

Compassionate Altruism, Guilt, Depression and Contemplative Practices

Presented at
The Science of Compassion
Origins, Measures and Interventions
July 19-22, 2012 - Telluride, Colorado

Lynn E. O'Connor,^a Jack W. Berry,^b Rachna Rangan,^a David J. Stiver,^c Rick Hanson^d and Winfred Ark^a
a The Wright Institute, Berkeley; *b* Samford University; *c* Graduate Theological Union;
d Wellspring Institute for Neuroscience and Contemplative Wisdom

EMOTIONS, PERSONALITY
AND ALTRUISM
RESEARCH GROUP
WWW.EPARG.ORG

Introduction

After two decades of studying altruism, empathy and the empathy-based types of guilt associated with pathogenic cognitions or imaginary crimes, pathological altruism, and multiple psychological problems, we became interested in the experience of Tibetan Buddhists who had been described as exhibiting protective factors in terms of reactions to stress. It was observed that --differing from many who escape politically repressive countries-- Tibetan Buddhists were less vulnerable to PTSD and depression when migrating to India, despite the severe traumas they had experienced in Tibet. Further, sophisticated fMRI studies were suggesting that experienced Tibetan meditators showed signs associated with enhanced emotion regulation and general wellbeing.

In our first study, we compared 98 Tibetan Buddhist practitioners to a non-Buddhist, non-practicing sample. We found the Tibetan Buddhists demonstrated significantly lower levels of pathogenic guilt ("omnipotent responsibility guilt"), lower levels of pathogenic empathy (empathy-distress), depression, and neuroticism, and perhaps most important, significantly higher levels of altruism towards strangers. Within the group of Tibetan Buddhists, we found significant correlations between these variables and intensity of practice.

The present study was designed to compare various contemplative practices to one another, and to normal (non-practicing) sample. Groups included: Tibetan, Theravada, Zen, Christian, Mindfulness (secular), and Yoga. We are trying to determine if our previous findings were unique to Tibetan Buddhists or shared by other groups engaged in contemplative practice. Do practitioners of popular and basically secular "mindfulness meditation" demonstrate the same kind of emotion regulation, in terms of controlling or inhibiting empathy-based pathogenic guilt we had found in the Tibetan Buddhist sample? Is any particular system of beliefs important in terms of the kind of wellbeing commonly found in Tibetan Buddhists, that our prior study supported? Is contemplative practice embedded in a religion more likely to have a positive impact when compared to secular (non-religious) contemplative practice? The present study, while not providing complete answers, begins to shed light on these questions.



Methods (continued)

questionnaire include how often the participant "gave money for an indefinite amount of time" and "helped them think about a problem."

Interpersonal Reactivity Index (IRI) (Davis, 1980): The IRI is a 28-item self-report instrument measuring distinct categories of empathy. **Perspective taking** is the ability to identify with, or understand cognitively the situation experienced by another person. **Empathic Concern** is the degree of concern a person tends to feel on witnessing difficult or unpleasant experiences occurring to another person. **Personal Distress** is the degree of distress a person is likely to feel, upon witnessing difficulties experienced by another person.

The Center for Epidemiologic Studies Depression Scale (CESD) (Radloff, 1977) is a widely-used 20-item self-report instrument, with responses on a Likert scale ranging from 1 to 4, and total scores ranging from 0 to 60. The cut off score for depression is equal to or greater than 16, which indicates at least a mild depression, though many clinicians mark a mild depression starting well below 16.

Brief Big Five Inventory (BFI) (John, 1990) is a 44-item self-report inventory for assessing five personality traits: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism.

Methods

To compare various contemplative practices we conducted an anonymous online survey that included 1484 practitioners compared to 450 non-practitioners. The study was announced on Rick Hanson's blog (www.rickhanson.net), Craigslist, and on a variety of Tibetan Buddhist listservs connected to the Foundation for the Preservation of the Mahayana Tradition (FPMT) in the United States.

INSTRUMENTS:

Interpersonal Guilt Questionnaire-67 (IGQ-67) (O'Connor, Berry, Weiss, Bush & Sampson, 1997). The IGQ-67 is a 67-item measure, using Likert-type scales to assess empathy-based guilt. Three subscales were used in this study: **Survivor Guilt** is characterized by the belief that being successful or happy will make others feel inadequate simply by comparison (e.g., "It makes me very uncomfortable to receive better treatment than the people I am with"). **Separation Guilt** is characterized by the belief that if a person separates, leads his or her own life, or differs from loved ones in some way, he or she will cause loved ones to suffer (e.g. "I am reluctant to express an opinion that is different from the opinions held by my family or friends"). **Omnipotent Responsibility Guilt** is characterized by the belief that one is responsible for the happiness and well being of others (e.g. "I often find myself doing what someone else wants me to do, rather than doing what I would most enjoy").

Compassionate Altruism Scale (CAS) (Berry & O'Connor, 2002). The CAS is a 45-item instrument, derived from a measure of social support (Vaux, Riedel, & Stewart, 1987). Instead of measuring how much social support a person received, the CAS measures how much support someone tends to extend to others. Respondents indicate how frequently they perform acts of altruism for family members, friends, and strangers in a variety of social situations. Items from this

Sample Characteristics

The Contemplative Practitioner sample ($N=1484$; 82.4% female; mean age 52.3 yrs, range 17-87) represent the following practices: Mahayana ($n=71$), Vajrayana ($n=50$), Theravada ($n=77$), Pure Land ($n=10$), Soto Zen ($n=17$), Centering Prayer ($n=67$), Mindfulness-based Stress Reduction ($n=343$), Other Mindfulness ($n=325$), Yoga ($n=174$), Other practices ($n=136$), and non-response ($n=214$). Most participants were European American (73.7%); other ethnicities included Asian/Indian/Pacific Islanders (2.1%), Latin American (1.9%), African American (1.3%), and a variety of other identifications. Current religious identifications were as follows: Buddhist (22.4%), Christian (12.9%), Jewish (2.7%), Hindu (0.8%), none (34.9%), and other or non-response (26.3%). The sample was highly educated, with 12.8% with a doctoral degree, 36.4% with a masters degree, 19.2% with a bachelors degree, and 24.3% with some college education.

The general population sample ($N=450$; 85.4% female; mean age 30.4 yrs, range 18-72) completed an online survey that included most of the psychological outcome variables as the contemplative group. Most of the sample were European Americans (60%) or Asian-Americans (19%). Religious identifications were 53.8% Christian, 8.4% Jewish, 2.7% Buddhist, 1.3% Muslim, 17.1% none, and 16% other or non-response. The sample was well-educated, with 3% having a doctoral degree, 13.8% a masters degree, 33.1% a bachelors degree, and 39.8% with some college education.

Table 1. Contemplative Practitioners versus General Population

	Contemplatives	General Population	t	p
Survivor Guilt	70.2	68.3	3.49	<.001
Separation Guilt	35.1	37.6	-5.96	<.001
Omnipotence Guilt	44.5	47.5	-6.95	<.001
Perspective Taking	26.2	25.3	3.68	<.001
Empathic Concern	28.6	27.8	3.79	<.001
Empathic Distress	15.5	17.3	-6.34	<.001
CESD	12.4	21.4	-7.91	<.001
Extraversion	26.1	25.5	0.93	0.35
Agreeableness	36.1	33.4	9.07	<.001
Conscientiousness	34.3	31.3	9.09	<.001
Neuroticism	21.4	25.3	-10.60	<.001
Openness	41.2	39.2	5.52	<.001

Table 2. Comparisons within the Contemplative Practitioner Sample

	Amount of meditation	How long meditating?	Practice Intensity	Practice loving-kindness?
Altruism-Family	0.05	0.07	-0.03	0.15
Altruism-Friends	0.07	0.07	0.00	0.17
Altruism-Strangers	0.17	0.14	0.15	0.19
Survivor Guilt	-0.03	-0.06	-0.04	0.09
Separation Guilt	-0.11	-0.12	-0.10	0.03
Omnipotence Guilt	-0.12	-0.13	-0.12	-0.03
Perspective Taking	0.15	0.16	0.07	0.18
Empathic Concern	0.06	0.08	0.03	0.19
Empathic Distress	-0.13	-0.14	-0.10	-0.08
CESD	-0.14	-0.20	-0.10	-0.07
Extraversion	0.05	0.10	0.03	0.03
Agreeableness	0.14	0.16	0.10	0.22
Conscientiousness	0.14	0.12	0.10	0.09
Neuroticism	-0.13	-0.19	-0.12	-0.10
Openness	0.16	0.21	0.12	0.09

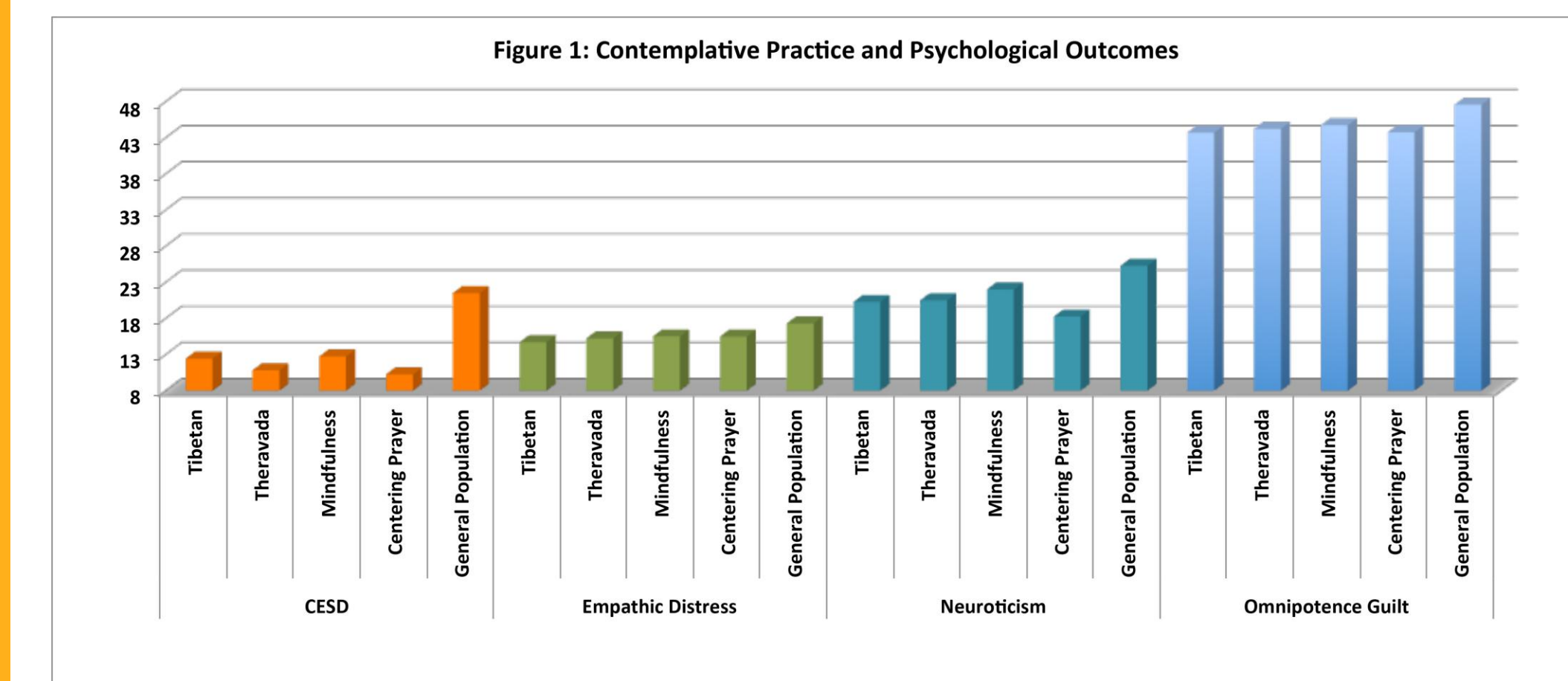
Correlations in bold significant at least $p<.05$

Table 3. Comparison of Religious and Secular Practices on Psychological Outcomes

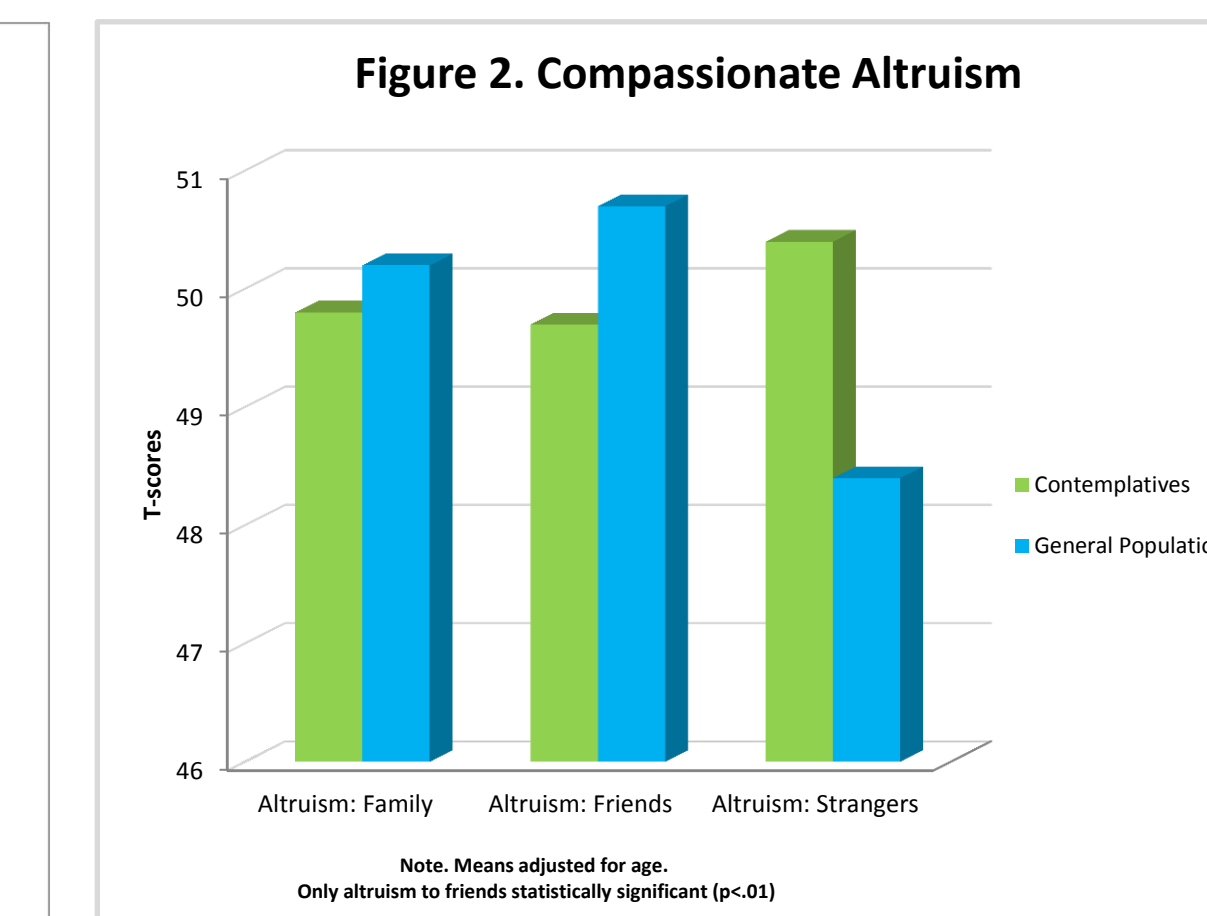
	Tibetan	Theravada	Mindfulness	Centering Prayer	General Population	F
Survivor Guilt	71.0	70.0	70.7	69.1	68.3	4.34**
Separation Guilt	34.4	33.0	34.8	33.9	37.6	12.29***
Omnipotence Guilt	43.7	44.2	44.7	43.7	47.5	12.18***
Perspective Taking	26.7	26.5	26.2	26.6	25.3	4.21**
Empathic Concern	29.0	28.7	28.7	29.2	27.8	5.02**
Empathic Distress	14.7	15.2	15.5	15.5	17.3	11.26***
CESD	12.4	10.8	12.7	10.2	21.5	16.73***
Extraversion	26.2	24.6	25.7	26.6	25.6	0.95
Agreeableness	36.1	36.3	35.9	37.8	33.4	22.53***
Conscientiousness	35.1	35.0	34.0	35.3	31.3	19.27***
Neuroticism	20.3	20.5	22.0	18.2	25.3	31.24***
Openness	41.7	40.7	41.1	40.9	39.2	8.45***

** $p<.01$ *** $p<.001$

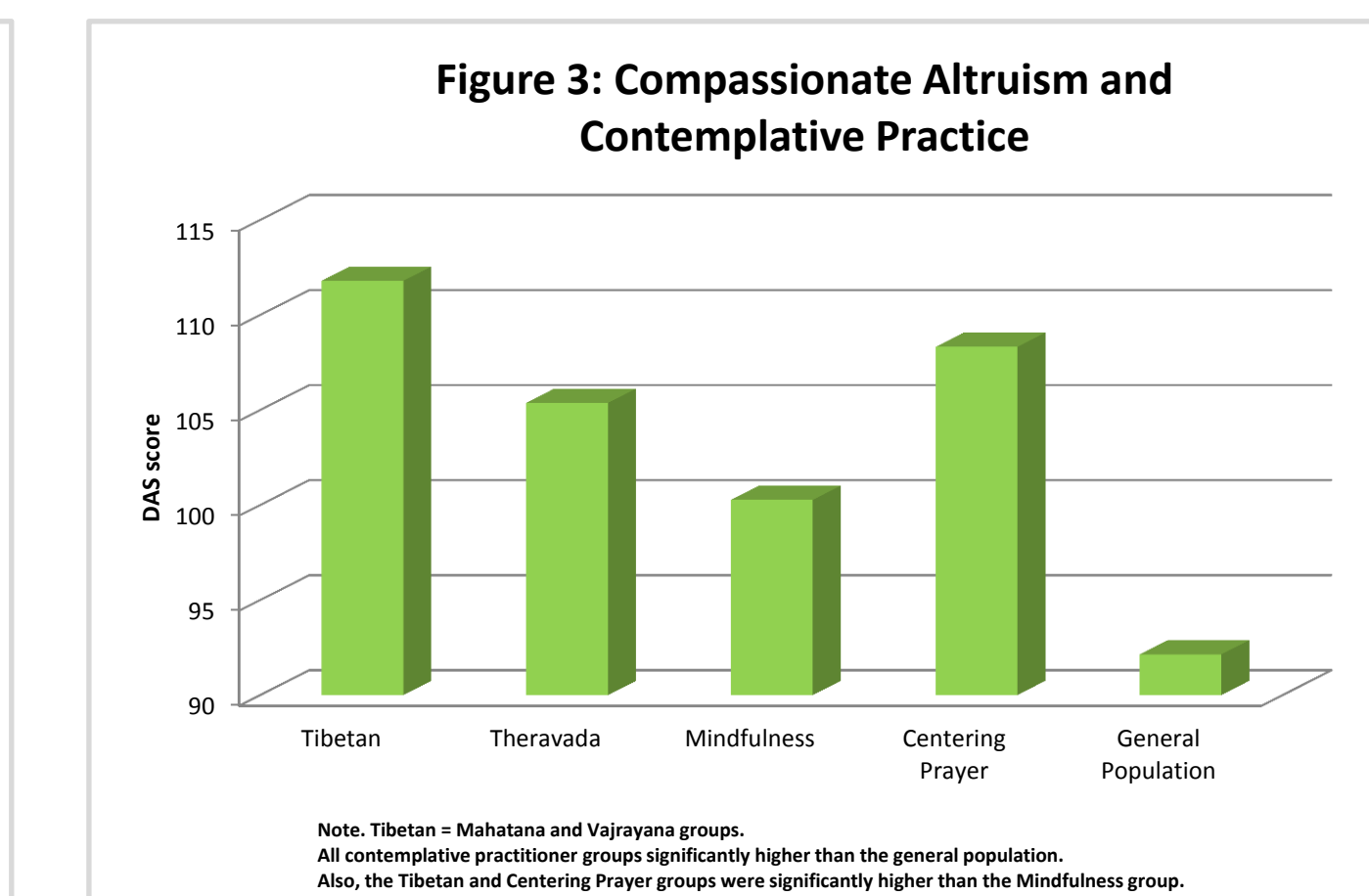
Note. All means in bold are significantly different from the General Population mean.



Note. Means adjusted for age. All group means are significantly lower than the general population group.



Note. Means adjusted for age. Only Altruism to Friends statistically significant ($p<.05$)



Note. Tibetan - Mahayana and Vajrayana groups. All contemplative practices and general population groups higher than the general population. Also, the Tibetan and Centering Prayer groups were significantly higher than the Mindfulness group.

Results

Contemplative Practitioners versus General Population

We first compared the full sample of contemplative practitioners to the general population sample on traits related to empathy and guilt, depression (CESD), and the Big Five personality factors. **Table 1** presents independent-samples t-tests for these comparisons. There were significant group differences for all variables except the personality factor of extraversion. The contemplatives were significantly higher in empathic concern, perspective-taking, empathy-based survivor guilt (guilt over being better off than others), agreeableness, conscientiousness, and openness to experience. The contemplatives were significantly lower on depression, empathic distress, neuroticism and omnipotent responsibility guilt (**Figure 1**). In general, these results suggest better psychological functioning and positive personality traits in the contemplative practitioner group compared to a community sample.

Using analysis of covariance, we next compared the full sample of contemplative practitioners to the general population sample on the Compassionate Altruism Scale, with subscales for Altruism to Family, Friends, and Strangers. Age was treated as a covariate because the contemplative groups were significantly older ($M=52.3$ yrs) than the comparison group ($M=30.4$ yrs). The two groups did not differ significantly on altruism to family ($F=0.48$, $p=.49$) or friends ($F=2.33$, $p=.13$), but similar to what we had found in our initial study of Tibetan Buddhists, the contemplatives were significantly higher on altruism to strangers ($F=8.72$, $p=.003$) compared to the general population sample (see **Figure 2**). We also compared practitioners of separate contemplative traditions (see **Figure 3**) to the general population on altruism to strangers. There was a significant main effect for group ($F=5.18$, $p<.001$). Post hoc comparisons found that all contemplative groups were significantly higher in altruism to strangers than the general population group.

Comparisons within the Contemplative Practitioner Sample

In the full contemplative practitioner sample, we examined the correlation between meditation practice variables and psychological outcomes (depression, guilt, empathy, altruism, and personality factors). The practice variables were (1) amount of meditation (from "no" to "all the time"); (2) How long meditating (from "Do not meditate" to "Over five years"); (3) practice intensity (product of frequency of meditation and duration of sessions); and (4) practice of loving-kindness/compassion while meditating (from "never" to "each time I meditate"). The correlations are shown in **Table 2**. In general, more frequent and intense meditation practice was associated with higher altruism (especially toward strangers), better the psychological functioning, and positive personality traits.

Comparison of Religious and Secular Practices on Psychological Outcomes

We compare four groups of practitioners and the general population sample on the altruism scales and other psychological variables. Three of the practitioner groups are explicitly religious in nature: Tibetan (practice of Mahayana or Vajrayana Buddhism); Theravada Buddhism; and Centering Prayer (mostly practiced by various Christian traditions). We classified Mindfulness (either Mindfulness-based Stress Reduction or any other mindfulness practice) as primarily secular. We conducted ANOVAs to compare these four contemplative groups and the general population group on the empathy, guilt, depression, and personality variables (see **Table 3**). Each of the four practitioner groups was significantly lower than the general population group on depression, neuroticism, separation guilt, omnipotence guilt, and empathic distress; and each was significantly higher on empathic concern, perspective-taking, conscientiousness, agreeableness, and openness to experience. For survivor guilt, only the Tibetan and Mindfulness groups were significantly higher than the general population group.

The four contemplative groups differed from each other only in agreeableness and neuroticism. Specifically, the Centering Prayer group was significantly lower in neuroticism than all other groups, and was significantly higher in agreeableness than the Tibetan and Mindfulness groups (and approaching significance compared to the Theravada group, $p=.07$).