Can Praying Reduce Anger in a Social Conflict Context?

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Abstract

The present study examined the effects of praying for oneself and praying for an offender on anger in a social conflict context. It hypothesized that praying for an offender leads to a greater reduction in anger compared to meditating on a religious icon. I recruited 104 Christians who were permanent residents of Hong Kong to participate in an experiment. I randomly assigned them to one of the three conditions: pray-for-oneself condition, pray-for-the-offender condition and meditation condition. At the beginning of the experiment, the experimenter provoked the participants by showing them a video about Beijing Professor Kung Qing-dong who made insulting comments on Hong Kong people. Afterwards, one-third of the participants prayed for themselves; another third of them prayed for the offender; and the remaining one-third of them meditated on a picture of the cross. Participants completed the pre-test and post-test self-report questionnaires as well as a sentence completion task, all of which measured their anger. Results from one-way ANOVA did not confirm the hypothesis that praying for an offender leads to a greater reduction in anger than meditating on a religious icon. Participants from the three conditions were not significantly different in their self-reported anger or coder-rated anger in the post-test. Results indicated that all three conditions were similarly effective in reducing anger. While previous research showed that praying for the offender is effective in reducing anger in personal conflict contexts, the present research showed that praying for the offender is not more effective than meditating on a religious icon in reducing anger in a social conflict context.

Keywords: praying, meditation, anger
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Anger is a basic emotion experienced by people in their everyday life (Plutchik, 2002). Past researchers have described anger as “a negative, phenomenological (or internal) feeling state associated with specific cognitive and perceptual distortions and deficiencies (e.g., misappraisals, errors, and attributions of blame, injustice, preventability, and/or intentionality), subjective labeling, physiological changes, and action tendencies to engage in socially constructed and reinforced behavioral scripts” (Hamdan-Mansour, Dardas, Nawafleh, & Abu-Asba, 2012; Kassinove & Sukhodolsky, 1995, p.7). Based on this description of anger, it is reasonable to believe that many Hong Kong people have been increasingly angry towards mainlanders in recent years. There are two major evidences for this claim. The first evidence can be found in social networking sites, where an increasing number of Hong Kong people have been uploading and circulating anti-mainlander video clips that portray mainland people as disgraceful and uncivilized citizens. Many of those video clips capture the outrageous moments of mainlanders in Hong Kong, such as violating eating restrictions on the Mass Transit Railway (MTR), urinating publicly on the MTR platform, and even defecating publicly in the Hong Kong Disneyland, etc. Some of those videos are so popular that the media has reported about them. One popular video which presents a series of mainlanders’ outrageous behavior in recent years has even reached over 300,000 page hits and has received over 3,000 “likes”. Apart from circulating the videos, many Hong Kong people have also published negative commentaries on mainlanders on the Web. Some commentaries accuse mainlanders for behaving disgracefully and irresponsibly in the city, while some use the trend for mainland mothers to come to Hong Kong to give birth as an evidence to support their view that mainlanders are “parasites” who deplete the resources in Hong Kong. Apart from the anti-mainlander activities on social-
networking sites, another evidence for the anger towards mainlanders among Hong Kong people is the resistance that many Hong Kong people have shown towards policies that facilitate mainlanders’ access to the city. For example, in response to the large number of mainland pregnant women coming to local hospitals to give birth, many Hong Kong people have demanded the Hospital Authority to cut the admission quota for mainland mothers, while some Hong Kong people have even called for a change in the Basic Law or a reinterpretation of it so that children born in Hong Kong to mainland parents would not be entitled to the right of abode in the city. In response to the government’s plan which allows access of some mainland cars into Hong Kong, many locals have taken to the street to protest against it.

As Hong Kong people become angrier towards mainlanders, it is increasingly important to find ways that help Hong Kong people alleviate their anger. It is because past research has suggested that anger does not only bring about long-term negative health outcomes to individuals (Chida & Steptoe, 2009; Giegling, Olgati, Hartmann, Calati, Moller, Rujescu, & Serretti, 2009), but it also brings harm to the society as a whole. On the social level, anger increases the possibility of conflicts among people, since it was closely linked with hostility and aggression (Ramírez & Andreu, 2005). A study on African American adolescents even found that anger mediates the effect of perceived racial discrimination on substance use (Gibbons, O’Hara, Stock, Gerrad, Weng, & Wills, 2012). Therefore, the present study endeavored to contribute to the research on anger coping in social contexts. Considering that more and more Hong Kong people become Christians or at least know about Christianity, the present study studied the effect of a religious coping strategy – prayer – on reducing anger among Hong Kong people. The present study examined the effects of two types of prayer – praying for oneself and praying for the offender.
I refined its scope of the present study to one anger incident in which many Hong Kong people reacted emotionally to a humiliating speech by a mainland professor, Kung Qing-dong. This anger incident became the focus of the present research for two reasons. The first reason was that the anger incident was recent when I conducted the present study, and therefore many Hong Kong people had knowledge about it. The second reason was that the anger incident had been one of the most blatant public insults made on Hong Kong people. The details of the anger incident were as follows. In a broadcasted TV interview with a Chinese media, Beijing Professor Kung Qing-dong harshly criticized the Hong Kong people by referring to them as “dogs of colonialism” and “bastards”. In addition, he also did the following: he described that Hong Kong was “lashed” by Britain during the colonial period; he talked of Hong Kong people as “wolves” in front of the mainland people; he condemned Hong Kong people for having a lower moral standard than most of their counterparts in China; he criticized Hong Kong tour guides and salespeople for cheating, etc. Many Hong Kong people reacted emotionally to Kung’s speech. Some of them demanded apologies from Kung, while some counter-criticized mainlanders for having a low moral standard. In light of the widespread anger among Hong Kong people towards Kung, the present research was interested to find out if praying for oneself and praying for Kung are effective in reducing anger towards Kung among Hong Kong citizens.

Praying as a common copying strategy among religious people

Praying is one of the coping strategies that many religious people adopt to manage their emotions. Since prayer is one of the most practiced forms of religiosity, researchers have described it as the “soul and essence of religion” (Brede Kristensen, 1971; Francis & Evans, 1995; James, 1902/1985, p. 365). Praying is also one of the most commonly used religious strategies to cope with stress and health problems (Spilka, Hood, Hunsberger, & Gorsuch, 2003).
A significant amount of research has proved for the positive effects of praying on physical and mental health (e.g., Baldacchino & Draper, 2001; Brown, 1994; Cardella & Friedlander, 2004; Francis & Evans, 1995; Maltby, Lewis, & Day, 1999; Taylor, Outlaw, Bernardo, & Roy, 1999; VandeCreek, Janus, Pennebaker, & Binau, 2002). It is reasonable to believe that “the person who prays attains a feeling of inner peace, of relief, and of power and support, and the resulting psychological effects can subsequently influence their physical health” (Bänziger, van Uden & Janssen, 2008, p. 103). According to Bänziger et al. (2008), praying conveys and reinforces meanings of life events. As a result, prayer “makes life meaningful, endows people with strength, and makes them feel good” (Hood, Spilka, Hunsburger & Gorsuch, 1996, p. 399).

**Definition of praying**

Praying refers to every kind of inward communication or conversation with the power recognized as divine (Meisenhelder & Chandler, 2000; Richards & Bergin, 2005; Richards, Hardman, & Berett, 2008; James, 1902/1985, p. 464). Praying is more than a private, intrapsychical phenomenon (Carver, Scheier, & Weintraub, 1989); it is also an imaginary social interaction between an objectively real person and the subjectively real God (Sharp, 2010). Although praying is imaginary in the way that God is unobservable to bare eyes, pray-ers subjectively experience interactions with God whom they believe can hear, understand and react to them (Sharp, 2010). Praying shares some characteristics of a social interaction between two people. Firstly, pray-ers hold beliefs about God’s characteristics, qualities and motivations based on religious socialization, religious teachings, the Bible, their subjective experience with God, etc. Secondly, pray-ers hold beliefs about how God perceives them and reacts to them when they pray. These beliefs about God alter how pray-ers think about, feel about and react to emotional situations as they pray or after they pray.
Praying is distinctive from another coping strategy – mediation. While praying involves actively seeking communication with the deity, meditation is “an exercise which usually involves an individual in turning attention or awareness to dwell upon a single object, concept, sound or experience” (West, 1980, p.265). A person who prays expects an answer from God, while a person who meditates does not. Compared to praying, meditation does not involve any intention to engage in social interactions with God; instead it is an intensive, inward dwelling on an object.

Although praying and meditation are different, they have many things in common. Both praying and meditation can be performed individually or in a group. For praying and meditation that are performed individually, both require solitude and quietness in order to work. Just like meditation, praying involves both the mental psyche and the physical body, such as sitting, standing and kneeling. Moreover, praying requires the person to clear all outside thoughts from the mind and focus on the prayer itself, just like to meditation which requires the person to focus on the inner-self or the inner awareness. Similar to praying, meditation is positively associated with physical and mental health outcomes. Past research showed that various meditative practices, such as mindfulness meditation, passage meditation and Zen breath meditation, may lead to a decrease in distress and anxiety (e.g. Shapiro, Schwartz & Bonner, 1998; Winzelberg & Luskin, 1999; Tloczynski & Tantriella, 1998). Past research has also shown that meditation is positively associated with effective functioning in terms of academic performance, concentration, perceptual sensitivity, reaction time, memory, self-control, empathy and self-esteem (Walsh & Shapiro, 2006). Biological research has shown that meditation is related to positive health outcomes such as improved immune function (Davidson, Kabat-Zinn, Schumacher, Rosenkranz, Muller, Santorelli, Urbanowski, Harrington, Bonus & Sheridan, 2003).
and reduced arousal, as measured by blood pressure, heart rate, cortisol and other neurochemical markers (Newberg & Iversen, 2003).

**Links between praying and emotions**

In recent years, more research has investigated how praying may help people cope with their emotions. Past research has shown that praying is beneficial to emotional well-being: it alleviates anger towards relationship partners (Lambert & Dollahite, 2006) and increases forgiveness towards relationship partners as well as friends (Lambert, Fincham, Stillman, Graham & Beach, 2009). Prior research has also shown that people who pray tend to be more successful in coping with stressful events such as cardiac surgery (Ai, Peterson, Tice, Huang, Rodgers, & Bolling, 2007) and terrorist attacks (Ai, Tice, Peterson, & Huang, 2005). It is also reasonable to believe that praying may promote prosocial thought and behavior, since many religious texts have linked prayer with compassion and generosity (Bremner, Koole & Bushman, 2011).

The research by Bremner et al. (2011) has shown that praying reduces anger and aggression even in situations where reciprocity is unlikely. Bremner et al. carried out three studies which provoked American college students by having them to write about a past anger event. Subsequently, the participants received demeaning remarks from an anonymous, fake person (the offender) for what they had written. Afterwards, provoked participants either prayed or meditated for 5 minutes. In Study 1, they either prayed for or thought about a stranger. In Study 2, they either prayed for or thought about the “offender” who gave them demeaning remarks on their essays in the previous section of the experiment. In Study 3, they either prayed for or think about a friend who needed help. The three studies use different tools to measure the change in anger or aggression in the participants after the experimental manipulation. In Study 1,
participants completed a pre-test and a post-test Profile of Mood Scale (POMS) which measured their anger. In Study 2, participants “competed” against the “offender” in a reaction time task at the end of the study. Bremner et al. told participants that whoever slower would receive a blast of noise through a pair of headphones. This reaction time task measured the aggression of participants towards the offender. In Study 3, participants judged the likelihood of ten life events, half of which were framed as the result of dispositional factors and half of which were framed as the result of situational factors. This task measured the angry appraisals of participants. The three studies in Bremner et al.’s research yielded three major findings. The first finding was that provoked individuals who prayed for a stranger reportedly harbored less anger towards an offender than did those who meditated on a stranger. The second finding was that provoked individuals who prayed for the offender demonstrated less aggression to the offender than did those who meditated on the offender. The third finding was that provoked individuals who prayed for a stranger reported lower angry appraisals than did those who meditated on a friend. All three findings pointed to the conclusion that praying is effective in reducing anger among provoked individuals.

Limitations of previous research

While past research on the effect of praying on emotional regulation seemed to show that praying is effective in reducing anger, it should be noted that they have two major limitations. The first limitation is that most of the past research focused on intercessory prayers (i.e. praying for others). For example, Bremner et al. (2011) studied the effect of praying for a stranger, praying for the offender and praying for a friend in need on anger and aggression. Lambert et al. (2009) studied the effect of praying for one’s romantic partner on forgiveness. However, little research has studied other types or facets of prayer. In fact, prayer is a complex, multi-faceted
activity which should be researched more comprehensively. According to Foster (1992), there are at least three types of prayers – inward prayers that are directed towards self-transformation; outward prayers that are directed towards connection with others; and upward prayers that are directed towards intimacy with divine. Intercessory prayer is a type of outward prayer. To broaden our understanding of the effect of prayer on emotional regulation, psychological research should also look into other types of prayer, such as praying for oneself. In fact, it is reasonable to believe that praying for oneself is one of the most common coping strategies for life problems among religious people. Even people who do not have any religious background may sometimes pray for themselves when they face difficult situations in life, with a hope to gain an immediate emotional relief or comfort. Considering that praying for oneself is a common coping strategy for emotions among religious people and sometimes among non-religious people as well, psychological research should find out if praying for oneself is indeed an effective emotional coping strategy.

The second limitation of past research which studied the effect of praying on emotional regulation is that most of them studied anger and forgiveness in personal conflict contexts, while little research has studied anger and forgiveness in social conflict contexts. For example, Bremner et al. (2011) studied the anger towards an offender who personally offended the participants by making insulting remarks on their essays. Lambert et al. (2009) studied the forgiveness towards participants’ romantic partners, who obviously have a personal relationship with the participants. Therefore, both studies examined the effects of praying in personal conflict contexts. However, anger in social contexts should also be an important area of research. Compared to anger in personal conflict contexts, anger in social contexts has an even broader implication on the society as a whole. Past research has found that anger in social contexts may
perpetuate through the collective memories of the conflicting groups and last for years after the hostilities have stopped (Bar-Tal, 2000). Therefore, reducing anger in social contexts is crucial for the harmony in a society. In fact, anger in social contexts may affect the health of individuals in a society as well. Evidence from Northern Ireland also found that forgiveness on a group level is negatively associated with the development of mild psychiatric conditions (Myers, Hewstone, & Cairns, 2009).

Past research has suggested ways that may reduce anger in social conflict contexts. For example, positive intergroup contact experiences may be effective in reducing anger in social conflict contexts, since previous research has consistently found that positive intergroup contact experiences are associated with reduced prejudice (for reviews, see Brown & Hewstone, 2005; Pettigrew & Tropp, 2006) and a greater willingness to forgive the outgroup (Tam, Hewstone, Cairns, Tausch, Maio, & Kenworthy, 2007). However, it should be noted that positive intergroup contact experiences are not always available. From observation, it seems that many Hong Kong people do not experience such positive intergroup contact experiences with mainlanders, even though they have increasing opportunities to interact with mainland people. Instead, the increasing contacts among Hong Kong people and mainlanders seem to have given rise to more conflicts among them. When positive intergroup contact experiences between Hong Kong people and mainlanders are unavailable, praying could possibly be a coping strategy that helps Hong Kong people alleviate their anger towards mainlanders.

**The present study**

Past research that primarily focused on the personal conflict contexts has found an effect of prayer in reducing anger or facilitating forgiveness (Lambert et al., 2009; Bremner et al., 2011). To find out if the effect of prayer is also present in social conflict contexts, the present study
endeavored to find out if the practice of praying for oneself and praying for Professor Kung are effective coping strategies that reduce anger among Hong Kong people towards Kung. The study adopted the practice of meditating on a religious icon as a control condition to compare against the two prayer conditions.

Both praying for an offender and meditating on a religious icon could be effective in reducing anger due to two reasons. Firstly, both of them act as distraction which diverts the attention of an individual from the source of anger to an external stimulus. For example, when people pray, they divert their attention from their anger to God, a source of peace and strength to most Christians. When people meditate on a religious icon, they divert their attention from their anger to a religious icon. Past research has shown that distraction can offer immediate relief to an angry person (Denson, Moulds, & Grisham, 2011), although it may not be effective in reducing anger in the long run since it does not facilitate resolution of the anger event. Secondly, praying for the offender and meditating on a religious icon are religious activities. Therefore both of them may prompt religious thinking related to compassion and forgiveness. As a result people may experience less anger.

Although meditating on a religious icon can be effective in reducing anger, the present study speculated that praying for an offender is even more effective. There are two reasons for this speculation. The first reason is that praying for an offender is more likely than meditation to lead to a cognitive reappraisal of the anger event, which refers to the mental process of re-evaluating a situation in order to prevent a full-blown emotional response. As mentioned earlier on, praying involves active interaction with God during which one’s perception and feelings about an event may be affected by the imagined reaction from God. Since God is known to most Christians as someone who is loving, forgiving and patient, praying for the offender may remind
the pray-ers that God sees the offender as one of his beloved creations and that God actually
wishes the pray-ers to forgive him. In response to this imagined reaction from God, pray-ers may
become more forgiving towards the offender. On the other hand, since meditating on religious
icon does not involve any interactions with God, the amount of cognitive reappraisal of the anger
situation that it induces is likely to be less than that of praying for an offender.

The second reason for the speculation that praying for the offender is more effective than
meditating on a religious icon in reducing anger is that praying for an offender facilitates selfless
concern, referring to the feeling of “selfless caring for others” (Lambert et al., 2009, p.4). When
people pray for an offender, they have to wish that something good occurs to the offender. As a
result, when praying for the offender, people may have more selfless concern towards the
offender. Such self-concern may elicit empathy, compassion and love towards the offender
(Beach et al., 2008), leading to more forgiveness and a reduction in anger. In fact, selfless
concern has been found to be a mediator of the effect of prayer for others on forgiveness
(Lambert et al., 2009). On the other hand, meditating on a religious icon is less likely to facilitate
such a selfless concern, since people do not need to wish that something good occurs to the
offender.

As for praying for oneself, its effectiveness in reducing anger is uncertain. On one hand,
very little research has studied the effects of praying for oneself on anger. On the other hand,
whether praying for oneself is effective in reducing anger may depend on whether it causes pray-
ers to focus on their own anger. It is likely for provoked individuals to talk about their anger
towards their offender when they prayed for themselves, especially if they believe that God is
willing to hear about their feelings and offer comfort to them. As individuals talk about their
anger, they naturally recollect their anger experience and therefore may re-experience the anger
towards the offender. As a result, they may ruminate, i.e., the activity of recollecting anger-inducing memories, re-experiencing anger response and thinking about revenge (Caprara, 1986; Denson, Pedersen, & Miller, 2006; Sukhodolsky, Golub, & Cromwell, 2001). Past research showed that rumination is likely to exacerbate anger (Rusting & Nolen-Hoeksema, 1998) and increase aggression towards innocent people over extended time periods (Bushman, 2002; Bushman, Bonacci, Pedersen, Vasquez, & Miller, 2005). Chronic anger rumination is even associated with frequent experience of anger and aggressive behavior such as domestic abuse and road rage (Anestis, Anestis, Selby, & Joiner, 2009; Caprara, 1986; Collins & Bell, 1997; Denson et al., 2006; Sukhodolsky et al., 2001). Therefore, under the assumption that people who pray for themselves tend to focus on their anger towards the offender, praying for oneself will not reduce anger. Instead, people who pray for themselves may even experience more anger, since they ruminate on their anger when they pray.

However, it is also possible for people who pray for themselves not to focus on their anger towards the offender. Instead, they may obtain from God a kind of social support which helps to reduce their anger. According to Sharp (2010), who interviewed intimate partner abuse victims to study the effect of praying on their negative emotions, pray-ers could obtain from God various social support resources that may reduce anger. The first social support resource is an outlet for negative emotions. When people pray for themselves, they get to express their negative emotions freely to God, whom many pray-ers believe to be loving, caring and nonjudgmental. As a result, anger finds a way to be expressed and does not stock up inside the pray-ers. The second resource is positive reflected appraisals from God. When people pray for themselves, they remember that God loves them and cares about them. These ideas comfort the pray-ers and offset their negative emotions. The third resource is a sense of protection. When people pray for themselves, they
remember that God is their supplier of strength, and therefore they have more courage to face difficulties in life. The fourth resource is a willingness to forgive. When people pray for themselves, they do not just think about what God can offer them, but also what God wishes from them. If pray-ers believe that God wishes them to be forgiving, they may respond to God’s wish by trying to be more forgiving towards the offender. When people become more forgiving, they tend to experience less anger (e.g. Baskin and Enright 2004; Reed and Enright, 2006). Therefore, praying for oneself could be effective in reducing anger if the pray-ers do not focus on their anger, but instead obtain social support resources from God.

Based on the past literature, the present study hypothesized that praying for an offender is more effective than meditation in reducing anger among Hong Kong people towards Kung. Since the effectiveness of praying for oneself on anger reduction is ambivalent, the study was also interested in finding out whether it is more effective than meditation on reducing anger among Hong Kong people towards Kung. Due to time constraint, the present study looked into the short term effect of praying only.

**Method**

**Participants**

A total of 104 Christians who were also permanent residents of Hong Kong were recruited through personal invitation. Ten participants were excluded from the analysis due to different reasons. One participant was excluded because he was not or did not report to be a permanent resident of Hong Kong. Three participants were excluded because they did not or did not report to identify with “Hong Kong people”. Six participants were excluded from the study because they indicated that they did not pray for the target that the condition induced them to pray for.
Therefore, the actual sample size was 94. Thirty nine participants (41.5%) were male and the remaining 55 participants (58.5%) were female.

The distribution of years of residence in Hong Kong among the 94 participants was as follows: one participant (1.1%) had resided in Hong Kong for 7 to 10 years; 40 participants (42.6%) had resided in Hong Kong for 11 to 20 years; 33 participants (35.1%) had resided in Hong Kong for 21 to 30 years; 12 participants (12.8%) had resided in Hong Kong for more than 30 years. Eight participants (8.51%) did not report their years of residence in Hong Kong.

All participants attended a church except one participant (1.1%). All participants had been Christians for at least six months, except one participant who did not report his or her years of belief. The distribution of years of belief among the 94 participants was as follows: 20 participants (21.3%) had been Christians for less than 5 years; 35 participants (37.2%) had been Christians for 5 to 10 years; 27 participants (28.7%) had been Christians for 11 to 20 years; 11 participants (11.7%) had been Christians for more than 20 years.

The age distribution among the 94 participants was as follows: 25 of them (26.6%) were aged at 15-19; 42 of them (44.7%) were aged at 20-29; 12 of them (12.8%) were aged at 30-39; seven of them (7.4%) were aged at 40-49; six of them (6.4%) were aged above 50. Two participants (2.1%) did not report their age.

The distribution of educational level among the 94 participants was as follows: three participants (3.2%) reported to have attained primary school level; 16 participants (17.0%) reported to have attained secondary school level; 66 participants (70.2%) reported to have attained undergraduate or post-secondary level; 6 participants (6.4%) reported to have attained post-graduate level. Three participants (3.2%) did not report their educational level.

Procedure
I made appointments with participants at natural settings with little distraction where they would find comfortable praying. The locations for the experiment included open study areas with low traffic at the University of Hong Kong and the City University of Hong Kong, as well as function rooms in churches and the Hong Kong office of Campus Crusade for Christ. I conducted pilot studies in the open study area of the University of Hong Kong as well as a function room in a church. Participants reported that they felt comfortable praying at those locations.

The study consisted of three parts. In the first part of the study, participants were asked to watch a 3-minute clip which aroused their anger towards a Beijing University Professor Kung Qing-dong. As mentioned earlier on, the video contained insulting comments on Hong Kong people, such as comments that Hong Kong people were “dogs of colonialism” and “bastards”. Then, they were asked to rate on a 4-point scale how much they agreed that Kung was: love-worthy, antagonistic, selfish, loving, friendly, ridiculous, mentally strained, respect-worthy, sympathy-worthy, rational and trust-worthy. To prevent the participants from guessing the hypothesis of the study, they were asked to rate the same items on “most Mainland people” and Henry Tang, a scandal-hit ex-Chief Secretary of Hong Kong who were running for the Chief Executive election at the time when I conducted the study. By rating the 11 items also on “most Mainland people” and Henry Tang, participants were led to believe that the study was interested in their perceptions of mainlanders and Henry Tang as well. Participants then reported how much they agreed with what was said in the clip. Finally, they wrote down what they would like to say to Kung.

In the second part of the study, I randomly assigned participants to one of the three conditions of the study. Participants received different instructions according to the conditions
they were assigned to. In pray-for-oneself condition, participants received the following instructions: “In this section, I want you to spend 2 minutes to pray about your thoughts or feelings about the short video clip. You may pray for your emotional reactions towards the clip.” In pray-for-offender condition, participants received the following instructions: “In this section, I want you to spend 2 minutes to pray about your thoughts or feelings about the short video clip. You may pray for the main character in the clip.”

Two things should be noted here. Firstly, the “main character in the clip” was known to participants as Kung. Kung was considered as an offender because he insulted the participants earlier on when the clip was shown in the first part of the study. Secondly, the instructions for the two prayer conditions gave participants freedom to pray about anything though they were advised to pray for a particular target, i.e., oneself or Kung. I did not adopt instructions that directly ask the participants to pray for one single target only for two reasons. One reason was that the participants might be able to guess the hypothesis of the study. The other reason was that it could be difficult for pray-ers to pray for just one single target in practice. It is natural for pray-ers to shift their attention to somebody or something else occasionally.

In both pray-for-oneself and pray-for-offender conditions, participants were told that praying means conversations with God, and that praying may take any form. They were also provided with an example of prayer as reference. In pray-for-oneself condition, participants were given the following prayer as an example: “Dear Jesus, I want to pray for my hatred towards Kung. Although his speech angers me, for example by referring to Hong Kong people as dogs, I know You have already forgiven him. Jesus, I pray that you help me, and give me the courage to forgive him. I pray that you will remove the feelings of hatred and annoyance inside me. In Jesus’ name I pray, Amen.” In pray-for-offender condition, participants were given the following
prayer as an example: “Dear Jesus, I want to pray for Kung Qing-dong in the short video clip. Ever since he made the speech which insulted Hong Kong, he was attacked on all sides by Hong Kong people. I pray that You open his eyes, so that he realizes he has made a mistake and he admits to his misdeeds. I pray that You help him face the criticisms and deal with the stress brought by others’ criticisms. In Jesus’ name I pray, Amen.”

After praying, participants in both pray-for-oneself and pray-for-offender conditions jotted down who they prayed for, what they prayed about and how long they prayed for each target.

As for the meditation condition, participants meditated on a picture with a cross for 2 minutes. To help participants focus during the meditation, I gave them a free space where they could freely write or draw about anything while meditating. After meditation, participants jotted down what they meditated about.

At the end of the second part of the study, all participants wrote again what they would like to say to Kung. Then they rated again the 11 items that measured their anger towards Kung. They also rated the same items on “most Hong Kong people” and Henry Tang. I intentionally asked them about “most Hong Kong people” in the post-test instead of “most Mainland people” as in the pre-test, so that the post-test looked slightly different from the pre-test. In this way, participants might be less aware of the fact that I would compare their responses in the post-test with those in the pre-test. To prevent the participants from thinking that they had to report the same answers as they had before, they received the following verbal instructions: “In this section, you will do a questionnaire that is similar to the one you did. The answers you give can be the same as or different from what you previously gave.”

In the third part of the study, participants received three word cues and they had to use each of the word cues to write a sentence. The three word cues were “mainland people”, “Kung Qing-
dong” and “Henry Tang”, but only the sentence containing the word cue “Kung” would be analysed. The purpose of this sentence completion task was to measure the anger, forgiveness, aggression and tolerance of participants towards Kung. For more effective coding of the data, three other variables were also measured: forgiveness, aggression and tolerance. All three of them were believed to be associated with anger.

At the end of the third part of the study, participants reported their demographic data, including their gender, age, education level, whether they attend a church, years of being a Christian, whether they are permanent Hong Kong residents, the number of years they had spent in Hong Kong. They were also asked how much they identify with “Hong Kong people”.

Result

Factor analysis

A Principal Axis Factor (PAF) with a Varimax with Kaiser Normalization was conducted on the 11 items rated on Kung by 94 participants. Two factors were extracted – positive appraisal on Kung and negative appraisal on Kung. Positive appraisal on Kung accounted for 32.3% of the total variance, while negative appraisal on Kung accounted for 18.9% of the total variance. Items that measured positive appraisal on Kung were seven questions which asked the extent to which participants agreed that Kung was love-worthy, loving, friendly, respect-worthy, sympathy-worthy, rational and trust-worthy. Items that measured negative appraisal on Kung were four questions which asked the extent to which participants agreed that Kung was antagonistic, selfish, ridiculous and mentally strained. In the present study, positive appraisal on Kung was defined as the acts of agreeing that Kung has some positive attributes (i.e., agreeing that Kung is loving, friendly, rational and trust-worthy) and showing acceptance to Kung (i.e.,
agreeing that Kung is love-worthy, respect-worthy and sympathy-worthy). Negative appraisal on Kung was defined as the acts of agreeing that Kung has some negative attributes.

**Manipulation Checks**

The first manipulation check was conducted on all 68 participants who were assigned to the pray-for-oneself condition or the pray-for-the-offender condition. The 68 participants included nine of those who would later be excluded from the analysis because they were not or did not report to be a permanent resident of Hong Kong; or because they did not or did not report to identify with “Hong Kong people”; or because they did not pray for the target that the condition induced them to pray for.

The first manipulation check showed that participants in the pray-for-oneself condition prayed for themselves for a significantly longer time (measured in seconds) than those in the pray-for-the-offender condition, $t(66) = 2.68, p = .009$. Moreover, participants in the pray-for-the-offender condition prayed for Kung for a significantly longer time (measured in seconds) than those in the pray-for-oneself condition, $t(66) = -4.16, p < .001$. This manipulation check showed that the manipulation was successful.

The second manipulation check was conducted on the 59 participants after excluding the nine participants. The results were similar. Participants in the pray-for-oneself condition prayed for themselves for a significantly longer time (measured in seconds) than those in the pray-for-the-offender condition, $t(57) = 3.08, p = .003$. Participants in the pray-for-the-offender condition prayed for Kung for a significantly longer time (measured in seconds) than those in the pray-for-oneself condition, $t(57) = -5.76, p < .001$. This manipulation check also showed that the manipulation was successful.

**Positive and negative appraisals on Kung**
Table 1 lists out the pre-test and post-test mean positive appraisal on Kung according to participants’ conditions. I conducted a one-way ANOVA to test the differences among the three conditions in the pre-test positive appraisal on Kung as well as the pre-test negative appraisal on Kung. The analysis found no significant difference among conditions in their pre-test positive appraisal on Kung, $F(2,90) = 0.58, p = .456$. The analysis also found no significant difference among conditions in their pre-test negative appraisal on Kung, $F(2,89) = 0.87, p = .423$. These results showed that random sampling was effective in attaining a similar baseline level of positive and negative appraisal of Kung among the three conditions before the experimental manipulation.

Since the present study hypothesized that participants in the pray-for-the-offender condition would experience more anger reduction than those in the meditation condition, the present study expected to find that participants who prayed for Kung had more positive appraisal on Kung and less negative appraisal on Kung compared to those who meditated on a religious icon in the post-test. I conducted a one-way ANOVA to test if there were any differences among the three conditions in their positive and negative appraisal on Kung in the post-test. The analysis found that there were no significant difference among conditions on their positive appraisal on Kung in the post-test, $F(2,90) = 0.99, p = .346$, although the difference among conditions in the post-test was greater than that in the pre-test. Similarly, the analysis found that there were no significant difference among conditions on their negative appraisal on Kung in the post-test, $F(2,91) = 1.47, p = .241$, although the difference among conditions in the post-test was greater than that in the pre-test. Thus, the hypothesis that praying for an offender leads to more anger reduction compared to meditating on a religious icon was not confirmed.
To check again if conditions had any effect on the appraisal on Kung, I conducted a two-way mixed-design ANOVA with conditions as the between-subject variable and the pre-test-post-test appraisal on Kung as the within subject variable. The analysis found ambivalent results. On one hand, the analysis found a marginally significant interaction between conditions and the pre-test-post-test positive appraisal on Kung, $F(2,89) = 3.03, p = .054$. This result indicated that conditions might have some effect on the positive appraisal on Kung. On the other hand, the analysis showed that there were no significant interaction between conditions and the negative appraisal on Kung, $F(2,89) = 0.54, p = .58$. This result indicated that conditions have no effect on the negative appraisal on Kung.

Since some interactions seemed to exist between conditions and the positive appraisal on Kung, I conducted another two-way mixed-design ANOVA with each of the seven items measuring the positive appraisal on Kung as the within subject variable, while keeping conditions as the between subject variable. The analysis found significant interaction between conditions and the lovingness rating on Kung, $F(2,90) = 3.11, p = .049$. I further conducted paired sample t-tests to test the effectiveness of each condition in increasing the lovingness rating on Kung. Paired sample t-tests showed that participants reported Kung as more loving after they were induced to pray for Kung, $t(30)= -2.79, p = .009$, but not after they were induced to pray for oneself, $t (27)= -1.00, p = .326$, nor after they meditated on a religious icon, $t(33)= .57, p = .571$.

I further conducted a pair-wise t-test on all participants which showed that participants generally had significantly more positive appraisal on Kung in the post-test than in the pre-test, $t(91) = -7.28, p < .001$, and significantly less negative appraisal on Kung in the post-test than in the pre-test, $t(91) = 4.14, p < .001$. I also conducted pair-wise t-tests the effectiveness of each of the three conditions in facilitating positive appraisal and reducing negative appraisal on Kung.
Results showed that participants in the pray-for-oneself condition had significantly more positive appraisal on Kung in the post-test than in the pre-test, $t(27) = -4.92, p < .001$, and significantly less negative appraisal on Kung in the post-test than in the pre-test, $t(26) = 2.46, p = .021$. Even participants who meditated on a religious icon had significantly more positive appraisal on Kung in the post-test than in the pre-test, $t(32) = -2.83, p = .008$, and significantly less negative appraisal on Kung in the post-test than in the pre-test, $t(33) = 2.843, p = .008$. As for participants in the pray-for-the-offender condition, while they also had significantly more positive appraisal on Kung in the post-test than in the pre-test, $t(30) = -5.43, p < .001$, the negative appraisal they had on Kung in the post-test was similar to that in the pre-test, $t(30) = 1.75, p = .091$.

I conducted a Pearson correlation to find out if the absolute amount of time spent on praying for Kung among the 94 participants was correlated with their pre-test positive appraisal, post-test positive appraisal, pre-test negative appraisal and post-test negative appraisal on Kung. The analysis found that the absolute time spent on praying for Kung had no significant correlation with pre-test positive appraisal of Kung, $r(92) = .06, p = .579$, or pre-test negative appraisal of Kung, $r(91) = -.11, p = .306$. I expected to see that the absolute time spent on praying for Kung to be correlated with post-test positive appraisal. However, the analysis showed that it had no significant correlation with post-test positive appraisal, $r(92) = .08, p = .455$, or post-test negative appraisal, $r(93) = -.02, p = .805$. In fact, it was beyond expectation to see that post-test negative appraisal to become slightly positively correlated with the absolute time spent on praying for Kung.

I further conducted a Pearson correlation to find out if the percentage of time spent on praying for Kung among the 94 participants was correlated with their pre-test positive appraisal,
post-test positive appraisal, pre-test negative appraisal and post-test negative appraisal on Kung. The analysis found that the percentage of time spent on praying for Kung had no significant correlation with pre-test positive appraisal of Kung, $r(58) = .11, p = .421$, or pre-test negative appraisal of Kung, $r(57) = -.15, p = .262$. I expected to see that the absolute time spent on praying for Kung to be correlated with post-test positive appraisal. However, the analysis showed that it had no significant correlation with post-test positive appraisal, $r(59) = .09, p = .522$, or post-test negative appraisal, $r(59) = -.09, p = .504$. 

To sum up the above results, statistical analysis in general showed that whether participants prayed or meditated on a religious object had no significant effect on the positive or the negative appraisal on Kung. All conditions were effective in facilitating positive appraisal and reducing negative appraisal on Kung, except for praying-for-the-offender condition which had no effect on the negative appraisal on Kung.

**Content Analysis**

I recruited two coders who did not participate in the study to code the answers to the three questions which measured participants’ anger towards Kung. The three questions included: a pre-test question on what participants would like to say to Kung (referred to as the pre-test question); a post-test question on what participants would like to say to Kung (referred to as the post-test question); and a post-test sentence completion task using “Kung Qing-dong” as the word cue (referred to as the sentence completion question). It should be noted that the post-test question and the sentence completion question measured slightly different things. While the post-test question measured the level of anger, aggression, tolerance and forgiveness that participants wished to express to Kung himself, the sentence completion question measured the level of anger, aggression, tolerance and forgiveness that participants held towards Kung.
Coders gave a rating of 0 to 2 on the extent of anger, aggression and tolerance expressed in each of the answers. Coders gave a rating of 0 if participants did not express any anger in the answer; a rating of 1 if participants expressed some anger in the answer; and a rating of 2 if participants expressed intense anger in the answer. The same rule applied to aggression and tolerance. Coders also gave a rating of -1 to 2 on the amount of forgiveness participants expressed in their answers. Coders gave a rating of -1 if participants showed an unwillingness to forgive. Coders rated privately on ten sets of answers each time and then they cross-checked their coding with each other. Should they find a difference in their coding on an answer, they read the answer again carefully and then explained to each other why they had assigned a certain code to the answer. Finally, they reached a consensus on their coding. Coders were 100% consistent in their coding of answers. The following paragraphs quote a sample of responses from participants which give an idea of what the standard of coding was in the present study.

**Coding for anger.**

The following responses received a rating of 1 on anger: “Hong Kong people are not dogs. They are not bastards.” “Kung Qing-dong is disrespectful and rude. He does not even know about basic courtesy. He is in no position to judge that Hong Kong people are dogs.” The following responses received a rating of 2 on anger: “Your thinking is communist, and you are the running dog (literally meaning ‘lackey’) of communism.” “Kung Qing-dong describes Hong Kong people as dogs, and this makes me feel very angry. He does not care how people feel when he talks.”

**Coding for forgiveness.**

The following responses received a rating of -1 on forgiveness: “Despite knowing that God still loves him (Kung), it is very difficult to imagine that I can forgive him.” “Who are you to criticize Hong Kong people?” The following responses received a rating of 1 on forgiveness:
“He (Kung) should try to love his fellow Hong-Kung-mates.” “I wish that Kung Qing-dong has the wisdom to learn to love and accept others, and to use his authority to help others love and accept each other as well.” The following responses received a rating of 2 on forgiveness: “Although Kung is not adorable in our eyes, he is worth to be loved just like we are” “I am willing to forgive him (Kung) for what he has said, and I wish to pray for him in the future.”

Coding for aggression.

In the present study, since no participants expressed the intention to physically attack the offender, the definition of aggression was refined to verbal aggression. The following responses received a rating of 1 on aggression: “Please reflect again what ‘colony’ means and understand more about the situation of Hong Kong. I don’t think Chinese people are senseless, but Mr Kung, you are very senseless, rude, uncivilized and conceited.” “Kung’s opinion is too radical and it demonstrates a lack of consideration for the mistakes of mainlanders. It humiliates not just Hong Kong, but his profession as a university professor.” The following responses received a rating of 2 on aggression: “You are a dog! Please mind what you say!” “As a descendant of Confucius (who was surnamed ‘Kung’), Kung brings humiliation to the Kung’s family by calling people ‘dogs’, and he is not qualified to be a member of the Kung’s.”

Coding for tolerance.

The following responses received a rating of 1 on tolerance: “Please stay calm.” “He (Kung) is just another scholar who suddenly got on his nerves and criticized Hong Kong people harshly. Actually it is no big deal.” The following responses received a rating of 2 on tolerance: “Although his (Kung’s) speech was radical, subjective and partial, I believe that he just wanted to protect mainland people.” “I thank you for your criticisms, for real!”
I conducted a Pearson correlation test on the pre-test anger, pre-test forgiveness, pre-test aggression and pre-test tolerance. Consistent with the assumption of the present study, pre-test anger was negatively correlated with pre-test forgiveness, \( r(93)=.482, p<.001 \), positively correlated with pre-test aggression, \( r(94)=.624, p<.001 \), and negatively correlated with pre-test tolerance, \( r(93)=.536, p<.001 \). Moreover, there were significant inter-correlations among pre-test anger, pre-test forgiveness, pre-test aggression and pre-test tolerance, with a maximum \( p \) of .020.

Table 2 lists mean anger, mean forgiveness, mean aggression and mean tolerance in pre-test, the post-test question as well as the sentence completion question according to participants’ conditions. I conducted a one-way ANOVA to test the differences among the three conditions in their pre-test anger, pre-test forgiveness, pre-test aggression as well as pre-test tolerance. The analysis found no significant differences among conditions in their pre-test anger, \( F(2,91)=0.28, p=.76 \); no significant differences among conditions in the pre-test aggression, \( F(2,91)=0.52, p=.604 \); and no significant difference among conditions in the pre-test tolerance, \( F(2,91)=0.91, p=.407 \). However, the analysis found significant difference among conditions in their pre-test expressed forgiveness, \( F(2,91)=3.77, p=.027 \). These results show that random sampling was effective in attaining a similar baseline level of anger, aggression and tolerance among the three conditions during pre-test, but it was not able to attain a similar baseline level of forgiveness among the conditions during pre-test.

The present study predicted the praying for the offender was more effective than meditating on a religious icon in reducing anger and aggression as well as increasing forgiveness and tolerance. I conducted a one-way ANOVA test the differences among the three conditions in their post-test anger, post-test aggression and post-test tolerance. Contrary to the hypothesis, the analysis found no significant difference among conditions in post-test anger as measured in the
post-test question, $F(91)=0.57$, $p=.569$, and post-test anger measured in the sentence completion question, $F(91)=0.60$, $p=.552$. Contrary to the hypothesis, the analysis also found no significant difference among conditions in post-test aggression as measured in the post-test question, $F(91)=0.12$, $p=.887$, and post-test aggression as measured in the sentence completion question, $F(91)=0.11$, $p=.899$. Contrary to the hypothesis, the analysis further found no significant difference among conditions in post-test tolerance as measured in the post-test question, $F(89)=0.13$, $p=.875$, and post-test tolerance as measured in the sentence completion question, $F(91)=0.91$, $p=.407$. Since pre-test forgiveness did not pass the test of homogeneity of variances, an ANCOVA was conducted to test the effect of conditions on post-test forgiveness, with pre-test forgiveness as the covariate. The present study predicted the praying for the offender was the most effective in increasing forgiveness, and thus it expected to see that conditions had an effect on post-test forgiveness. Contrary to the hypothesis, the analysis found no significant effect of conditions on the post-test forgiveness as measured in the post-test question, $F(89)=0.94$, $p=.396$, and on the post-test forgiveness as measured in the sentence completion question, $F(89)=1.83$, $p=.167$.

To sum up the results from the content analysis, the analysis showed that whether participants prayed or meditated had no effect on anger, forgiveness, aggression or tolerance. Therefore, the hypothesis that praying for others is more effective than meditating on religious icon in reducing anger and aggression as well as increasing forgiveness and tolerance was not confirmed.

**Discussion**

The present study aimed to find out if praying for oneself, praying for the offender and meditating on a religious icon are different in their effectiveness on reducing anger in a social
conflict context. It was hypothesized that praying for the offender is more effective than meditating on a religious icon in reducing anger. Two reasons were proposed. One reason is that praying for the offender is more likely than meditating on a religious icon to facilitate selfless concern, which promotes forgiveness and thus reduces anger. The other reason is that praying for the offender is more likely than meditating on a religious icon to lead to a cognitive reappraisal of the anger situation, which facilitates forgiveness and reduce anger. Since I hypothesized that praying for the offender is more effective than meditating on a religious icon in reducing anger, I expected to find that praying for the offender is more effective than meditating on a religious icon in facilitating positive appraisal and reducing negative appraisal on the offender. Contrary to the expectation, praying for the offender were not significantly better in facilitating positive appraisal on the offender compared to meditating on a religious icon. Also contrary to the expectation, praying for the offender was not effective in reducing negative appraisal on the offender, while meditating on an icon was effective in reducing negative appraisal on the offender. Moreover, praying for the offender was not more effective than meditating on a religious icon in facilitating forgiveness and tolerance as well as in reducing anger and aggression.

**Three notable trends**

Despite the lack of significant results, the present study noted three trends. One of the trends was that praying for the offender led to the biggest increase in positive appraisals on the offender but the least reduction in negative appraisals on the offender compared to the other two conditions (Figure 1). Praying for an offender may be the least effective in reducing negative appraisal because many participants who prayed for Kung asked God to help Kung realize his mistakes. Such kind of prayer which stressed the need for the offender to repent or to be
transformed by God might have reinforced the belief that the offender had certain negative attributes.

The present study noted another trend regarding the effects of praying for oneself. Similar to the case of praying for the offender, praying for oneself were not significantly better in facilitating positive appraisal and reducing negative appraisal on the offender compared to meditating on a religious icon. Also similar to the case of praying for the offender, praying for oneself was not more effective than meditating on a religious icon in facilitating forgiveness and tolerance as well as in reducing anger and aggression. In sum, there was a lack of significant results which proved any difference in the effects on anger between praying for oneself and praying for the offender. Nevertheless, the present study noted the trend that praying for oneself may be more effective in facilitating forgiveness compared to praying for others, which facilitated forgiveness to a similar extent as meditating on a religious icon did (Figure 3). It is possible that praying for the offender is less effective in facilitating in forgiveness because it is focused on the negative attributes of the offender that need to be changed.

The third trend that the present study noted was that praying in general might be more effective than meditating on a religious icon in reducing anger and aggression as well as facilitating forgiveness and tolerance. Praying for oneself and praying for the offender appeared to be more effective than meditating on a religious icon in reducing anger in the sentence completion question, though the post-test question did not show such a trend (Figure 2). Similarly, praying for oneself and praying for the offender appeared to be more effective than meditating on a religious icon in facilitating forgiveness as shown in the sentence completion question, though the post-test question did not show such a trend (Figure 3). Also, praying for oneself and praying for the offender appeared to be more effective than meditating on a religious icon in facilitating forgiveness and tolerance. Praying for oneself and praying for the offender appeared to be more effective than meditating on a religious icon in reducing anger and aggression as well as facilitating forgiveness and tolerance.
icon in facilitating tolerance as shown in the sentence completion question, though the post-test question did not show such a trend (Figure 5). In addition, praying for oneself and praying for the offender appeared to be more effective than meditating on a religious icon in reducing aggression as shown in both the post-test question and sentence completion question (Figure 4). The above findings suggested the possibility that praying could be more effective than meditating on a religious icon in reducing anger, although the statistical analysis did not provide sufficient evidence to support this possibility.

**Limitations and suggestions for future research**

There are several possibilities why the current research did not find any significant difference among the conditions on their effect on anger. One possible reason is that the sample size was too small. Originally, 104 participants were recruited. However, 10 participants were excluded because of one of the following reasons: they were not or did not report to be a permanent resident of Hong Kong; they did not or did not report to identify with “Hong Kong people”; or they did not pray for the target that the condition induced them to pray for. The loss of participants reduced the power of the study significantly. Given a larger sample size, the difference among the conditions on their effect on anger may become more apparent.

The inadequate strength in the experimental manipulation could be another possible reason why the current research did not find any significant difference among the conditions on their effect on anger. In the present study, participants in the two prayer conditions spent an average of 1.37 minutes on praying. Participants in the pray-for-oneself condition spent an average of 1.13 minute to pray for themselves, while participants in the pray-for-the-offender condition spent an average of 1.14 minute to pray for the offender. In the study of Bremner et al. (2011) which found that praying for an offender is effective in reducing anger, participants prayed for
their offender for 5 minutes. It is possible that praying might be only effective in reducing anger if sufficient time is provided for cognitive reappraisal to occur. The short time of praying limited the degree of cognitive change that participants could have. The present experiment induced a relatively short time of praying because pilot studies on the present research showed that participants stopped praying after around two minutes. One possible way to improve the present study would be to provide guided questions on what to pray about, so that participants may be able to pray for a longer period of time. However, if the guided questions are not neutral enough, e.g., it induced cognitive reappraisal of the anger situation, it might become a confounding variable to the study. As a result, even if participants reported a significant reduction in anger, such a change could be caused in part by the activity of reading the prompt questions. Another possible way to improve study is to induce praying for consecutive days or even weeks. In this way, participants would be given sufficient chances to experience the cognitive reappraisal effect that could be brought about by praying. However, the experimental procedures will become more complicated and the time cost will become much higher.

Methodological weaknesses could be the third possible reason why the current research did not find any significant difference among the conditions in their effect on anger. In the present study, participants who were assigned to either one of the two prayer conditions were given a significant amount of freedom over deciding what they wanted to pray about. Instead of strictly requiring participants to pray just for Kung or themselves, I just “advised” participants on whom to pray for. There were two reasons for this. Firstly, by allowing more freedom in deciding what to pray about, it might be less likely for participants to be able to guess the hypothesis of the research, or the experimental condition they were in. Secondly, praying is an activity that should be motivated inwardly by one’s wish to communicate with God on certain matter rather than
being motivated externally by instructions. In order to motivate participants to pray for whom the condition wished them to pray for, participants were given an example of prayer that was either for Kung or for oneself. In the present study, most participants prayed for the target that the condition wished them to pray for, but a significant number of participants prayed for both themselves and for Kung. In the pray-for-onself condition, some participants prayed longer for Kung then for themselves; while in the pray-for-the-offender condition, some participants prayed longer for themselves than for Kung. In fact, one of the biggest challenges of studying praying is to keep the neutrality of praying while manipulating it at the same time. Future research may improve the methodology of the present study to see if there may be an effect of praying for the offender on anger.

The fourth possible reason why the current research did not find any significant difference among the conditions in their effect on anger was that, praying for the offender or for oneself is indeed no better than meditating on a religious icon in reducing anger in provoked individuals in social conflict contexts. This possible implication of the study does not contradict with the research findings of Bremner et al. (2011) that praying for the offender is effective in reducing anger. Firstly, Bremner et al. studied anger in the personal conflict contexts, while the present research studied anger in the social conflict contexts. It is possible that anger in social conflict contexts is more stable than anger in personal conflicts, since the former has an element of collectivism. People’s perception of the offender may be influenced by how other people in their society perceive the offender. Secondly, Bremner et al. compared the effect of praying for an offender to the effect of thinking about an offender, while the present study compared the effect of praying for an offender to meditating on a religious icon.
Thinking about an offender is different from praying for an offender in three ways. Firstly, praying for an offender involves thinking about an offender, but thinking about an offender does not involve praying for an offender. Secondly, thinking about an offender does not prompt religious thinking. Thirdly, it is a ruminative condition, since thinking about an offender will cause people to focus on their anger experience as well as the feelings and evaluation that are associated with it. As mentioned earlier on in this paper, rumination could perpetuate anger and even increase it (Rusting & Nolen-Hoeksema, 1998). As a result of rumination, people could not divert their attention from their anger experience to something else. Based on the above three differences between praying for an offender and thinking about an offender, there can be three interpretations for Bremner et al.’s research finding that praying for an offender is more effective than thinking about an offender in reducing anger. The first interpretation of the research finding is that praying for an offender is effective in reducing anger. The second interpretation of the research finding is the prompting religious thinking is effective in reducing anger. The third interpretation of the research finding is that prompting rumination facilitates anger. Bremner et al. used the first interpretation to explain their research results. They ruled out the possibility of the third interpretation by finding that participants in the meditation condition experienced some reduction in anger, although the reduction was significantly lower than that among participants who prayed for the offender. However, they did not rule out the second possibility.

To improve Bremner et al.’s research study and to test if praying for an offender is indeed effective in reducing anger, the present study used meditating on a religious icon as a control condition. The present study found that praying for the offender is not more effective than meditating on a religious icon in reducing anger. As mentioned above, this result could be due to the lack of sample size, the weak manipulation or the methodological problem of the present
study. Future research may enlarge the sample size and improve the experimental manipulation as well as the methodology in the present study to test if praying for the offender is effective in reducing anger.

**Conclusion**

Previous literature has indicated that praying for an offender may be effective in reducing anger in provoked individuals. The present study extended the past findings by testing if praying for an offender is effective in reducing anger in social contexts. It also investigated the effects of another type of prayer, i.e., praying for oneself, on anger. The present work suggested that praying for an offender was not more effective than meditating on a religious icon in reducing anger in a social conflict context.
References


Mental Health Foundation (2008). *Boiling point report: Problem anger and what we can do about it.* London: MHF.


Table 1. *Effects of praying for oneself, praying for an offender and meditating on a religious icon on positive and negative appraisals on the offender.*

<table>
<thead>
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<th>Pray for oneself</th>
<th>Pray for offender</th>
<th>Meditate</th>
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Table 2. *Effects of praying for oneself, praying for an offender and meditating on a religious icon on anger, forgiveness, aggression and tolerance towards the offender.*

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<th>Meditate</th>
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Figure 1. Effects of praying for oneself, praying for an offender and meditating on a religious icon on positive and negative appraisals on the offender.
Figure 2. Effects of praying for oneself, praying for an offender and meditating on a religious icon on anger towards the offender
Figure 3. Effects of praying for oneself, praying for an offender and meditating on a religious icon on forgiveness towards the offender.
Figure 4. Effects of praying for oneself, praying for an offender and meditating on a religious icon on aggression towards the offender.
Figure 5. Effects of praying for oneself, praying for an offender and meditating on a religious icon on aggression towards the offender.
Appendix A

Consent Form for Pray-for-oneself and Pray-for-the-offender Conditions
參與研究同意書

感謝閣下願意撥冗參與本人 Carmen Bat 的香港大學心理學學士畢業研究，此研究旨在收集有關信仰及感受的資料。

這次研究一共分為三部分。第一部分，你將會觀賞一段三分鐘的短片及填寫一份問卷。你或許會因為短片中的內容而感到輕微不安，但此不安的感覺不會比日常所經歷的大。第二部分，你將會禱告二至三分鐘，並填寫一份問卷。第三部分，你將會完成一項寫作活動。整個研究過程需時大概三十分鐘。

是次研究並不為你提供報酬，但所搜集數據將對信仰與感受的研究提供寶貴資料。是次參與純屬自願性質，你可以隨時中止參與研究，而此決定並不為閣下帶來任何負面後果。

本人所收集的資料只作研究用途，亦只有負責這次研究的人員才能存取，個人資料將絕對保密，如你對是項研究有任何問題，你可以現在提出。

如日後你對是項研究有任何查詢，請與本人聯絡（電話: 6053-2116；電郵: batkaman@hku.hk）。如你想知道更多有關研究參與者的權益，請聯絡香港大學非臨床研究操守委員會（2241-5267）。如你明白以上內容，並願意參與是項研究，請在下方簽署。

再次感謝閣下是次心理學研究的支持和參與。

回條

本人_________________________（姓名）同意參與是項心理學研究並提供真實資料，而我明白所提供的資料只供學術用途，將絕對保密。

_________________________  日期

簽署
Appendix B

Consent Form for Meditation Condition
參與研究同意書

信仰及感受

感謝 閣下願意撥冗參與本人 Carmen Bat 的香港大學心理學學士畢業研究。此研究旨在收集有關信仰及感受的資料。

這次研究一共分為三部分。第一部分，你將會觀賞一段三分鐘的短片及填寫一份問卷。你或許會因為短片中的內容而感到輕微不安，但此不安的感覺不會比日常所經歷的大。第二部分，你將會默想二至三分鐘，並填寫一份問卷。第三部分，你將會完成一項寫作活動。整個研究過程需時大概三十分鐘。

是次研究並不為你提供報酬，但所搜集數據將對信仰與感受的研究提供寶貴資料。是次參與純屬自願性質，你可以隨時中止參與研究，而此決定並不為閣下帶來任何負面後果。

本人所收集的資料只作研究用途，亦只有負責這次研究的人員才能存取，個人資料將絕對保密。如你對是項研究有任何問題，你可以現在提出。

如日後你對是項研究有任何查詢，請與本人聯絡（電話：6053-2116；電郵：batkaman@hku.hk）。如你想知道更多有關研究參與者的權益，請聯絡香港大學非臨床研究操守委員會 (2241-5267)。如你明白以上內容，並願意參與是項研究，請在下方簽署。

再次感謝 閣下是次心理學研究的支持和參與。

回條

本人_________________（姓名）同意參與此項心理學研究並提供真實資料，而我明白所提供的資料只供學術用途，將絕對保密。

_________________ ____________________
簽署 日期
Appendix C

Pre-test Questionnaire
問卷

<table>
<thead>
<tr>
<th></th>
<th>非常不同意</th>
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<tbody>
<tr>
<td>大部分內地人是可信任的。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>大部分內地人是值得被愛的。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>大部分內地人是心懷敵意的。</td>
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<td>大部分內地人是荒謬可笑的。</td>
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<td>3</td>
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</tr>
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<td>大部分內地人是精神緊張的。</td>
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<td>4</td>
</tr>
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<td>大部分內地人是有思考能力的。</td>
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</tr>
</tbody>
</table>
非常不同意 | 不同意 | 同意 | 非常同意
--- | --- | --- | ---
片中的人物是可信任的。 | 1 | 2 | 3 | 4
片中的人物是值得被爱的。 | 1 | 2 | 3 | 4
片中的人物是心怀敌意的。 | 1 | 2 | 3 | 4
片中的人物是自私的。 | 1 | 2 | 3 | 4
片中的人物是有爱心的。 | 1 | 2 | 3 | 4
片中的人物是友善的。 | 1 | 2 | 3 | 4
片中的人物是荒谬可笑的。 | 1 | 2 | 3 | 4
片中的人物是精神紧张的。 | 1 | 2 | 3 | 4
片中的人物是值得尊重的。 | 1 | 2 | 3 | 4
片中的人物是值得同情的。 | 1 | 2 | 3 | 4
片中的人物是有思考能力的。 | 1 | 2 | 3 | 4

非常不同意 | 不同意 | 同意 | 非常同意
--- | --- | --- | ---
你有几大程度同意片中人物的言论？ | 1 | 2 | 3 | 4

你現在最想跟片中人物說甚麼？
Appendix D

Prayer instructions and Prayer record form for Pray-for-oneself condition
第二部分

在此部分，我想你用 2-3 分鐘的時間，就着你對短片的想法及/或感受作一個祈禱。你可以為自己
對短片的情緒反應祈禱。

祈禱即是與神交談，沒有特定的形式。如果你不知道該怎樣祈禱，你可以參考以下的例子。

例：
主耶穌，我想為到自己對孔慶東的惱恨祈禱。雖然孔慶東的言論激怒我，例如他形容香港人是
dog，但我知道主你已經饒恕他。主呀，求你幫助我，讓我有勇氣去饒恕他。求你使我心中憤怒、
煩躁的感覺可以消除。奉主名求，阿們。

請不要翻閱後頁。
請記錄你剛才的祈禱內容。

<table>
<thead>
<tr>
<th>祈禱對象</th>
<th>祈禱內容</th>
<th>祈禱長度</th>
</tr>
</thead>
</table>
| e.g. 自己 | • 表達我的感受(憤怒、煩躁)  
• 表達我的看法(孔慶東很自私)  
• 求主讓我有勇氣去饒恕孔慶東  
• 求主消除我心中憤怒、煩躁 | 大概 6 min |
Appendix D

Prayer instructions and Prayer record form for Pray-for-the-offender condition
在此部分，我想你用 2-3 分钟的时间，就着你对短片的想法及/或感受作一个祈祷。你可以为片中人物代求。

祈祷即是与神交谈，没有特定的形式。如果你不知道该怎样祈祷，你可以参考以下的例子。

例：
主耶稣，我想为到刚才短片中的孔庆东祈禱。自從他發表了侮辱香港的言论，他便成了全城的眾矢之的。求主你讓他有明亮的眼睛，能發現並勇於承認自己的錯處。求主你亦幫助他面對惡意批評，讓他能適當地處理言論所帶來的壓力。奉主名求，阿們。

請不要翻閱後頁。
問卷

請記錄你剛才的祈禱內容。

<table>
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<th>祈禱對象</th>
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</thead>
</table>
| e.g. 孔慶東 | • 求主讓他有明亮的眼睛  
• 求主讓他能發現並勇於承認自己的錯處  
• 求主幫助他面對惡意批評  
• 求主讓他能適當地處理言論所帶來的壓力 | 大概 0.5min |
Appendix E

Meditation instructions and Meditation record form for Meditation condition
第二部分

在此部分，我想你用 **2-3 分鐘** 的時間，默想以下圖案。

(以下空間或許能幫助你默想，你可以隨意在這裡書寫/繪畫等。)
問卷

請記錄你剛才默想的內容。

______________________________________________________________________________________

______________________________________________________________________________________

______________________________________________________________________________________

______________________________________________________________________________________

______________________________________________________________________________________

______________________________________________________________________________________

______________________________________________________________________________________

______________________________________________________________________________________

______________________________________________________________________________________
Appendix F

Post-test Questionnaire
你現在最想跟孔慶東說甚麼？

(部分以下題目可能在上一部分出現過，但你的回答不一定跟上一部分的相同。)

<table>
<thead>
<tr>
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唐英年是值得尊重的。

唐英年是值得同情的。

唐英年是有思考能力的。

非常不同意  不同意  同意  非常同意

片中的人物是可信任的。

片中的人物值得被愛的。

片中的人物是心懷敵意的。

片中的人物是自私的。

片中的人物是有愛心的。

片中的人物是友善的。

片中的人物是荒謬可笑的。

片中的人物是精神緊張的。

片中的人物是值得尊重的。

片中的人物是值得同情的。

片中的人物是有思考能力的。
Appendix E

Sentence Completion Task
第三部分

試用以下名詞，創作不少於 15 字的句子。

1. 內地人

______________________________________________________________________________
______________________________________________________________________________

2. 孔慶東

______________________________________________________________________________
______________________________________________________________________________

3. 唐英年

______________________________________________________________________________
______________________________________________________________________________