



# In broad daylight, we trust in God! Brightness, the salience of morality, and ethical behavior



Wen-Bin Chiou\*, Ying-Yao Cheng

*Institute of Education, National Sun Yat-sen University, 70 Lien-Hai Rd., Kaohsiung, 80424, Taiwan*

## ARTICLE INFO

### Article history:

Available online 14 July 2013

### Keywords:

Brightness  
Ethical behavior  
Morality  
Perceptual symbol systems

## ABSTRACT

Based on metaphorical associations between light and goodness, we hypothesized that experiencing brightness increases the salience of moral considerations and the likelihood of engaging in ethical behavior. The results of three experiments supported these predictions. In Experiment 1, participants in a well-lit room acted less selfishly in the dictator game and were more likely to return undeserved money than were those in a moderately or a dimly lit room. In Experiment 2, participants' monetary donations were positively associated with environment lighting. In Experiment 3, participants in a well-lit room volunteered to code more data sheets than did participants in moderate brightness. Experiments 2 and 3 used implicit and explicit measures of the salience of morality to self to demonstrate that the relationship between brightness and ethical behavior is driven by an increased mental accessibility of morality. Control over environment lighting may be an effective approach to increasing ethical behavior.

© 2013 Elsevier Ltd. All rights reserved.

*God saw that the light was good, and he separated the light from the darkness ~ Genesis 1:4*

## 1. Introduction

Imagine you are hearing/reading a news story reporting that a person was murdered in broad daylight while sitting on a park bench. Why does “broad daylight” attract your attention? Is it that people believe that good deeds happen when the sun is out? In contrast to the association between darkness and evil, light has always been a symbol of goodness. The metaphorical relationship between light and goodness is ubiquitous in popular films, dramas, and religious materials in both Western and Eastern cultures (for related exemplars, see Banerjee, Chatterjee, & Sinha, 2012; Meier, Robinson, & Clore, 2004). If light has the potential to embody goodness, brightness may be associated with virtues that lead people to perform ethical deeds. Extant research in the domain of environmental psychology has focused primarily on connections between environment lighting and perceived safety (e.g., Blöbaum & Hunecke, 2005; Boyce, Eklund, Hamilton, & Bruno, 2000; Hanyu, 2010; Johansson, Rosén, & Küller, 2011; Nasar & Jones, 1997) and fear of crime (e.g., Fisher & Nasar, 1992; Loewen, Steel, & Suedfeld, 1993; Nasar & Fisher, 1993; Pain, MacFarlane, Turner, & Gill, 2006)

in the exterior environment. Appleton's (1975) prospect-refuge theory argues that there is an evolutionary advantage in being able to effectively survey the environment (prospect) and a preference for environments that offer shelter (refuge). Based on this notion, a recent study (Haans & de Kort, 2012) experimentally demonstrated that three kinds of proximate physical cues mediated the effect of street lighting on perceived safety: those related to prospect (having an overview of the environment), escape (perceived escape possibilities), and refuge/concealment (perceived hiding places for offenders). However, previous studies have neither investigated the effect of the brightness of the immediate environment on ethical behavior nor have they empirically examined the possible mechanisms underlying this relationship. We report on three experiments that demonstrate the connection between brightness and ethical behavior and clarify the mediating role of the salience of morality in this relationship.

Sensations contribute to initial understandings of more abstract concepts and may also render concepts relevant to metaphorical associations accessible (Barsalou, 1999; Landau, Meier, & Keefer, 2010). Recent advancements in embodied cognition have shown that a concrete sensory experience can be influenced by a metaphorically associated concept. For example, Meier et al. (2004) showed that people automatically assume that bright objects are good and dark objects bad when making evaluations. Similarly, Sherman and Clore (2009) first documented the moral Stroop effect by showing that the speed of color naming was faster when words in black concerned immorality (e.g., cheat) rather than morality,

\* Corresponding author. Tel.: +886 7 5252000x5884; fax: +886 7 5250133.

E-mail addresses: [wchiou@mail.nsysu.edu.tw](mailto:wchiou@mail.nsysu.edu.tw) (W.-B. Chiou), [chengyy@mail.nsysu.edu.tw](mailto:chengyy@mail.nsysu.edu.tw) (Y.-Y. Cheng).

and when words in white concerned morality (e.g., charity) rather than immorality. A recent study by Banerjee et al. (2012) indicated that recalling moral behavior may influence perceptions of brightness. In one experiment, participants who recalled an ethical deed perceived their immediate surroundings to be brighter than did those who recalled an unethical deed. In another experiment, participants who recalled their own unethical deeds preferred products that would make the room brighter. The aforementioned research supports an association between the experience of brightness and the sense of morality and suggests that the effect of brightness on ethical behavior merits investigation.

In principle, people whose self-concept is organized around their moral beliefs are highly likely to translate those beliefs into action (Damon & Hart, 1992). Just as the active-self account for behavioral priming proposes that prime-to-behavior effects occur when one's corresponding self-concepts are activated (Wheeler, DeMarree, & Petty, 2007), we argued that the salience of morality to self should mediate the connection between experiencing brightness and ethical behavior. Following Williams and Bargh (2008), who showed that tactile experiences of physical warmth can activate concepts or feelings of interpersonal warmth and lead to prosocial behavior, we contend that the experience of brightness may promote the salience of morality and thereby increase the inclination to perform ethical deeds.

We tested predictions regarding the link between brightness and ethical behavior in three studies. Experiment 1 examined the extent to which participants acted selfishly in a dictator game (i.e., altruism) and returned undeserved money (i.e., honesty) in a room with varying levels of illumination. Experiment 2 examined whether participants in a brighter environment donated more money to charity. We also employed the Stroop task to examine whether brightness increased the salience of morality, thereby eliciting greater Stroop interference in naming the colors of morality-related words presented in black versus in white. Experiment 3 examined whether participants in a well-lit room would be more likely to code data than those in a moderately bright room. Our final study used an explicit measure to assess the salience of morality (i.e., the self-importance of morality) to replicate the perceptual–symbol association between light and goodness. The mediating role of the salience of morality was tested in both Experiments 2 and 3.

## 2. Experiment 1: the dictator game and honesty

### 2.1. Method

Eighty-one undergraduates (41 females, 40 males, mean age = 20.7 years) attending a public university in southern Taiwan

were tested in a between-subjects experiment. This experiment was disguised as a decision-making test. Participants had the opportunity to earn NT \$160 (approximately US \$5.33).

After providing consent, every three participants were assigned to one of three study conditions (high, medium, low brightness) via a block-randomized method to manipulate the lighting of the setting of the Stroop task (see Fig. 1). The test room (13 ft × 15 ft) was illuminated by 12 fluorescent lights mounted on the ceiling under the high-brightness condition (well-lit room), eight fluorescent lights under the medium-brightness condition (moderately lit room), and four fluorescent lights under the low-brightness condition (dim room). Participants in the dim room could see the experimental material, and the experimenter apologized for some of the lights being out.

Each participant then played a one-shot, anonymous version of the dictator game (Hoffman, McCabe, Shachat, & Smith, 1994). The experimenter led participants to believe that they had been randomly paired with another person in a different room. Participants were told: "This game includes two roles: initiator and recipient. The initiator has NT \$160 to allocate between him/herself and the recipient. Initiators keep whatever they do not offer to the recipients. Recipients can choose to accept or reject the offer, but their choices do not affect the initiator's outcomes." Although participants were told they had been randomly assigned to a role, all served as the initiator and played against the experimenter via a computer program. After the game, participants were asked to judge the brightness of the room on a 7-point scale (1 = low, 7 = high) and then completed a filler five-item questionnaire measuring perceived anonymity. Participants indicated their agreement with each item on a 7-point scale (1 = strongly disagree, 7 = strongly agree, adapted from Zhong, Bohns, & Gino, 2010; e.g., "I was anonymous during the study", "I was watched during the study" [reverse scored];  $\alpha = .91$ ). This measure was used to rule out an association between perceived anonymity and the brightness manipulation and ethical behavior.

The experiment ended after this survey. During the probe process, none of the participants suspected that the lighting and the dictator game were related. Payment in the amount that participants kept for themselves in the dictator game was then given to participants in unsealed envelopes. The experimenter asked participants to make sure they had received the payment they deserved and exited the room. However, additional money (one NT \$50 coin) was given to each participant. Our indicator of honesty was whether participants returned this undeserved money.

### 2.2. Results and discussion

Analysis of variance (ANOVA) on perceptions of the test room's lighting showed significant differences in the effect of the level of



Fig. 1. Photographs of three levels of lighting in the test room as seen from where the participants sat. The left photo was the image under the high-brightness condition, the middle photo was the image under the medium-brightness condition, and the right photo was the image under the low-brightness condition.

Download English Version:

<https://daneshyari.com/en/article/7246536>

Download Persian Version:

<https://daneshyari.com/article/7246536>

[Daneshyari.com](https://daneshyari.com)