises with the rise in the donation amount, and hence a warm glow. In the collective treatment, the size of the collective donation does not change the subjects' affective state as they are not sure what amount will finally be donated. In case of collective giving, no evidence is found for a warm glow as the subject is unsure what will be the final amount of charity in collective giving. In addition, no systematic relationship is seen between individuals' personality features, attitudes and ethical preferences and their willingness to donate entire 10 €.





As a side-result, it is found that individuals, who consider Kant's "Categorical Imperative" as an imperative standard for individual decision, prefer not to be free-riders and are more likely to give the full endowment to charity. This outcome justifies "the notion of Kantian thinking as an independent factor explaining cooperative behaviour" (Roemer, 2014).

#### **4.2 Paper 2: "Warm glow or cold, hard cash? Social identity effects on consumer choice for donation versus discount promotions"**

The results show that, in general, interdependent consumers prefer make donations belonging to a relatable charity than independent consumers, while independent consumers prefer a discount. However, it is found that the effects of the above-mentioned social identities disappear if the charity is not identity congruent or if the consumer is not able to relate with the charity, that is, if the charity, instead of being local, is international. These findings indicate that promotion preference has an impact only when the cause associated with the donation is congruent with the social identity of the consumer.

The study also shows that the charity must be efficient to garner support from the donors. If the charity was rated as inefficient, interdependent consumers were observed to not choose donation-based promotion, going against their self-construals.

The final study in the paper shows that purchase and consumption of indulgent products, which is typically presumed to be causing a sense of guilt, triggers the discount-based promotion favouring independent consumers, to instead pick the donation-based promotion. This is because the warm glow of making a donation helps such consumers to offset the guilty feelings, hence, suppressing their self-construals.

#### **4.3 Paper 3: "Warm glow and the transmission of pro- socialness across generations"**

In this paper an initial model is presented in which individuals, motivated by the "warm glow" of doing the right thing, practice restraint to reduce harm to others as well as to preserve their self-image. A consistency is observed with the prior empirical evidence that there is a strong correlation between the prosperity in a village and the motivation of villager's to work in a socially responsible way (Dell, Lane, & Querubin, 2018). The model is then extended to include the spread of pro-socialness from one generation to the next generations. The present generation collectively decides how much they will invest towards the moral of the next generation. The researcher then finds out that the ultimate level of pro-



socialness is greatly affected by the beginning level of pro- socialness. Lastly, the researcher looks at the situation where the cost of moral education of the next generation is dependent on the current generation. When parents themselves have a low pro-socialness level, there is a need to incur more cost in educating their children to achieve a desired level of pro-socialness. Parents with a low level of pro-socialness do not become good role models for their children.

## **5. Conclusion**

The basic themes of pro-social behaviour and altruism (warm glow) were impressively proved in all the three papers involving comprehensive research.

The ‘pro-social behaviour of people’ as studied in these scientific papers proves that the purpose of charity compels people to be good and relinquish their self-interest. It was also shown that this pro-social behaviour leads to prosperity of the community at large. If people use a public good, they compensate for the guilt of taking this resource away from another by investing in educating the next generation to be pro-social. Similarly, if people indulge in the purchase of a luxury good, they compensate for that guilt by donating to charity instead of availing discounts on said product.

Furthermore, it was also established that the more that people give, the higher the warm glow they experience and hence, they want to give even more. It was reinstated that if the cause of donations resonates with the people, their desire to donate is increased even further, leading to a higher feeling of the warm glow.

In conclusion, it can be said that “being good” (pro-social) and “doing good” (charity) go hand-in-hand and knowledge of the relationship between the two concepts may help governments and/or policy makers to make such policies that motivate people to behave in a pro-social manner voluntarily in order to experience the warm glow.



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