# RELIGIOSITY, ALTRUISM, AND ALTRUISTIC HYPOCRISY: EVIDENCE FROM PROTESTANT ADOLESCENTS

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What influence does religion have on altruistic belief and prosocial behavior? This is a question of substantial ethical and religious relevance that currently has no consensual answer. We attempt to address this question by applying measurements of personal religious orientations, doctrinal orthodoxy, and faith maturity to the data from an extensive survey of adolescents in an evangelical Protestant church. Results suggest that horizontal or "love-of-neighbor" faith is a powerful predictor of altruism. Intrinsic and orthodox religion are aligned with positive views toward helping others but inversely related to actual altruistic behavior. This link between altruistic hypocrisy and intrinsic-orthodox religion is striking; therefore, potential explanations on the source of this relationship are explored.

he concept of altruism is widely perceived as at the center of Judeo-Christian religion. By doing good for others when nothing is expected in return, churchgoers and religious people may believe they commit themselves to God's will. Some of them possibly give part of their time and wealth to the poor or those in need because of their hope that God would reward them with spiritual and material benefits. Regardless of what motivates religious altruism, to balance the popular view it must be noted that scholars have often expressed doubts regarding whether religion in fact shapes individuals' compassionate and prosocial values and behaviors. Their findings are as yet far from consensual, however.

In a study of 1,366 adults living in the United States, for instance, Smith (2003; see also Youniss, McLellan, and Yates 1999) found that fundamentalist Christians were higher on empathy scales than moderates and liberal Christians. Also, those who regularly attend church had more empathy but lower altruistic values than those who do not go to church. This position stands in contrast with the findings of Smith, Wheeler, and Diener (1975; see also Batson, Floyd, Meyer, and Winner 1999) who studied the link between general religious beliefs and behaviors within a class of introductory psychology students. In this study, the class was divided into born-again Christians, traditionally religious students, nonreligious students, and atheists. The students were then given the opportunity to volunteer to help mentally retarded children. The authors found no difference between the groups in relation to the amount of time spent helping the children. Reviewing the related literature, Kohn (1990) claimed that religious faith is neither necessary for one to act pro-socially nor sufficient to

ensure such behavior, adding that there is virtually no link one way or the other between religious faith and prosocial behavior.

### ALTRUISM AND PERSONAL RELIGION

To gain a better understanding of the issue, scholars have examined the influence of personal religion on individuals' decisions to help others in different ways. One approach that has attracted the most attention is to utilize the concept of intrinsic, extrinsic, and quest religious orientations. In detail, about a half century ago, Allport (1950) noted that motivations determine how an individual experiences religion, which led to his development of a theory of religious orientation. Using Allport's terminology, persons with extrinsic religious orientation are those who participate in religious activities primarily because of the hope of some kind of gain, while those with an intrinsic orientation do so as a result of their convictions and beliefs. Religious orientation, in this view, is an attempt to qualify an external behavior, religious participation, by an internal factor, motivation. Allport and Ross (1967) subsequently developed a psychological instrument, the Religious Orientation Scale, to measure these religious orientations and applied it to the question of religious impact on racial prejudice. In this study, they found that people who attended church frequently tended to be less prejudiced than those who did so only occasionally. People with intrinsic orientations were also more tolerant of minorities than those with extrinsic orientations. Speaking in a different spirit, however, Batson, Schoenrade, and Ventis (1993) have found extrinsic religiosity to be essentially uncorrelated with prejudice, while intrinsic religiosity strongly and positively relates to racial and social prejudice.1

In a similar vein, scholars have long debated the relationship between religious orientations and helping others. Intrinsic religiosity, according to Watson, Hood, and Morris (1985), positively correlates with self-reported altruistic empathy, while extrinsic religiosity has a negative relationship. Hunsberger and Platonow (1986) found a positive relationship between intrinsic religiosity and behavioral intentions to volunteer to assist charitable causes. Another attempt to directly relate altruism with religiosity appeared in Trimble's review (1997) of Allport and Ross's Religious Orientation Scale, which asserted that intrinsic religiosity consistently correlates positively with altruistic motivation. That same year, however, Eckert and Lester (1997) presented their own study indicating exactly the opposite: that religiosity does not associate with altruism. Batson (1976) also failed to find significant ties between the intrinsic dimension of personal religion and the likelihood of offering help to others. Extrinsic religion, on the other hand, is known to have an insignificant or inverse relationship with prosocial motives and behaviors. Batson, Schoenrade, and Ventis (1993) sought the root of its weak relationship to helping in extrinsic person's self-serving goal of avoiding looking bad and gaining social rewards.

Batson and his colleagues (Batson et al. 2001; Batson et al. 1999; Batson, Schoenrade, and Ventis 1993) went one step further, suggesting that intrinsic religiosity associates with increased altruism only when this assistance is more or less in response to direct, low-cost requests or is motivated by self-concern to look good rather than concern for the other person's welfare. In a similar fashion, Batson and his colleagues asserted that there are differences between religious persons with intrinsic and quest orientations in the kind of assistance that they offer to those in need. Those with high levels of intrinsic religiosity display a tendency to persist in assisting victims, even when the latter indicate that such help is no longer needed. In the same situation, quest religiosity is found to be conversely related to persist-

ence because quest-oriented people are motivated by concern for the victim's need and well-being. The rigid form of altruism reportedly relates to intrinsic persons' strong empathetic motivation, adherence to orthodoxy standards of behavior, social desirability, or selfish desire to relieve a personal distress by helping others (Batson et al. 1981; Batson and Gray 1981; Batson et al. 1983; Watson, Hood, and Morris 1985; Watson et al. 1984; contra Watson et al. 1986).

Psychology of religion has lately witnessed the growth of various perspectives of personal religion other than extrinsic, intrinsic, and question religion, a fact that calls for a more diverse approach to the issue of religion and altruism. One influential account of personal religion produced by recent scholarship is that of doctrinal orthodoxy. A good example is the Christian Orthodoxy Scale developed by Fullerton and Hunsberger (1982). Their unidimensional ideas on Christian orthodox beliefs have been well received by many scholars (Hunsberger 1989; contra Lindsey, Sirotnik, and Heeren 1986); their instrument has been held to constitute an important basis for a variety of religious studies on apostasy (Hunsberger 1983), clergy counseling (Winger and Hunsberger 1988), individual relationship to God and other people (Ji 2004a), moral development (Ji 2004b), and religious socialization (Hunsberger and Brown 1984). A case in point for the present study is Hunsberger and Platonow's research (1986) that found some tendency for orthodox people to have more positive attitudes toward helping others, even though there was no evidence for a clear link between orthodoxy and volunteering for charitable causes. This view is more or less in harmony with the results from Watson, Hood, and Morris (1985).

In addition, in 1993, Benson, Donahue, and Erickson proposed an entirely different approach to personal religion, a framework for measuring religiosity with a new notion of faith maturity. The emphasis of this approach lies on indicators of faith, rather than on the faith itself, as stated by the authors' insistence that faith maturity be measured both by value and behavioral consequences rather than simply belief. The Faith Maturity Scale was designed to measure two subscales of vertical and horizontal faith. Vertical faith was defined as one's relationship to God, while horizontal faith related to one's relationship with others, including behavioral manifestations of social service and justice. Mature faith, according to this theory, required the proper mix of both scales, rather than simply a high level of a particular one. Using the scale to study six large Protestant congregations, Benson and his colleagues reported that, in general, faith maturity is positively related to various prosocial attitudes and behaviors such as gender and racial inclusivity, acceptance of diversity, rejection of apartheid, global concern, and general prosocial behaviors. In a more recent application of the scale, Ji (2004a) found support for its psychometric qualities and recommended the faith maturity model for further study of Protestant faith and spirituality.

### RESEARCH PURPOSE AND HYPOTHESIS

In contrast to previous studies, this study measures the influence of personal religion on altruism by referring to the multidimensional view of personal religion and using extensive survey data from the adolescents affiliated with an evangelical Protestant church in the United States and Canada. Specifically, we inspected four dimensions of adolescents' personal religion: extrinsic religiosity, intrinsic religiosity, doctrinal orthodoxy, and faith maturity.<sup>2</sup> The issue under consideration, especially extrinsic and intrinsic religion, has been repeatedly investigated by scholars, yet they have not yet fully articulated the importance of personal religion to altruism. Moreover, most of the previous studies which link religion to

altruism used religious-orientation measures of intrinsic, extrinsic, and quest religiosity in a single "help needed" situation that required a face-to-face interaction between the helper and the victim for specific medical, personal, or other form of emergency. Personal religion, however, is a complex phenomenon involving more than intrinsic, extrinsic, and quest orientations, as stated above. This also holds for altruism. Being positive toward helping others does not always translate to actual altruistic behavior, suggesting the need to distinguish attitudes or beliefs toward altruism and actual prosocial behaviors when one deals with altruism. Another characteristic feature of previous studies is that the samples were taken from college students or adults, and, in most cases, their size ranged from only three or four dozens to, at best, several hundred. Scholars understandably have seldom explored this subject in periods of human development other than the college years. This is particularly the case for the adolescent period. The adolescent years largely remain terra incognita as far as research on the impact of religiosity on altruism is concerned.

The foregoing review of literature brings us to the research hypotheses for this study. First, in keeping with many prior studies on adult religion and altruism, we anticipated that adolescents' intrinsic religiosity and doctrinal orthodoxy would be associated with an increase, in their altruistic beliefs and behaviors, whether their true motivation to help other is empathetic concern, egoistic desire to present oneself as a good and compassionate person, or adherence to religious creed.<sup>3</sup> After all, since altruism is acclaimed as the essence of traditional Christian faith and teaching, intrinsic and orthodox dimensions of Christianity are likely to have at least some intended as well as unintended positive influences on adolescent's prosocial belief and behavior. Second, in contrast, adolescent extrinsic religiosity was expected to be unrelated to their altruism; if anything, it is inversely connected with being altruistic, given its association with the egoistic, greedy, and utilitarian aspects of adolescent minds.

One may suggest either a non-significant or inverse linkage between intrinsic religiosity and altruistic behavior during the adolescent period, based on the aforementioned studies by Batson and his colleagues. The prior studies, however, centered on the relationship between intrinsic religiosity and specific value violations, homosexuality in particular, which seems to be as yet far from conclusive when applied to non-value violators and everyday hospitality. More importantly, much of the recent social psychology literature is characterized by what may be called the theory of planned behavior (Ajzen 1988; Ajzen and Fishbein 1980; Fishbein and Ajzen 1975). Basic to this idea is the premise that personal beliefs and attitudes are of great significance in shaping one's social behaviors; attitudes are developed from beliefs, behavioral intention from attitudes, and behavior from behavioral intentions. Many studies guided by this perspective have shown success in predicting a variety of political and social behaviors from corresponding beliefs and attitudes (e.g., Ajzen and Fishbein 1980; Hamid and Cheng 1995). The present study adopted the fundamental theoretical assumption of the planned behavior theory; it anticipated finding that altruistic beliefs lead to altruistic behaviors. In other words, adolescents' intrinsic religiosity was hypothesized to promote altruistic behavior among young people as it positively associates with altruistic beliefs and attitudes.

Finally, when we come to faith maturity, we posited the likelihood of a positive link between horizontal faith maturity and altruism, granted that the former construct represents communal or "love-of-neighbor" faith with heavy emphasis on Christian obligation and action for social service and social justice. One may be more skeptical about vertical faith because it mainly centers on an individual's relationship with God rather than others and is

reported to have a weak correlation with horizontal faith (Ji 2004a). With vertical faith, however, it is logically sensible for us to expect strong, positive associations with intrinsic religion and doctrinal beliefs that underscore personal trust in God and promote continuous effort in seeking God's will. Hence, from the preceding assumption we suggest that, as for intrinsic religiosity and doctrinal orthodoxy, vertical faith maturity is likely to boost altruistic belief and behavior among adolescents to some extent, if not as strongly as does horizontal faith maturity.

### METHODOLOGY

### Sample

The large questionnaire survey that provided the database for this article involved sixth-to twelfth-grade students who were enrolled in the schools affiliated with a conservative, evangelical Protestant church in the United States and Canada (Gillespie, Donahue, Boyatt, and Gane 2004). As of 2005, the church's membership numbers close to 13 million baptized adult members worldwide and is reportedly one of the fastest growing Protestant churches.<sup>4</sup> The church as a whole, in view of its official creedal statement, seems to be conservative on most matters of morality and ethics, including its endorsement of modest dress and healthy life style, avoidance of premarital sexual intimacy, disengagement from many forms of contemporary entertainment, and prohibition against drug use and homosexuality. The denomination also holds most conventional evangelical beliefs such as the Trinity, the virgin birth of Jesus Christ, salvation through Christ's atoning death on the cross, repentance of sins, the second coming of Jesus, and resurrection and eternal joy in heaven (cf. http://www.adventist.org/beliefs/fundamental).

The headquarters of the church organization supported the survey and named it the Valuegenesis research. For the survey, during the 2000 school year, a sample of about 30% of 1,050 schools affiliated with the church was chosen by a stratified-random method which ensured proportional representation of school type, size, and geographical location (personal communication with Boyatt and Gillespie at Valuegenesis). Each selected school appointed a survey administrator who oversaw the entire process of surveying all pupils in grades six through twelve. Subsequently, approximately 21,000 questionnaires were sent, 16,000 of which were completed and returned to the surveyors. At each school, the survey took place in a classroom setting according to the guidelines offered by the surveyors so that the students received as identical and consistent a survey setting as possible. The questionnaire was made up of 396 items related to various aspects of family, school, church, friends, life-style, and religion (see Gillespie, Donahue, Boyatt, and Gane 2004 for more information on the questionnaire). Of the 396 survey items, the present study utilized 56 items related to students' altruism, doctrinal orthodoxy, faith maturity, and religious orientations along with demographic attributes and the frequency of personal devotional activities.

The final database available for the present study ended up with 11,481 respondents after eliminating surveys with incomplete information or those from students who were not affiliated with the church under consideration ( $\underline{n} = 1,762$ ). According to the analysis, female students comprised 53% of the sample, and the mean age for baptism of the students was 11.60 years of age while 22% were not baptized at all. There was a balance across the age groups represented in this survey; 44% of the respondents came from grades nine to twelve while the rest were identified as sixth to eighth graders. In regards to ethnicity, 68% of the respon-

dents represented non-white ethnic communities, which included 15% of the samples who identified themselves as multiracial. The final male/female percentages in the sample were representative of the overall population in the whole school system under consideration, yet ethnic minority pupils were found to be over-represented in the sample by about 10% as compared to their proportion in the entire student representation (a personal communication, Boyatt).

### Variables and Validation

The dependent variables were comprised of two altruism scores. The Valuegenesis survey includes eight items on altruism, four of which assess the importance of altruism as a life value using 4-point Likert scales with 1 = "not at all important" and 4 = "extremely important," and the other four items measuring the number of hours that the adolescents spend helping others or doing various volunteer work during a typical month, using 6-point scales (see Table 1 for the items). The anchors of rating scale for altruistic behavior were 1 = "0 hours," 2 = "1 -2 hours," 3 = "3 -5 hours," 4 = "6 -10 hours," 5 = "11 -20 hours," and 6 = "more than 20 hours."

Responses to the eight items were first transformed to standardized values and then subjected to a principal component factor analysis with varimax rotation to examine their factor structures.<sup>6</sup> Factor loadings > .40 and eigenvalue > 1.00 were used as cutoff points to interpret the strength of each scale item and cluster of items. The upper tier of Table 1 presents the results. As expected, four items were each found to load on the first and second factors, subsequently labeled the altruistic belief and behavior factors, respectively. The one-factor solution explained 36% of the total variance, and the two factors combined explained 55% of the variance. The correlation for the two factors was .32. Cronbach coefficients for the belief and behavior items were .75 and .65, in the order specified. For the analysis, we computed the means of the two groups of items to obtain the altruistic belief and behavior scores, respectively.

The principal independent variables include faith maturity, intrinsic and extrinsic religiosity, and doctrinal orthodoxy. For faith maturity, the 5-point items in the Valuegenesis survey were taken from the 12-item short form of Faith Maturity Scale (Benson, Donahue, and Erickson 1993). Ji (2004a) conducted a validity study on the same 12-item scale using urban church members in California, which yielded a two-factor solution of vertical and horizontal faith maturity. The structure of the 12 Valuegenesis items on faith maturity was examined using the same extraction and rotation methods as for the altruism items. The results are summarized in the lower tier of Table 1, which clearly supports the two-factor solution of the scale. Factor 1 alone explained 40% of the variance; factors 1 and 2 combined accounted for 50%. The seven items loaded on the first factor plus the five items loaded on the second factor were named vertical and horizontal faith maturity, respectively. The mean scores of the seven and five items were then calculated for use as the scores of vertical and horizontal faith maturity.

The doctrinal orthodoxy score came from the mean of eight 6-point Likert scale items in the Valuegenesis survey. The questionnaire included 24 items that claimed to tap doctrinal orthodoxy, yet most dealt with beliefs specifically related only to the church under consideration alone rather than general Protestant churches. We identified eight items pertaining to general Protestant orthodoxy beliefs and examined their factor structures. The results, as given in the top tier of Table 2, showed a clear single-factor solution with eigenvalue 1 =

Table 1
Summary of Items and Factor Loadings for Two-Factor Solutions of the Altruism Scale and the Faith Maturity Scale (N = 11,476)

Altruism Scale Item	Factor 1	Factor 2
How important is it to you as personal goals to help people who are poor		<del></del>
or hungry?	.80	01
How important is it to yo as a personal goal to show love to other people?	.78	07
How important is it to yo as a personal goal to spend time helping people?	.76	.10
How important is it to yo as a personal goal to help promote social equality?	.68	01
In a typical month how many hours do you spend helping non-family members in a typical month how many hours do you spend making your own town	ers?03	.75
a better place to live?	06	.74
In a typical month how many hours do you spend helping friends or neighbor with problems?	.04	.70
In a typical month how many hours do you spend promoting social equality of peace?	or .04	.65
Faith Maturity Scale Item	Factor 1	Factor 2
I have a real sense that God is guiding me.	.87	16
I feel God's presence in my relationships with other people.	.75	.01
The things I do reflect a commitment to Jesus Christ.	.74	.03
I feel my life is filled with meaning and purpose.	.74	20
I am spiritually moved by the beauty of God's creation.	.59	.03
I seek opportunities to help me grow spiritually.	.56	.23
I talk with other people about my faith.	.49	.26
I care a great deal about reducing poverty in my country and throughout the		
world.	09	.78
I feel a sense of responsibility for reducing pain and suffering in the world.	15	.83
	(1/2)	.69
I give significant portions of time and money to help other people.	02	
I give significant portions of time and money to help other people.  I help others with their religious questions and struggles.  I apply my faith to political and social issues.	.29	.47

Note. Extraction method: principal factor; rotation method: Varimax with Kaiser normalization. The items were taken from the Value Genesis Survey Questionnaire.

3.12 and eigenvalue 2 = .92, the single factor solution explaining 41% of the test variance. Cronbach coefficient for the eight items was .74.

In the survey, the measures of intrinsic and extrinsic religiosity were derived from the Religious Orientation Scale of Allport and Ross (1967). The measure of intrinsic religiosity was grounded in nine 5-point Likert scale items, and factor analysis clearly pointed to a one-factor solution with eigenvalue 1 = 3.80 and eigenvalue 2 = .92 (see the second tier of Table 2). The single factor solution accounted for 43% of the total variance. We computed a Cronbach coefficient to assess the internal consistency of the items; the analysis yielded .82, indicating good reliability. Finally, factor analysis was used to assess the factor structure of eleven 5-point scale items related to extrinsic religion. The results, as presented in the bottom tier of Table 2, suggested a three-factor solution; the three factors together explained 55% of the total variance. Five items were found to load on the first factor while three items each loaded on the second and third factors. The factors were labeled uncommitted, social

Table 2
Summary of Items and Factor Loadings for Factor Solutions of the
Faith Maturity, Intrinsic Religiosity, and Extrinsic Religiosity Scales (N = 11,476)

Doctrinal Orthodoxy Scale Item			Factor 1
Jesus will come back to earth again and take the righteous to heave	en.		.68
The Ten Commandments still apply to us today. The body is the temple of God, and we are responsible in every are			.68
for its care.	ou or me		.66
There is one God: Father, Son, and Spirit a unity of three eternal po	ersons.		.69
God, our Heavenly Father, is the source, sustainer, and ruler of the			.75
Jesus is truly and eternally God.			.59
God, the Holy Spirit, teaches us how much we need Jesus in our li	ves, draws		
us to Him.			.50
Jesus became truly and fully human.			.47
Intrinsic Religiosity Scale Item			Factor 1
I enjoy reading about my religion.			.73
I try hard to live all my life according to my religious beliefs. My religion is important because it answers many questions about	the meanir	ng.	.73
of life.	the meann	ıg	.72
My whole approach to life is based on my religion.			.71
I have often had a strong sense of God's presence.			.70
It is important to me to spend time in private thought and prayer.			.68
I would prefer to go to church.			.62
Prayers I say when I'm alone are as important to me as those I say	in church.		.51
I would rather join a Bible study group than a church social group	•		.43
Extrinsic Religiosity Scale Item	Factor 1	Factor 2	Factor 3
Although I am religious, I don't let it affect my daily life.	.75	04	.06
Sometimes I have to ignore my religious beliefs because of what	.68	.01	07
people might think of me.	.08 .68	.01 07	07 .05
It doesn't matter much what I believe so long as I am good.		07	.03
Though I believe in religion, many other things are more important	.61	.01	02
in my life.  I pray mainly because I have been taught to pray.	.59	.13	.06
I go to church mainly to spend time with my friends.	.00	.89	03
I go to church mainly to spend time with my friends.  I go to church mainly because I enjoy seeing people I know there.		.81	17
1 40 to charen manny occasion i enjoy scenig people i know there.	16	.65	.30
		,	
I go to church because it helps me make friends.			
	07	01	.76
I go to church because it helps me make friends.  What religion offers me most is comfort in times of trouble and		01 .00	.76 .74

Note. Extraction method: principal factor; rotation method: Varimax with Kaiser normalization. The items were taken from the Value Genesis Survey Questionnaire.

benefit, and personal benefit extrinsic religiosity, respectively, and the corresponding Cronbach coefficients  $\alpha$  were .69, .70, and .60. This distinction is reminiscent of the prior works of Gorsuch and McPherson (1989) and Kirkpatrick (1988), who analyzed the items that claim to tap extrinsic religiosity and suggested that extrinsicness comprises at least two categories—one concerned with personal benefits and the other with social relationship. For the analysis, we computed the means of nine and 11 intrinsic and extrinsic items to get the composite scores; the three extrinsic-religiosity subscale scores corresponded to the means of the items, each loaded on the three factors.

Demographic control variables included grade (0 = grades 6-9, 1 = grades 10-12), gender (0 male, 1 female), ethnicity (1 white, 2 black, 3 Asian, 4 Hispanic, 5 others), and region (1 Canada, 2 northeast, 3 midwest, 4 west, 5 south). The analysis took these variables into consideration to control their potential effects on the extent of altruistic belief and behavior. One additional control variable related to the frequency of personal devotional activities. For the analysis, personal devotion was defined as a mean score of four 8-point Likert items ranging from "never" (1) to "more than once a day" (8) for personal prayer, reading the Bible, and watching or listening to religious TV or radio programs, and from "never" (1) to "two times a week or more" (8) for worship attendance at a church.

### **ANALYSIS**

### Descriptive Analysis

The results of descriptive analysis for religiosity and altruism are shown in Table 3. Some indications of the average-level religious orientation of the sample were demonstrated by the means that ranged from 2.50 to 3.69 on the 5-point scales for intrinsic religiosity, extrinsic religiosity, and faith maturity. This also stood for personal devotion. In contrast, the participants were highly orthodox in terms of their doctrinal beliefs; they obtained the mean of 5.65 on the 6-point response-format scale. A second item of interest on this table was the relatively low mean of altruistic behavior, when compared to altruistic belief. The sample garnered the mean of 2.28 for the 6-point altruistic behavior items, indicating that the sample spends roughly two hours or less a month helping others or volunteering for the community. This sharply contrasted with the mean of 3.08 for altruistic belief on the 4-point repose-format scale, a score that shows the participants considered helping others "quite important" for their life.

# Regression Analysis

Table 4 presents the ordinary-least-squares regression results predicting altruistic belief and behavior. As can be seen in the table, the equations as a whole were significant. In the first column, the coefficients revealed religiosity effects on altruistic belief. The extent of altruistic belief tended to increase as did the levels of intrinsic religiosity, extrinsic religiosity, faith maturity, and personal devotion. These results from the composite religiosity score model were similar, except for extrinsic religiosity and personal devotion, to the ones obtained in the third column that used subscale scores of faith maturity and extrinsic religiosity. Both faith maturity subfactors, along with intrinsic religiosity and doctrinal orthodoxy, were statistically significant with coefficients in the positive direction. In contrast, personal devotion was no longer a significant predictor of altruistic belief. Equally interesting was the finding that personal benefit extrinsicness is positively associated with altruistic belief while the lat-

Table 3
Descriptive Statistics of Religiosity and Altruism Scales

	<u>M</u>	<u>SD</u>	Min-Max
Intrinsic Religiosity	3.62	.66	1.00-5.00
Extrinsic Religiosity	3.22	.45	1.00-5.00
Uncommited	2.50	.77	1.00-5.00
Social Benefit	2.92	.92	1.00-5.00
Personal Benefit	3.54	.77	1.00-5.00
Faith Maturity	3.39	.69	1.00-5.00
Horizontal	2.98	.79	· 1.00-5.00
Vertical	3.69	.76	1.00-5.00
Personal Devotion	4.72	1.20	1.00-6.00
Doctrinal Orthodoxy	5.65	.52	1.00-6.00
Altruistic Belief	3.08	.60	1.00-4.00
Altruistic Behavior	2.28	.94	1.00-6.00

N = 11,481.

ter had statistically little to do with social benefit and uncommitted extrinsic religiosity. A review of standardized coefficients showed that faith maturity, especially horizontal faith maturity, was more influential in predicting altruistic belief and behavior than religious orientation and control variables. Viewed from the correlation results (partial correlation coefficients not reported in the table), faith maturity accounted for approximately 10% of the variance of altruistic belief whereas the other religious orientations explained from near-zero to 1% of the variance. Related to this finding was the result showing that horizontal faith maturity alone explained almost 10% of the total variance, standing in sharp contrast with the near-zero percentage for vertical faith maturity.

In the second and fourth columns, we added altruistic belief to the predictors in order to inspect its importance to altruistic behavior as well as to test whether or not religiosity variables remain statistically robust even after controlling altruistic belief. Altruistic belief was statistically significant with its coefficient in the positive direction. Also, in light of the results, it is immediately striking that intrinsic religiosity and doctrinal orthodox belief had adverse effects on altruistic behavior. That is, the students with high levels of intrinsic religiosity and doctrinal orthodoxy were less likely to help others or volunteer for the community. This was apparently in conflict with their positive effects on altruistic belief. Besides, altruistic behavior was positively tied to both the uncommitted forms of extrinsic religiosity and that which strives for social relationship or gains through the religion. Adding altruistic belief to the predictor variables did not much change the values of estimated coefficients of faith matu-

	Altr	Altruistic Belief	Belief	Altrui	Altruistic Behavior	havior	Altr	Altruistic Belief	elief	Altrui	Altruistic Behavior	navior
	B	SE	ð	B	SE	g g	<u>a</u>	SE	ත	କା	SE	<b>E</b>
Constant	1.00*		40	.74*	=		1.03*	90:		75*	=	
Female	*4I.		.12	.05*	.02	.02	.12*		.10	**40	6	6
Senior High	04*	.01	03	*91.	.02	80:	.05	10:	9.	.15*	70.	8
White	*40'-		06	*60	.02	05	*90'-		05	*60	0.	05
African-American	01		01	12*	.03	40	01		01	12*	.03	9
Asian	01		01	01	.03	00:-	01		01	02	.03	01
Hispanic	.02		.01	*60'-	.03	03	.02		.01	*60'-	.03	03
Canada	**40		02	**80	.03	.02	05**		02	**/0	.03	.02
Northeast Region	02		01	02	.03	01	01		01	02	.03	01
Midwest Region	02		01	02	.03	01	02		01	02	.03	01
West Region	03**		02	.03	.02	.01	02		02	.03	0.	0.02
Personal Devotion	.02		9.	*10*	10:	.11	.02		.05	*10:	0	4
Doctrinal Orthodoxy	.02	.01	.02	19*	.02	-10	.03**		:03	*17*	.02	60-
Intrinsic Religiosity	.13*		.15	34*	.02	24	.17*		.19	15*	0.0	=
Extrinsic: Composite	.05*	.02	9.	.25*	.03	.12					!	:
Extrinsic: Uncommited							01	.00	01	*90	.01	.05
Extrinsic: Social Benefit							01	.01	.0	*90:	0.	.05
Extrinsic: Personal Benefit							.05	.01	.07	.01	.01	8
Faith Maturity: Composite	.33*	.01	.38	*74.	.02	.35						
Horizontal Faith Maturity							.26*	.01	.35	.39*	.01	.32
Vertical Faith Maturity							*40.	10:	.05	*40.	.02	90:
Altruistic Belief				.28*	.02	.18				.24*	.02	.15
<u>R</u> Square/ Adj. <u>R</u> Square <u>E (df)</u>	.32 / .32	32 5* (16,	.32 / .32 347.96* (16, 11076)	.21 / .21	21 / .21 183.29* (15, 11074)	1074)	.35 / .35	.35 / .35 320.65* (18, 10914)	0914)	.23 / .23 1.23 1.71.68*	.23 / .23 171.68* (19, 10912)	0912)

rity and personal devotional activities. Clearly, as for altruistic belief, horizontal faith maturity once again provided the single most powerful influence on altruistic behavior, granted the magnitude of its standardized regression coefficient, alone explaining 7% of the total variance.

Turning to the demographic variables, overall, females were found to be more altruistic than males. The students in Canada tended to have lower levels of altruistic belief but were more likely to help others as compared to those in the southern region of the United States. This also applied to the students in grades 10-12 relative to those in their junior high school years. There were also statistical reasons to suggest that those with multiethnic backgrounds more often helped others than white, Hispanic, and black students. No significant differences were found between the multiethnic referent group and Asian students.

# Supplementary Analysis 1: Self-Interest and Altruistic Hypocrisy

In view of the foregoing evidence, intrinsic and orthodox religion foster compassionate and caring beliefs, yet the likelihood of actually helping others decreases as those religious orientations increase. How is this possible? This paradox not only contradicts our expectation but also presents some obvious difficulties for the normative ideal of religious integrity that is widespread among religious people or churchgoers. Accordingly, we further explored the data on hand to better understand the reasons why intrinsic and orthodox adolescents tended to have well-internalized principles of altruism but were less likely to act prosocially when compared to those with low levels of intrinsic religiosity and doctrinal orthodoxy.

One of the popular explanations for moral hypocrisy is "overpowered integrity" (Batson and Thompson 2001). To this theory, a person sincerely intends to be moral, only to give up this goal when the costs of acting morally become evident. Should self-interest also be the root of altruistic hypocrisy, intrinsic and orthodox religion are likely to be positively related to and interact with extrinsic religion that represents a utilitarian and self-interest aspect of personal religion. Indeed, there is evidence of the first assumption. According to our data, intrinsic religiosity was strongly correlated with extrinsic religiosity,  $\underline{r} = .70$ ,  $\underline{p} < .001$  (the results not reported in the form of a table). Orthodoxy had a weak relationship with extrinsic religiosity, but its coefficient was in the correct direction,  $\underline{r} = .31$ ,  $\underline{p} < .001$ . The more intrinsic and orthodox an individual was, the more utilitarian he or she was in practicing religion.

For the assumption of interaction, we developed a twofold typology system of intrinsic, orthodox, and extrinsic religiosity, using their mean scores as cutoff points. This meant the division of the sample into low (below-average) and high (above-average) in intrinsic religiosity. Parallel systems were developed for orthodox and extrinsic religiosity as well. The scores of altruistic belief and behavior were then transformed into t-scores, and the difference scores were computed by subtracting altruistic behavior scores from altruistic belief scores. This difference score was used as a measure of altruistic hypocrisy. A greater positive difference score meant that the further one supports the idea of helping others, the less he or she tends to actually help others. A negative value meant that a person still provides help to others although he or she does not believe in the altruistic standard. That is, the higher the positive score of difference, the more hypocritical a person was.

Prior to testing the hypothesis, as a supplement we conducted a set of  $\underline{t}$  test to confirm the connection of intrinsic-orthodox religion with altruistic hypocrisy. The results revealed a significant gap between low and high intrinsic and orthodox religiosity ( $\underline{t} = -20.58$  and -9.63,

Results of Three-Way Analysis of Variance for Intrinsic, Extrinsic, and Orthodox Religion on Altruistic Hypocrisy and One-Way Analyses of Variance for Intrinsic and Extrinsic Religion on Altruistic Hypocrisy Table 5.

Variable		<u>E</u> (1,	E(1, 11216)						
Main Effect of Intrinsic Religiosity Group (I) Main Effect of Extrinsic Religiosity Group (E) Main Effect of Doctrinal Orthodoxy Group (O) I x E I x O E x O I x E x O		248. 2. 2. 13.4. 13.	248.55* 2.73 14.19* 13.99* 2.69 .27						1
168		Low			High				
Variable	N	M	<u>SD</u>	N	M	SD		<u>F</u> ( <u>df</u> )	
Extrinsic Religiosity for Low Intrinsic Group	3885	-2.79	11.57	1232	-1.33	11.46	14.79*	14.79* (1, 5,115)	
Extrinsic Religiosity for High Intrinsic Group	1968	2.35	11.20	4144	1.91	11.61	1.97	(1, 6110)	
Intrinsic Religiosity for Low Extrinsic Group	3885	-2.78	11.57	5853	2.35	11.20	263.84*	(1, 5851)	
Intrinsic Religiosity for High Extrinsic Group	1232	-1.33	11.46	4144	1.91	11.61	74.50*	(1, 5374)	

\*p< .001; dependent variable: altruistic hypocrisy; independent variables: intrinsic religiosity group (low, high), extrinsic religiosity group (low, high), and doctrinal orthodoxy group (low, high).

respectively,  $\underline{df} = 11, 227, p < .001$ ). On average, the samples with high intrinsic and orthodox religiosity (intrinsic:  $\underline{M} = 2.06, \underline{SD} = 11.45$ ; orthodox:  $\underline{M} = .80, \underline{SD} = 11.50$ ) displayed a greater degree of altruistic hypocrisy than did samples with low intrinsic and orthodox religious attributes (intrinsic:  $\underline{M} = -2.43, \underline{SD} = 11.56$ ; orthodox:  $\underline{M} = -1.37; \underline{SD} = 11.88$ ). The suggestion that intrinsic and orthodox religiosity evoke higher levels of altruistic hypocrisy was, thus, further supported.

Next, the data were subjected to three-way analysis of variance in order to estimate the effects of intrinsic, extrinsic, and orthodox religiosity and their interactions in relation to altruistic hypocrisy. The analysis brought out a significant interaction effect between intrinsic and extrinsic religion; no interaction between orthodox and extrinsic religion was found. As given in Table 5, no significant mean differences were found between low and high extrinsics when the analysis was restricted to only high intrinsics. For low intrinsics, the low-extrinsic scorers obtained a greater mean difference score than the high-extrinsic scorers, yet both values were smaller than zero. This meant that of those who had lower levels of intrinsic religion, persons with strong extrinsic religion were more likely to offer help to others despite their lower levels of support for the idea of altruism as compared to those with weak extrinsic religion. More importantly, analysis of simple effects of both low and high extrinsic groups revealed that high intrinsics reported significantly higher levels of altruistic hypocrisy than low intrinsics. Intrinsic religiosity was associated with increased altruistic hypocrisy regardless of extrinsic religiosity. Taken together, both intrinsic and orthodox religion were conducive to altruistic hypocrisy across both low and high extrinsic groups.

The principal question the preceding analyses sought to answer was whether intrinsic and orthodox religious motivations increase altruistic hypocrisy because they tend to be influenced by utilitarian and self-interest religious inclination. The verdict turned out to be negative. Given the results, those who had high levels of intrinsic and orthodox religion, indeed, tended to develop high levels of self-interest religion, yet the link and interaction between them did not seem to clearly account for why intrinsic-orthodox religion was closely tied with altruistic hypocrisy.

# Supplementary Analysis 2: Faith Maturity and Altruistic Hypocrisy

In the previous analysis, horizontal faith was demonstrated as playing a substantial role in forming behavioral commitment to helping others while vertical faith has limited influence on the same behavioral trait. This being the case, one explanation for altruistic hypocrisy in intrinsic and orthodox religion may be that these forms of religion do not much contribute to the growth of horizontal faith as a whole, but they disproportionally increase people's attention to vertical faith. This disparity, then, may entail a gap between altruistic belief and behavior; vertical faith makes people develop affirmative views on helping others due to its centrality to their religious teaching but does not necessarily increase prosocial behavior along with the increase in altruistic belief. This conceptual approach rather dovetails into the so-called social authority or agency perspective of moral hypocrisy or disengagement that holds with the responsibility of blind submission to authority figures (Milgram 1974) or their social agencies that do not earnestly uphold moral standards (Bandura 1999; 2002).

For this assumption, we next performed a set of two-stage-least-squares (2SLS) regression in order to examine two prediction models. To illustrate the first model, the dependent variable in the second stage of 2SLS analysis was altruistic hypocrisy while, as is standard in 2SLS regression, the predicted values of horizontal and vertical faith maturity from the

Two-Stage-Least-Squares Regression Analysis Summary for Religiosity and Demographic Variables Predicting Altruistic Hypocrisy Table 6.

	Hori	Horizontal Faith	-aith	Ven	Vertical Faith	uith		,	Altruistic	Altruistic Hypocrisy	_	
	BI	SE	£	B	SE	Ð	B	SE	β	B	SE	₽
Constant	*89:	60:		.42*	.07		-10.50*	1.32		-9.55*1.93	.93	
Female	.21*		.13	.10*	.01	90:						
Senior High	.21*		.13	.10*	.01	.07						
White	01	.02	00	.0. *40.	.02	:03						
African-American	-: 11*		40	*90:-	.02	02						
Asian	00.		00:	00.	.02	90:						
Hispanic	11*		04	10*	.02	9.						
Canada	.05		.02	01	.02	00:-						
Northeast Region	05**		02	03	.02	01						
Midwest Region	02		01	04	.02	02						
West Region	.03		.02	<b>.</b> 04	.01	.03						
Horizontal Faith Maturity							-22.08*	1.85	-1.50	-10.35*	2.46	70
Vertical Faith Maturity							20.68*	1.40	1.36	56	3.91	<u>.</u>
Intrinsic Religiosity	*04	.02	.34	.65*	.01	.56				*06.6		.56
Extrinsic Religiosity	16*	.02	10	23*	.02	14				-4.12*		16
Doctrinal Orthodoxy	.03**	.01	.02	.12*	.01	80:				2.59*		.11
Personal Devotion	.17*		.25	.16*	.01	.25				1.10*		.12
R Square/ Adj. R Square	72.172.	27		.48 / .48	84		.03 / .03			90. / 90.	2	
F (df)	297.9	4* (14,	297.94* (14, 11088)	742.9	5* (14,	742.96* (14, 11088)	161.06* (2, 11088)	(2, 110	(88)	111.35	111.35* (6, 11084)	)84)

Note. \*p < .01; \*\*p < .05; Categorical independent variables: gender (0 male, 1 female); grade (0 junior, 1 senior); ethnicity (1 white, 2 black, 3 Asian, 4 Hispanic, 5 others); region (1 Canada, 2 northeast, 3 midwest, 4 west, 5 south).

first stage of the analysis were instruments for altruistic hypocrisy in the second-stage model. Faith maturity is here premised to depend on personal devotion, intrinsic religiosity, extrinsic religiosity, and doctrinal orthodoxy in addition to demographic variables. The second model was identical with the first one, except that it took into account personal devotion and intrinsic, extrinsic, and orthodox religiosity as predictors of altruistic hypocrisy in addition to the predicted values of horizontal and vertical faith maturity.

Personal religiosity variables were significantly associated with both horizontal and vertical faith maturity. As shown in the first two columns of Table 6, levels of horizontal and vertical faith maturity tended to decrease as the level of extrinsic religiosity increased, while they were positively linked with intrinsic religiosity, doctrinal orthodoxy, and personal devotion. A review of standardized coefficients shows that intrinsic religiosity and personal devotion made the two largest contributions to the prediction of horizontal and vertical faith maturity. Doctrinal orthodoxy made a relatively meager contribution to the prediction, which is inconsistent with our premise that orthodox religion is as important to faith maturity as intrinsic religiosity. As expected, intrinsic religion increased both vertical and horizontal faith maturity, but the magnitude of its impact on vertical faith was considerably more than that on horizontal faith maturity.

The results for the first 2SLS model are presented in the third column of Table 6. Altruistic hypocrisy is significantly dependent on vertical and horizontal faith maturity. More germane to the current discussion, the analysis demonstrated a significant positive impact of vertical faith on altruistic hypocrisy, whereas horizontal faith was found to have adverse effects on the hypocrisy. The findings are supportive of our anticipation. The second 2SLS model is depicted in the last column. Two facts are noteworthy when compared to the first 2SLS model. First, the results displayed significant and positive effects of intrinsic religiosity and doctrinal orthodoxy on altruistic hypocrisy, but the coefficients of extrinsic religiosity and personal devotion were in the negative direction, showing that they tended to attenuate the degree of hypocrisy. Next, horizontal faith caused the decrease of altruistic hypocrisy and made the single largest contribution to the prediction of altruistic hypocrisy. Yet, the coefficient of vertical faith was not significant, and its standardized value was much smaller than those for other religiosity variables. Stated differently, the value of the horizontal faith coefficient continued to be significant; however, adding direct connections from intrinsic, extrinsic, and orthodox religion to altruistic hypocrisy markedly changed the value of the estimated vertical faith coefficient in the previous model, decreasing its size and making it statistically insignificant as well. Once the effects of religious orientations and personal devotion were considered, vertical faith appeared to lose its importance in increased altruistic hypocrisy.

The comparison of the two 2SLS models lends limited evidence of the view that intrinsic and orthodox religion increase altruistic hypocrisy indirectly via the increased vertical faith. Intrinsic and orthodox religion, as anticipated, are more closely connected with vertical faith maturity than horizontal faith maturity, and vertical faith tends to augment altruistic hypocrisy. Yet, the effect of vertical faith on altruistic hypocrisy evidently dissipates once the direct effects of intrinsic and orthodox religion are factored into the prediction model. This suggests that intrinsic and orthodox religion are more directly at the root of altruistic hypocrisy rather than indirectly through vertical faith. This seems to be particularly the case for intrinsic religiosity.

### DISCUSSION

The results of the present study provide only partial support for the expectation that personal religion, except for extrinsic religion, advances altruistic belief and behavior among religious adolescents. The pattern of relationship appears to be more complicated than and much different from the initially proposed one. Despite this limitation, a couple of findings deserve our attention, as they shed new light on the nature of the relationship of religion to altruism during the adolescent period.

First, high levels of adolescent extrinsic religiosity, to some extent, tend to make them feel more sympathetic toward those in need, and also motivate them to volunteer for altruistic work. The positive link between altruistic behavior and social benefit extrinsic religiosity leads to the supposition that religiously extrinsic young people do not aid others only for some sort of social reward or economic perk. Why the extrinsically-motivated, with their great concern for personal prosperity, are also inclined to have positive attitudes toward helping others is not clear. This relationship may arise from a sensitivity to personal well-being in general. Adolescents who seek personal well-being from religion or God possibly hold a value position which also allows the poor and the sick to benefit from external sources such as peoples' empathy and humanitarian actions. In any case, at the very least, the present study shows that extrinsic religiosity in the adolescent period is not as firmly connected with antihumanitarian or anti-social traits as some previous studies portrayed on the basis of data from adults and college students (cf. Allport and Ross 1967; Batson, Schoenrade, and Ventis 1993).

Second and more importantly, adolescent faith maturity has a bigger impact on their altruism than other dimensions of personal religiosity. High scorers on the horizontal faith maturity scale report being more compassionate in terms of belief, and the magnitude of its effect on altruism is greater than that of other religiosity variables, including intrinsic religiosity, vertical faith maturity, and personal devotional activities. Adolescents with high levels of communal or "love-of-neighbor" faith also tend to more often be involved in actual prosocial behaviors. In contrast, vertical or "love-of-God" faith was found to be virtually unrelated to concern for others or humanitarian behaviors, given its very weak relationships with altruistic belief and behavior. In general, mature faith has been portrayed as a balanced integration of vertical and horizontal faith (Benson, Donahue, and Erickson 1993), while Ji (2004a) has recently shown that they are, instead, two independent but continuous aspects of religious faith, if not two distinctive dimensions of personal religion. This study seems to support the latter view of two independent forms of personal faith that differ with respect to their influence on altruism.

A third major finding relates to intrinsic religiosity and doctrinal orthodoxy. As hypothesized, adolescent intrinsic religion is positively related to their holding of altruistic belief, but unexpectedly, inversely relates to engagement in altruistic behavior. This finding may uphold the point of view that intrinsic adolescents hold prosocial values but do not necessarily act on them, or at least narrowly define their application. From this study, however, intrinsic religion is not merely found to have no relation to altruistic actions but, indeed, a negative one: adolescents seem to be actually less likely to behave altruistically the higher they score on intrinsic religiosity. The same pattern of incongruity is also noticed with respect to doctrinal orthodoxy, though its influence on altruism itself is weaker than that of intrinsic religiosity. Intrinsic and orthodox religion possibly cause the exhibition of anti-altruistic tendencies to become more covert, as some scholars have claimed in conjunction with prej-

udice and other anti-social traits (Batson, Schoenrade, and Ventis 1993: 330; Gaertner and Dovidio 1986).

Some of the proposals may be offered out of a desire to find the source of adolescent altruistic hypocrisy in intrinsic and orthodox religion. One possible suggestion is that a person's intent to be altruistic is overpowered by utilitarian self-interest; another one is that vertical faith comes into play as intrinsic religiosity and doctrinal orthodoxy make people concentrate on their relationship with God while deflecting them from building compassionate ties with others and the community. This study explored the self-interest theory by investigating the interaction between extrinsic religion and intrinsic-orthodox religion. The interaction of adolescents' extrinsic and intrinsic-orthodox religion did not affect their altruistic hypocrisy; adolescents with strong devotion to intrinsic and orthodox religion are more hypocritical than those who commit in a lesser extent to the religion, regardless of the gamut of their extrinsic religion. The analysis also showed that vertical faith causes a turning aside from altruistic integrity and that intrinsic and orthodox religion are embedded in vertical faith. Yet, the direct influence of orthodox and, especially, intrinsic religion seems to be considerably more than their indirect influence via vertical faith, and vertical faith does not stand statistically robust once the direct effects of intrinsic and orthodox religion are considered. In other words, the present study has failed to provide strong support for connecting altruistic hypocrisy of intrinsic religiosity and doctrinal orthodoxy to utilitarian self-interest religion or unilateral attention to vertical relationship with God.

Why are intrinsic and orthodox adolescents less likely to display altruistic behavior, despite their high levels of support for altruistic values? The preceding two hypotheses found limited support for this question. Part of the answer may be, then, that we have not looked in the right places. One may blame a learning deficit in intrinsic and orthodox adolescents: they have not yet learned or properly understood the importance of acting in accordance with their altruistic beliefs. Learning deficit theory, however, has not only been long recognized as insufficient to explain moral disengagement in the general population (Batson and Thompson 2001), but also seems to have difficulties accounting for why this deficit is more salient in intrinsic and orthodox religion than in other dimensions of personal religiosity.

Another reason may lie in authoritarianism or social prejudice that often prevails among conservative religious people (Altemeyer 1996). To this view, traditional religion that underscores intrinsic and orthodox forms of religious life charges individuals with antipathy toward non-social conformists or value violators, which in turn makes them less sympathetic or attentive to helping a person if that person's behavior violates conventional moral codes (Batson, Floyd, Meyer, and Winner 1999). This suggestion finds some support from experimental studies (Batson, Dyck, Brandt, Batson, Powell, McMaster, and Griffitt 1988) but may not explain why the intrinsic and orthodox are also less likely to help ordinary people, the very group of population that the Valuegenesis dealt with, let alone non-social conformists or value violators.

A third possibility is that intrinsic-orthodox religion and altruistic hypocrisy have no causal connection but are only reliant on a common third factor or factors. That is to say, some combination of personality or social constructs or traits, such as locus of control, anxiety, life experiences, family background, or others may lead to greater traditional religiousness as well as altruistic hypocrisy. If such is the case, future studies need to look for third factors that can account for the observed converse covariation between altruistic integrity and traditional religion.

### CONCLUSION

The empirical investigations reported above represent our initial efforts to uncover the nature and extent of the influence which adolescents' personal religion has on their altruistic belief and behavior. The attempt seems to have successfully revealed that the thesis of faith maturity or individual perception of relationship to God and other people is a meaningful indicator of adolescent altruistic belief and behavior. In particular, our finding of the substantial importance of horizontal communal faith as a powerful predictor of adolescent altruism is striking, a finding which helps us to go beyond the traditional, popular approach mainly based on the thesis of intrinsic, extrinsic, and quest religious orientations. Other evidence suggests that, during the adolescent period, intrinsic religiosity and doctrinal orthodoxy are coupled with positive views toward altruism but inversely associated with actual altruistic behavior. This finding of altruistic hypocrisy raises some provocative questions for the role of conventional religion in adolescent moral life, yet lends support to the results of the previous studies based on the lab-based "help needed" experiments using college students and adults. The combination of the past and present studies may posit that the adverse effects of intrinsic and orthodox religion on altruistic integrity begins at least as early as during the adolescent period and continues to demonstrate an unfavorable effect through college years and adulthood.

Churchgoers and religious individuals may find it uncomfortable to note deleterious effects of intrinsic and orthodox religion on compassionate behaviors and altruistic integrity, given that the church often portrays these as ideal forms of personal religion. Accordingly, future research may continue to ask what makes adolescents and people with intrinsic and orthodox religion less likely act altruistically, even though they believe in the value of compassionate concerns for others. With regard to this question, this article has provided only a very limited resolution. Another obvious limitation to this study is that it was based on adolescents in the parochial schools affiliated with one Protestant church. The church covered in this study is generally considered to be fairly conservative and evangelical, a profile that may not represent other Protestant denominations or the Catholic church. Besides, adolescence is characterized by a high level of egocentrism (Elkind 1968). Adolescents assume their thoughts and actions to be as critical to others as to themselves and take the other person's standpoint to an extreme degree. This adolescent egocentrism possibly associates with the observed large gap between altruistic belief and behavior. Therefore, further research is warranted to examine whether or not the present findings also can hold when applied to other religious, age, and cultural groups.

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#### NOTES

'Allport's construct of religious orientation eventually became one of the more commonly used measures of religiousness in the literature. Limitations with his system, however, began to appear. In 1976, Batson noted that Allport's own description of the intrinsic had eventually come to include compulsive, conforming, and other unflattering characteristics of the "unquestioning true believer." Rather than abandoning Allport's system in toto, how-

ever, Batson suggested that there might exist within Allport's intrinsic category two distinct religious orientations; there exist not only the true believer, but also the questioning, searching, true individual. Batson's solution was to append this third dimension, or quest religiosity, to Allport's original two-factor schema. Quest religiosity, according to Batson's studies (1976), was more likely to correlate negatively with actual antisocial behaviors and attitudes like prejudice than either extrinsic or intrinsic religiosity. In contrast to this position, Donahue (1985) asserts that quest religiosity fails to correlate with any measure of religiousness, describing it as "agnosticism" religiosity or a measure of religious doubt that methodologically and conceptually contributes little to the study of religiousness. Although Batson and Schoenrade (1991a; 1991b) offered psychometric responses to Donahue's charges, the controversy over religious orientation still continues.

<sup>2</sup>Disappointingly, the Valuegenesis survey data used for the present study lack items dealing with Batson's quest religious orientation. Thus, our analysis and discussion below are restricted to only intrinsic and extrinsic religiosity.

Over the last decades, considerable progress has been made in understanding adolescent religiosity and altruism. The literature shows that religiosity has been researched in three fronts (Benson 2004). First, some scholars centered on the importance of family, school, peer group, and community to adolescent faith. The research has been particularly successful in demonstrating the accent of parental faith and their supportive and engaged parenting style (Dillen and Pollefeyt 2005: Martin, White, and Perlman 2003; Regnerus, Smith, and Smith 2004). Second, this research advance on the source of adolescent faith has been matched by the studies on its effects on youth behavior, in which religion was found to reduce the likelihood of young people's engagement in a range of high-risk and non- conforming behaviors (Donahue and Benson 1995). Third, other scholars approached adolescent religiosity from a developmental perspective and found out that adolescence is a critical time period in which many youths undergo faith transformations, some turning to religion while other turn away from it (Donelson 1999; Gorsuch 1988; Regnerus and Uecker 2006). On the other hand, most research on adolescent altruism has focused on how teenagers' altruistic attitudes link with their moral beliefs, identity development, and personal attributes (Chiu and Nevius 1990; Chou 1998; McLellan and Youniss 2003; Nelson and Buchholz 2003; Youniss, McLellan, and Mazer 2001; Youniss, McLellan, Su, and Yates 1999). One question that has gone nearly unexamined is how adolescent religion and altruism differ from those of adults and what relationships exist between the two attributes during the adolescent period (Levenson, Aldwin, and D'Mello 2005). In this paper, we assumed that adult religiosity and altruism are reflective of corresponding adolescent attributes, ushering us to rely on prior research on adult religion and altruism in developing hypotheses on adolescent faith and altruism.

'Please refer to the official homepage of the church (http://www.advenstist.org) for the statistical facts and its official religious creed and doctrines.

The items covered in this study include the following Valuegenesis survey items: 1-12 for faith maturity; 21-24 for altruistic behavior, 35-37 and 107 for personal devotion, 61-62 and 69-74 for doctrinal orthodoxy, 99, 102, 105, and 106 for altruistic belief, 311-329, 338, and 457 for intrinsic and extrinsic religiosity, 85 for race, 230 for grade, 15 for gender, and 457 for region. Some readers may be reluctant to adopt self-report data for the study of altruism and religiosity granted that the psychological instruments are subject to bias and faking since the participants are prone to portray themselves in a positive and socially acceptable manner. Despite this concern, however, self-report is a very practical and realistic, if not the only, way to study a sizable pool of psychological subjects. In addition, studies show that "internal, non-observable experiences," including moral values and attributes, significantly influence corresponding behaviors and "the only way to assess such subjective experiences is with the self-report method (Janda 1998: 330)." From this perspective, the reliance on self-report data may be justifiable for the research of altruism and religiosity until more complete and adequate methods are developed.

<sup>6</sup>The authors also conducted promax rotations granted that some altruism and religious factors are likely to be correlated. The results were almost identical in terms of factor solution, interpretation, and various indexes with those from varimax rotations, and thereby the following psychometric reports deal with only the results from varimax rotations due to the limited space of the paper.

The power of statistical test increases as the sample size increases. Given the large sample in use for the present study, it seems rather imperative to consider the magnitudes of correlation coefficients along with the level of statistical significance in order to estimate how much contribution each variable makes to the prediction of the dependent variable.

\*Female respondents averaged 3.19 ( $\underline{SD}$  = .55) and 2.38 ( $\underline{SD}$  = .94) on altruistic belief and behavior, respectively, which were greater than male respondents' corresponding mean scores of 2.95 ( $\underline{SD}$  = .62) and 2.16 ( $\underline{SD}$  = .92). The mean scores of the Canadian samples were 3.01 ( $\underline{SD}$  = .59) and 2.57 ( $\underline{SD}$  = .98) on altruistic belief and behavior, in the order specified, while the students in the southern region completed the same scales with 3.11

( $\underline{SD}$  = .60) and 2.27 ( $\underline{SD}$  = .94) averages. The students in grades 6-9 reported mean scores of 3.09 ( $\underline{SD}$  = .59) and 2.20 ( $\underline{SD}$  = .91) for attitude and behavior, respectively, whereas those in grades 10-12 averaged 3.07 ( $\underline{SD}$  = .60) and 3.15 ( $\underline{SD}$  = .95). Turning to ethnicity and altruistic behavior, the Asian students had the highest mean, 2.39 with  $\underline{SD}$  = 1.01, closely followed by the multiethnic group ( $\underline{M}$  = 2.35,  $\underline{SD}$  = .95). These two groups were trailed by white, black, and Hispanic groups with 2.25 ( $\underline{SD}$  = .91), 2.23 ( $\underline{SD}$  = .96), and 2.20 ( $\underline{SD}$  = .95), respectively.

This strong correlation between intrinsic and extrinsic religiosity may have to do with the utilitarian and egocentric thinking that characterizes the adolescent period. Overall, adolescents are more selfish and self-seeking than adults, primarily caring about maximizing their wants and desires by any means that do not cause adverse consequences. This cognitive egocentrism may prevent adolescents from differentiating a utilitarian part of their personal religion from its intrinsic component, making them embrace both intrinsic and extrinsic religiosity without giving much thought to potential dissonance or conflict between the two forms of religion. Another possibility is that adolescents may increasingly become intrinsically religious due to their struggle for meaning and purpose of life, but at the same time their egocentric minds promote them to use religion for their own benefit and satisfaction. The process of choosing one form of religion over another has possibly not yet fully taken place during the adolescent period.

<sup>10</sup>The two models were also tested using a set of path analyses. The results and conclusions from this type of analysis were in accord with those from the 2SLS regression analyses. The limited space of this paper, however, allows us to report here only those from the 2SLS regression analyses. A complete graphic and statistical presentation of the path analysis results is available from the lead author upon request.

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