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The Effect of the Golden Rule on Inequality - Behavioral Evidence in Belief Systems

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Abstract

Widening inequality has significant implications for growth and macroeconomic stability, and we wonder if 'doing unto others as you would have done onto you' or adherence to the Golden Rule would reduce such economic failures. This paper through a behavioral experiment sets off to understand the pervasiveness of such moral principle in our modern societies in order to enable better design of policies attuned to behavioral nuances that are rooted in religious values as a possible means to tackle economic failures like inequality. It attempts to demonstrate the importance of religious ethics in pro-social behaviors for mutually beneficial outcomes, and helps to understand the role of universal values in shared religious beliefs that reduces inequality and advances just treatment of others. The methodology of this study assesses the behavior of the subject pool (players representative of the Muslims and non-Muslims) through a Volunteer's Dilemma that was designed to test for the pro-social behavior of 'doing unto others and you have done onto you'. The game is multiplayer version of the chicken game, where a public good is only produced if at least one person volunteers. In this particular experiment, Muslims outperform non-Muslims (88% to 68%), with positive priming effects for both Muslims and non-Muslims (religiously primed subjects performed better 61% to 31%). We briefly discuss how altruism rooted in beliefs can overcome biases in tackling inequality.

Keywords: Altruism, compliance, empathy, inclusion

1. INTRODUCTION

A recent Pew Research Center (PRC 2014) survey found that the gap between the rich and the poor is considered a major challenge by more than 60 percent of respondents worldwide, and Pope Francis has spoken out against the "economy of exclusion". Indeed, the PRC survey found that while education and working hard were seen as important for getting ahead, knowing the right persons and belonging to a wealthy family were also critical, suggesting potential major hurdles to social mobility. Widening inequality also has significant implications for growth and macroeconomic stability, it can concentrate political and decision making power in the hands of a few, lead to a suboptimal use of human resources, cause investment-reducing political and economic instability, and raise crisis risk.

High and sustained levels of inequality, especially inequality of opportunity can entail large social costs. Entrenched inequality of outcomes can significantly undermine individuals' educational and occupational choices. In such events, individuals have an incentive to divert their efforts toward securing favored treatment and protection, resulting in resource misallocation, corruption and nepotism, with adverse social and economic consequences.

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It may appear that the world may be a better place if we treated each other as the golden rule suggests. The Golden Rule simply states that all of us are to treat other people as we would wish other people to treat us in return. Almost all organized religions, philosophical systems, and secular systems of morality include such an ethic. It is normally intended to apply to the entire human race. To apply the golden rule adequately, we need to have great empathy for others — we need to be able to imagine ourselves, vividly and accurately, in the other person's position and circumstance. We also need to know what effect our actions have on the lives of others. And for many centuries the idea has been influential among people of very diverse cultures which suggest that the golden rule has an important moral value.

The Golden Rule is best seen as a consistency principle. It does not replace regular moral norms. It is not an infallible guide on which actions are right or wrong; it does not give all the answers. It only prescribes consistency — that we not have our actions (toward another) be out of harmony with our desires (toward a reversed situation action). It tests our moral coherence. If we violate the golden rule, then we are violating the spirit of fairness and concern that lie at the heart of morality. The golden rule, with roots in a wide range of world cultures, is well suited to be a standard that different cultures can utilize in tackling inequality. As the world becomes more and more a single interacting global community, the need for shared values is becoming more important and necessary. It is in this spirit that Rawls (1971) argued that the distribution of opportunities and of outcomes are equally important and informative to understand the nature and extent of inequality around the world.

In this paper, we wanted to investigate the effect of the Golden Rule in the members of a society in investigating actions towards mutual benefit using a well-documented experimental game called the Volunteer's Dilemma, in order to understand how people behave in real-life situations measured against what is ordained to them in 'doing unto others as you would have done onto you' in their respective religious scriptures and teachings. This research will be using a game-theoretic experimental game with actual cash incentives within a selected group of unbiased test subjects. In our experiments, we grouped our test subjects into Muslims and non-Muslims in order to make distinction in the level of compliance between religious traditions and belief systems, within the jurisdictions of Singapore and Malaysia. We will be using a priming instrument to heighten religious saliency in the subjects against control groups which are unprimed.

2. THE UNIVERSALITY OF THE GOLDEN RULE - 'DO UNTO OTHERS AS YOU WOULD HAVE DONE ONTO YOU'

The principle of 'doing unto others as you would have done onto you' is known as the Golden Rule as it is a maxim¹, ethical code or a universal morality² that fundamentally states either of the following:

One should treat others as one would like others to treat oneself. (Positive form)

One should not treat others in ways that one would not like to be treated (Negative form, also known as the Silver Rule).

Simon Blackburn also states that the Golden Rule can be "found in some form in almost every ethical tradition". Not surprisingly, this rule of not to harm is also a generally accepted rule which can be found in the First Rule of Patents, Three Laws of Robotics and under the UNWC convention. All belief systems, including Islam, attaches great importance to protecting people from harm. The Qur'ān states: "... and you should forgive and overlook: Do you not like God to forgive you? And Allāh is The Merciful Forgiving" (Qur'ān 24:22) — and the Prophet ﷺ is reported to have said:

Anas related that Prophet Muhammad ﷺ said: "None of you is truly a Muslim until he loves for his brother what he loves for himself." (reported in Sahih Muslim and Bukhari)

"Whoever wishes to be delivered from the fire and to enter paradise should treat other people as they wish to be treated themselves." (reported by Sahih Muslim)

"Do unto all men as you would wish to have done unto you; and reject for others what you would reject for yourself." (reported by Abu Dawud)

In other scriptures, the Golden Rule is similarly emphasized:

¹ Antony Flew, ed. (1979). "Golden Rule". A Dictionary of Philosophy. London: Pan Books in association with The MacMillan Press. p. 134. ISBN 0-330-48730-2. This dictionary of philosophy contains the following exact quote under the entry for "golden rule": "*The maxim 'Treat others how you wish to be treated'. Various expressions of this fundamental moral rule are to be found in tenets of most religions and creeds through the ages, testifying to its universal applicability.*"

² Walter Terence Stace argued that the Golden Rule was much more than simply an ethical code. Instead, he posits, it "*express[es] the essence of a universal morality.*" The rationale for this crucial distinction occupies much of his book *The Concept of Morals* (1937): – Stace, Walter T. (1937, Reprinted 1975 by permission of MacMillan Publishing Co. Inc., Also reprinted January 1990 by Peter Smith Publisher Inc). *The Concept of Morals*. New York: The MacMillan Company; and also reprinted by Peter Smith Publisher Inc, January 1990. p. 136. ISBN 0-8446-2990-1. (above quote found p. 136, ch. 6).

"All things whatsoever ye would that men should do to you, do ye so to them; for this is the law and the prophets." (Christianity: Matthew 7:1)
"Do not do to others what you would not like yourself. Then there will be no resentment against you, either in the family or in the state." (Confucianism: Analects 12:2)
"Hurt not others in ways that you yourself would find hurtful."
(Buddhism: Udana-Varga 5,1)
"This is the sum of duty; do naught onto others what you would not have them do unto you."
(Hinduism: Mahabharata 5,1517)
"What is hateful to you, do not do to your fellowman. This is the entire Law; all the rest is commentary."
(Judaism: Talmud, Shabbat 31d)
"Regard your neighbor's gain as your gain, and your neighbor's loss as your own loss."
(Taoism: Tai Shang Kan Yin P'ien)
"That nature alone is good which refrains from doing another whatsoever is not good for itself."
(Zoroastrianism: Dadisten-I-dinik, 94,5)

In 1993, the second Parliament of the World's Religions met in Chicago. The 8,000 attendees represented many faiths, and many branches of faiths like Buddhism, Christianity, Hinduism, Islam, and Judaism. The Parliament tried to reach agreement on a global ethics document that supported common values. Most agreed on the need for this document and the central place of the golden rule. The Golden Rule is arguably the most essential basis for the modern concept of human rights, in which each individual has a right to just treatment, and a reciprocal responsibility to ensure justice for others.

2.1 The Islamic Tradition of the Golden Rule

Imam 'Alī (about 600–660AD), a cousin and son-in-law of the Prophet ﷺ and later became the fourth rightly-guided Caliph, gave a longer statement of the golden rule in a documented text to his son Hasan ibn 'Alī:

"O my son, regard yourself as a scale [against which you measure your behavior] with others. Hence, what you prefer for yourself, prefer for others; what you find objectionable for yourself, treat as such for others. Do not wrong anyone, just as you would not like to be wronged; do good to others just as you would like others to do good to you; that which you consider immoral for others, consider immoral for yourself."

This deals with both desires and actions ('prefer' and 'do not wrong'), and with both doing good and refraining from harming ('do good' and 'do not wrong'). And there is no suggestion that these 'others' are limited to fellow Muslims.

The renowned scholar and eminent thinker Abu Hāmid al-Ghazālī (1058–1111AD) in his *Disciplining the Soul*³ gave this statement of the golden rule: "Were all people only to renounce the things they dislike in others, they would not need anyone to discipline them." Thus the golden rule is an important help for disciplining ourselves toward greater perfection.

The Grand Sufi mystic saint and philosopher Ibn 'Arabī (1165–1240AD) stated the golden rule this way: "All the commandments are summed up in this, that whatever you would like the True One to do to you that do to His creatures." Here the golden rule applies to how we are to treat all creatures which would include, not just all humans, but also all animals. And the golden rule, formulated in terms of how we want God to treat us, is given as the summary of how we are to live.

The enigmatic Persian poet Sa'dī (about 1213–92AD) in his *Gulistan* (Chapter 1, Story 10) had these verses, which accord with the spirit of the golden rule and are now displayed at the entrance of the United Nations Hall of Nations:

*Human beings are members of a whole, in creation of one essence and soul.
If one member is afflicted with pain, other members uneasy will remain.
If you have no sympathy for human pain, the name of human you cannot retain.*

³ trans. T.J. Winter (Cambridge, UK: Islamic Texts Society, 1995), in the section On Discovering Our Faults, page 54.

The context here is a story about an evil king who thinks nothing of breaking the fingers of a poor man. Many of Sa'dī's stories involve the idea that the good or evil that we do to others will somehow come back to us (sometimes through divine action). So, the good or evil that we do to another, we really are doing to ourselves.

Gensler (2013) notes that Islamic golden-rule formulas deal with our desires toward others (what we wish, love, or prefer) instead of just actions (what we do), as in the examples given earlier from the Qur'an (against fraud), Imam 'Alī, and Ibn 'Arabī. So, this tradition has both golden-rule forms: about desires and about actions. Gensler observes that the forms about desires are more distinctive, and that very few other traditions have golden-rule forms about desires.

3. INCOME INEQUALITY AND ITS CONSEQUENCES

The widening income gap between the rich and poor is at its highest level in decades, especially in advanced economies. Inequality trends have been more mixed in emerging markets and developing countries, with some countries experiencing declining inequality, but pervasive inequities in access to education, health care, and finance remain.

Higher inequality lowers growth by depriving the ability of lower-income households to stay healthy and accumulate physical and human capital (galor and moav, 2004; aghion, caroli, and garcia-penalosa, 1999). for instance, it can lead to underinvestment in education as poor children end up in lower-quality schools and are less able to go on to college⁴. As a result, labor productivity is lower than it would have been in a more equitable world (stiglitz, 2012).

In addition to affecting growth drivers, inequality could result in poor public policy choices. For example, it can lead to a backlash against growth-enhancing economic liberalization and fuel protectionist pressures against globalization and market-oriented reforms (Claessens and Perotti, 2007). At the same time, enhanced power by the elite could result in a more limited provision of public goods that boost productivity and growth, and which fail to improve the poor (Putnam, 2000; Bourguignon and Dessus, 2009).

Inequality seem to also hamper poverty reduction. Income inequality affects the pace at which growth enables poverty reduction (Ravallion, 2004). Growth is less efficient in lowering poverty in countries with high initial levels of inequality or in which the distributional pattern of growth favors the non-poor. Moreover, to the extent that economies are periodically subject to shocks of various kinds that undermine growth, higher inequality makes a greater proportion of the population vulnerable to poverty.

4. METHODOLOGY OF INVESTIGATION

The methodology of this study aims to assess the behavior of the subject pool (players representative of the Muslims and non-Muslims) in a given scenario (Volunteer's Dilemma) that will test the adherence to the Golden Rule. The same game will be played starting with a pair of players and then incrementally by two more players until ten. For our purposes, the game will have:

- i. There is a set of participants, whom we call the players. There will be two players in each game.
- ii. Each player has a set of options for how to behave, which are the player's possible strategies.
- iii. For each choice of strategies, each player receives a payoff that can depend on the strategies selected by the other player. The payoffs will generally be incentives for playing the game, with the assumption that each player preferring larger payoffs to smaller payoffs.

The instructions in a session will be read stage by stage. Neutral terminology will be used to avoid any potential bias. At the end of each scenario, the data is tabulated for analysis to examine the decisions made in different situations. It is a simple one-off game, in which the players simultaneously and independently choose their actions, and they do so only once. The test subjects do not know what is being tested for in each game to obtain neutrality and objectiveness in the outcomes. This allows us to extract actual behavioral responses as they would behave naturally in real life. Also, to statistically control for religious effects, we use a priming instrument used by Shariff and Norenzyan (2007) to segregate the Islamic-salient subjects from non-Islamic subjects via sentence-unscrambling task.

⁴ Widening income disparities can depress skills development among individuals with poorer parental education background, both in terms of the quantity of education attained (for example, years of schooling) and its quality (that is, skill proficiency). Educational outcomes of individuals from richer backgrounds, however, are not affected by inequality (Cingano 2014).

4.1 Priming Instrument

Priming⁵ has emerged as a valuable tool within the psychological study of religious effects on a number of psychological outcomes, such as pro-social behavior. The experimental design uses a priming instrument used by Shariff and Norenzayan (2007) to segregate the Islamic-salient subjects within the Muslim group as well as the religious-salient subjects within the non-Muslim group via sentence-unscrambling task (see Appendix 2). The sentences vary depending on whether the subject is in the Islamic-salient condition or the control condition. Five of the sentences unscrambled by Islamic-salient subjects contain religious content. None of the control subjects' sentences contain religious content. An advantage of this priming instrument is that it is subtle; compared with blatant primes, subtle primes more reliably cause behavior to conform to norms (Wheeler and Petty, 2001), which aids in interpreting our results within our theoretical framework of self-categorization. The basic idea is that priming a social category temporarily increases the strength of affiliation with that category. Stronger affiliation with a category causes behavior to shift towards that category's norms, so comparing primed and unprimed behavior allows us to infer something about what the category's norms are and how they affect steady-state behavior. In fact, it has been demonstrated that priming with religious concepts reduces cheating (Ariely, 2012; Bering, McLeod, & Shackelford, 2005; Randolph-Seng & Nielsen, 2007) and promotes trust and altruism (Ruffle & Sosis, 2010; Shariff & Norenzayan, 2007), although there are limited studies on the Golden Rule or direct behavioral application to economic failures like inequality.

4.2 Volunteer's Dilemma (Test for Golden Rule)

The game is a multiplayer version of the chicken game, where "volunteering" is akin to swerving. If no one volunteers, the worst possible outcome is obtained. If any one person elects to volunteer, the rest benefit by not doing so. In this research, the game is played in a symmetric-payoff design, the benefit to every member of the group if at least one person volunteered was S\$2/RM2 and the individual cost of volunteering was S\$1/RM1. If there were no volunteers in the group, each participant earned nothing. The game will be played with 2, 4, 6, 8, 10 players where everyone starts with S\$2/RM2.

A public good is only produced if at least one person volunteers. In this game, bystanders decide independently on whether to sacrifice something for the benefit of the group. Because it will cost the volunteer to ensure mutual benefit, there is a greater incentive for free-riding. The social phenomena of the bystander effect and diffusion of responsibility heavily relate to the volunteer's dilemma (Poundstone, 1993).

The story of Kitty Genovese is often used as a classic example of the volunteer's dilemma. Genovese was stabbed to death in an alley where various residential apartments overlooked the assault. Although many people were aware of the assault at the time (even though they may not have been aware of the exact scope and nature of the assault), only one person contacted the police. It was assumed that people did not get involved because they thought others would contact the police, and people did not want to incur the costs of getting involved in the dispute (Takooshian, 2014). The apparent lack of reaction by numerous neighbors purported to have watched the scene or to have heard Genovese's cries for help, although erroneously reported, prompted research into diffusion of responsibility and the bystander effect. Social psychologists John M. Darley and Bibb Latané started this line of research, showing that contrary to common expectations, larger numbers of bystanders decrease the likelihood that someone will step forward and help a victim (Zimbardo, 2014). The reasons include the fact that onlookers see that others are not helping either, that onlookers believe others will know better how to help, and that onlookers feel uncertain about helping while others are watching. The Kitty Genovese case thus became a classic feature of social psychology textbooks.

4.3 Details of Test Subjects

As mentioned, we carried out our tests in two different cities — Singapore and Kuala Lumpur. Our sample size was 30 in Singapore and 40 in Malaysia which though modest, still had a good spread of age, education, gender and income (see Appendix 1) instead of limiting to undergraduate or graduate groups.

The Singaporean sample consisted of 12 Muslims and 18 non-Muslims — six Buddhists, three Catholics, one Christian (non-Catholic), one Atheist, five Free-thinkers, one Hindu and one Taoist which are all grouped as non-Muslims. There are less variation in the Muslim community in Singapore and Kuala Lumpur which is

⁵ Religious priming has robust effects across a variety of outcome measures—pro-social measures included. Religious priming does not, however, reliably affect non-religious participants—suggesting that priming depends on the cognitive activation of culturally transmitted religious beliefs (Shariff et al, 2015).

predominantly Sunni and follow the Shafi'e school of thought. We are not aware of existing hypotheses in the literature regarding how atheism or agnosticism might affect economic behavior. Of the sample, 17 were males and 13 females. Out of the 30 test subjects, 18 were primed and 12 were unprimed. Of the 18 primed samples, seven were Muslims and eleven were non-Muslims. Five Muslims and seven non-Muslims were unprimed.

The Malaysian sample comprised 20 Muslims and 20 non-Muslims — 10 Buddhists, one Catholic, three Christians (non-Catholics), three Free-thinkers and three Hindus. Of the sample, 20 were males and 20 females. Out of the 40 test subjects, 20 were primed and 20 were unprimed. Of the 20 primed samples, nine were Muslims and 11 were non-Muslims. 11 Muslims and nine non-Muslims were unprimed.

Table 1 : Summary of Game Decision Rules, Payoffs and Sample Size.

Game	Decision Rules	Payoffs	Total Size
Test for Golden Rule (Volunteer's Dilemma)	Starts with pairs then progressively increased by pairs to 10 players. Player volunteers but loses S\$1/RM1 in the process.	As long as 1 player volunteers, everyone in the group gets S\$2/RM2. If there are no volunteers, the group gets nothing.	38 Non-Muslim (22 primed) 32 Muslim (16 primed)

We would like to point out that the work in this research was significantly limited by sample size due to limited resources available. In many published papers, however, the sample size are somewhat larger, but mostly limited to students (i.e. effectively restricting age to 20s only, a particular income group and a particular education level) and this seems to be one of the major criticism to those studies. Our sample, though small, was a more accurate snapshot of society, ranging from 20s to 50s in age, various income groups and educational backgrounds (see Appendix 1 again).

5. RESULTS AND ANALYSIS

The volunteer's dilemma is a binary-choice game in which a single contributor (volunteer) is all that is needed for a given benefit to be enjoyed by all players. Larger external examples include casting a politically costly veto or attempting an emergency rescue but in our experiment the scenario involves volunteering to call the power company in a blackout in order to test for the Golden Rule. The contribution decision is costly (in our case, half of the money given out). In line with self-regard, if there is a possibility that someone else will pay for the call, then players will wait for others to make the call. For the Volunteer's Dilemma, previous findings from Diekmann. (1986, 1993), (Poundstone, 1993), Franzen (1995), (Takooshian, 2014), (Zimbardo, 2014) show that:

- i. That as the group size gets bigger (from group of 2 to 10, the cost/utility ratio approaches 0.10 from 0.50).
- ii. The likelihood of someone volunteering to call reduces by about 3 times when group size is increased from 2 to 5.

In order to get all subjects to participate in this experiment, three sessions were conducted in Singapore (for 30 players) and four in Malaysia (for 40 players). Table 2 contains the number of volunteers as the group gets progressively bigger (increasing number of pairs) in the respective sessions, with the average percentage of volunteers as the group size increases in Figure 1.

Table 2: Number of Volunteers as Group Size increases from 2 to 10.

No. of Players	2		4		6		8		10		Total
	Count	Ratio %									
SG Volunteers											
Session 1	2	100%	2	50%	4	67%	4	50%	1	10%	13
Session 2	2	100%	4	100%	1	17%	2	25%	2	20%	11
Session 3	2	100%	2	50%	2	33%	2	25%	1	10%	9
MY Volunteers											
Session 1	2	100%	3	75%	4	67%	5	63%	5	50%	19
Session 2	1	50%	2	50%	1	17%	1	13%	4	40%	9
Session 3	2	100%	1	25%	2	33%	1	13%	2	20%	8
Session 4	1	50%	2	50%	1	17%	2	25%	1	10%	7
Combined Volunteers											
Overall	12		16		15		17		16		76
Average	1.71	86%	2.29	57%	2.14	36%	2.43	30%	2.29	23%	10.86

Figure 1: Average Percentage of Volunteers decreases as Group Size increases from 2 to 10.

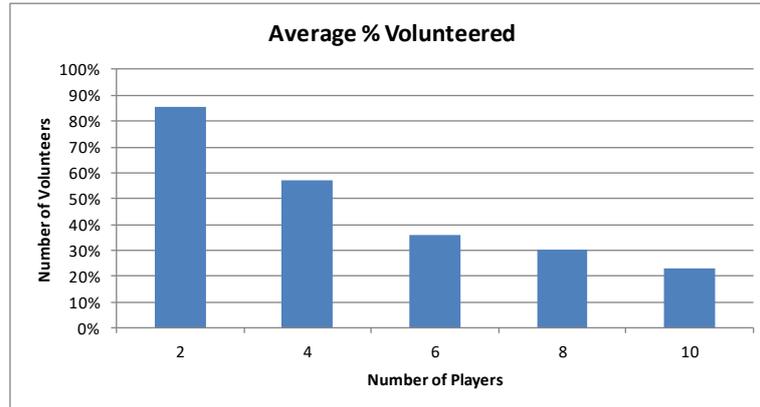


Table 2 and Figure 1 validate the results of previous findings that the likelihood of someone volunteering reduces when group size is increased.

Table 3: Breakdown of Likelihood of Volunteering Between Sample Groups.

Volunteered?	Yes		No		Total
	Count	Ratio %	Count	Ratio %	
Muslim	28	88%	4	13%	32
Primed	11	69%	5	31%	16
Unprimed	4	25%	12	75%	16
Non-Muslim	26	68%	12	32%	38
Primed	12	55%	10	45%	22
Unprimed	6	38%	10	63%	16
Combined (M & nM)	54	77%	16	23%	70
Primed	23	61%	15	39%	38
Unprimed	10	31%	22	69%	32

In analyzing for Muslim versus non-Muslim behaviors, the Muslims were more likely to volunteer as compared to their non-Muslim counterparts (88% versus 68%). The primed Muslims were also more likely to volunteer as compared to their primed non-Muslim counterparts (69% versus 55%). In terms of priming only, the primed subjects were overwhelmingly (61% versus 31%) likely to volunteer. Overall, the results clearly indicate that Muslims 'outperform' non-Muslims and primed subjects 'outperform' the unprimed subjects in the Golden Rule of 'doing unto others as they would have done unto them'.

Table 4: Overall Performance for both Cities (Islamic and Priming Effects).

SUMMARY	
	Golden Rule
Muslim Priming Effects	P > UnP
Non-Muslim Priming Effects	P > UnP
Combined (M & nM) Priming Effects	P > UnP
Muslim vs non-Muslim	M > nonM

where P = primed; UnP = unprimed subjects and M = Muslim and nonM = non-Muslim participants and > means performs better and < means conversely according to the primary criteria of the experimental game

The higher performance by the Muslims in Singapore and Malaysia seem to indicate that the rule tested was consistent to their understanding of the values familiar to them, through their mental frames, values espoused by their religion and reinforced in their social, racial or cultural identity. These values could also have been deeply entrenched in their upbringing, affirmed through their social circles or become profoundly ingrained as part of their identity — be it as part of their cultural evolution or racial identity. In short, their better performance could be due to these values being emphasized in their daily lives and how embedded they have been in their perception of themselves and others in their worldview. As Gensler had earlier pointed out that Islam was the only tradition whose golden rule formula encompassed *both* actions and desires. Consistent with the idea of equality and fairness, the better performers were those who saw themselves being responsible to ensure that the power company knows about the blackout regardless if others had made the call. However, we caution from taking a broad-brush supposition and these results should not be seen as representative of all Muslims at all times and in all countries. Instead, these experiments should be repeated in more countries and if resources permit, in larger sample sizes, to confirm these unique Islamic traits. A deeper understanding of religious and priming effects would require further verification of these findings in multiple countries, and possibly non-Muslims be segregated by their respective religions instead of being lumped together as a non-Muslim group.

Underperformers in the game were players who assumed that others would make the call to the power company, and the blackout had not severely disrupted their immediate activities for them to take any action. In the context of real life outside of the scenario given in the game, a possible explanation as to why non-Muslims may have 'underperformed' is that the perception of empathy is limited to the understanding of what the other party wants or needs. There are instances where the other party may not want to be treated as you would due to differing preferences or desires. For example, some people may not appreciate unannounced neighborly visits (to visit the sick for instance) but others may find them as pleasant surprises, or including others in one's religious celebrations (with the intention of being inclusive or to promote understanding) may be perceived as evangelizing them. These instances could result in hesitance for one to assume that he/she knows how the other party would want to be treated based solely on their own preferences or intentions. This is the reason why some people adhere to an enhanced variant of the golden rule — the Platinum Rule: "Treat others the way *they* want to be treated." The key difference here is to understand others' preferences first before acting on the Golden Rule. From a macroeconomic or policy standpoint, however, the economic underperformers may not necessarily know how they should be treated or what is good for them, and this responsibility lies on the governing institutions to treat them as they *should* be treated in order to enjoy the quality of life that better performers are afforded through informed choices.

To effectively tackle inequality, empathizing how the poor feel is not enough. Conventional economic thinking assumes the poor will want to earn their way out of poverty. But studies show that poverty makes people feel powerless and helpless. The poor are subject to exceptional levels of stress, and stress makes beneficial decision-making more difficult. Above all, the poor lack the institutional framework which, in the more affluent and advanced economies, improves decisions towards prosperity. As such, a multi-dimensional strategy as well as key areas need to be developed to holistically secure a just and prosperous future for all — where we effect the efforts towards the poor, underprivileged and disadvantaged as we would towards our own. The critical components of the financially inclusive and sustainable future are financial literacy and access to financial services, income and wealth redistributive instruments, development of micro, small and medium enterprises (MSMEs), sound governance through active legal and enforcement systems to ensure these take place ethically, and an adequate metric-set to measure effectiveness, performance and progress of such initiatives. Lastly, employing behavioral insights of religious values and how the poor make choices can provide an improved design to traditional development programs. Paying attention to how the poor actually think would also imply big changes to financial-inclusion policies. Behavioral economics offers new perspectives on interventions that institutions could use. Traditional impact assessment approaches, for example, for estimating benefits to the poor, may need to be adapted when biases are present (both the benefactor as well as the beneficiaries). Integrating insights from behavioral economics with traditional intervention and market failure analysis has much scope for helping regulators choose the best interventions.

6. CONCLUSION

The identity formulation through individual experiences, upbringing, cultural conditioning and religious beliefs are assertions for moral behavior based on our findings. Other experimental studies (Xygalatas, 2012, etc.) also show a link between religious priming and pro-social behaviors, and these effects are evident irrespective of the degree of religiosity of the participant. Primed test subjects clearly performed better than unprimed subjects (regardless of religiosity) which indicate that shared religious values are productive prompts for ethical behavior. However, ethical behaviors can also be governed by rules that are enforced by the economic, legal and political institutions of a country. The effective understanding of how religious tenets produce productive behaviors can

be applied to fill gaps in such institutions to enhance improvements through low-cost behavioral interventions in development policy. Our findings indicate that in order to fulfill shared goals, it must be done through deeper understanding of such unifying religious values, how they can be applied in the context of multi-cultural and multi-religious societies in order to achieve mutually-beneficial outcomes like income equality, economic justice and inclusive prosperity through altruism, fairness and moral responsibility.

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APPENDIX

Appendix 1a : Sample Size and Ratios of Background Spread

Sample Size	Singapore	Malaysia	Total	Ratio
Sample Sub-total	30	40	70	100%
Muslim	12	20	32	46%
Non-Muslim	18	20	38	54%
Atheist	1	0	1	
Buddhist	6	10	16	
Catholic	3	1	4	
Christian (non-Catholic)	1	3	4	
Free-thinker	5	3	8	
Hindu	1	3	4	
Taoist	1	0	1	
Age	30	40	70	100%
20s	10	18	28	40%
30s	10	16	26	37%
40s	9	6	15	21%
50s	1	0	1	1%
Gender	30	40	70	100%
Male	17	20	37	53%
Female	13	20	33	47%
Education	30	40	70	100%
Tertiary	19	38	57	81%
Non-tertiary	11	2	13	19%
Income	30	40	70	100%
< S\$/RM24k per annum	6	14	20	29%
S\$/RM24k to 36k per annum	14	13	27	39%
S\$/RM36k to 48k per annum	6	10	16	23%
> S\$/RM72k per annum	4	3	7	10%

Appendix 1b : Size/Ratios of Muslim vs non-Muslim and Primed vs Unprimed Groupings

Sample Size	Singapore	Malaysia	Total
Sample Sub-total	30	40	70
Muslim	12	20	32
Non-Muslim	18	20	38
Primed	18	20	38
Muslim	7	9	16
Non-Muslim	11	11	22
Unprimed	12	20	32
Muslim	5	11	16
Non-Muslim	7	9	16
Ratios (%)	Singapore	Malaysia	Total
Sample Sub-total	100%	100%	100%
Muslim	40%	50%	46%
Non-Muslim	60%	50%	54%
Primed	60%	50%	54%
Muslim	23%	23%	23%
Non-Muslim	37%	28%	31%
Unprimed	40%	50%	46%
Muslim	17%	28%	23%
Non-Muslim	23%	23%	23%

Appendix 2: Priming Instruments

Instructions:

Unscramble the following groups of words to make a four word phrase or sentence by dropping the irrelevant word.

For example, high winds the flies plane → the plane flies high

Islamic-specific Priming Sentences (for priming Muslims)

1. at the park on sat she bench
2. you be upon peace conflict
3. the self-interest pursuit of in busy
4. right and wrong forbid then command
5. pictures deleted some glee she
6. others is to fasting prescribed you
7. is option not failure an succeed
8. theft an charity is obligation
9. is the warm water take
10. of mothers under paradise feet is the love

God-Related Priming Sentences (for priming non-Muslims)

1. theft an charity is obligation
2. dessert divine was fork the
3. appreciated presence was imagine her
4. more paper it once do
5. send I over it mailed
6. wrong thanks give God to
7. yesterday it finished track he
8. sacred was book refer the
9. reveal the future simple prophets
10. prepared somewhat I was retired

Appendix 3a: Game Instructions

Instructions to Game Masters:

1. Always use neutral terms only to avoid any bias
2. Do not give examples that are one sided. For example, do not say you can choose like if you like it. You must say, you can choose like if you like it OR don't choose if you don't like it
3. Follow the notes for each game, whether players can or cannot discuss
4. Record player's ID number accurately. Failing to do so will result in data inaccuracy
5. Please note the answers in your answer sheet and record the answers in the player's score cards. There is no room for mistakes.
6. Please note other observations on your answer sheet, e.g. whether players discuss or not, changes their minds, etc.
7. Please ensure amounts given to players are correct, both at the start of each game and at the end of each game
8. Players are to sign for the amounts received for each game and game master must tally their balance on the answer sheet

Appendix 3b: Game Flow

Volunteer's Dilemma (Golden Rule)

Materials :	1 Condition Board Every two new players gets two \$1 coins Game Master : Thirty \$1 coins
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Game Master: Gives out money to the players.

In this game, there is a blackout in the street of a row of houses. Everybody is given \$2.

It takes only one person to call the Electric Company to turn the power back on, and costs S\$1 to make that call. i.e. to indicate that you want to make the call, you put up S\$1.

If at least one person volunteers to call the Electric Company, everyone earns S\$2 each.

If there are no volunteers in the group, each participant earns nothing.

You have two minutes to respond.

There are no right or wrong answers or choices, you will only be revealing a preference.

Note: If players ask if they can discuss, the answer is yes.

Game Ends:

Record responses in your score card and player's score card. Mark X if the player volunteers, mark O if player did not volunteer. Distribute bonus and indicate for the next pair to come in.