

# Religious Attendance and subjective Well-being in an Eastern-Culture Country: Empirical Evidence from Taiwan

Wen-Chun Chang

## Abstract:

This paper investigates the relationship between religious attendance and subjective well-being in an Eastern-culture country. The findings of this study indicate that religious attendance has positive relationships with happiness as well as domain satisfactions with interpersonal relationship, health, and marital life, but it is not significantly related to the satisfaction with personal financial status. Interestingly, for believers of Eastern religions, those who have a higher level of relative income tend to have higher levels of satisfaction with financial status and health status, but are less satisfied with being free of worry and interpersonal relationship. Moreover, for the adherents of Eastern religions, those who have a higher educational attainment appear to report lower levels of overall happiness and the satisfaction with being free of worry. It appears that the differences in the religious practices and organizational settings between Eastern religions and Western Christianity lead to different patterns of the relationships between religious attendance and various measures of subjective well-being.

---

## 1. Introduction

Religious attendance has been argued to have a positive relationship with subjective happiness from studies using data of Western-developed countries dominated by Christianity. Aside from the positive externalities in reducing crime and deviant activities documented in existing literature, religious participation also tends to generate positive “internalities” by directly raising the levels of happiness and various domains of life satisfaction for the participants. With these important influences, studies on religious attendance have drawn much attention from researchers and policy makers. However, the concept of good life rests heavily upon religious definition of ideals and there are many differences in religious practices across different religions. The relationships between religious attendance and happiness and life satisfaction may vary substantially across different religions, cultures and societies. Despite this, little research has been done in examining the possible link between religious involvement and subjective happiness for an Eastern country with most people affiliated towards Confucian religions or Buddhism. This study attempts to fill this gap by examining the relationship between religious attendance and happiness as well as various domains of life satisfaction with the data from the Taiwan Social Change Survey (TSCS).

Given the differences in culture and religious affiliation between Western and Eastern countries, the following reasons are why this study is important. First, subjective happiness is a direct reflection of people's well-being, and it is certainly an important consideration of economic policy. For a government pursuing the maximization of social welfare, economic policies should be justified in raising people's subjective happiness. For example, many countries' tax systems usually provide tax deductions for contributions to religious organizations based on the positive externalities generated by religious participations such as reducing criminal activities (Lipford et al., 1993; Hull and Bold, 1995; Hull, 2000), abortion, and extra-marital birth (Berggren, 1997). When there is a positive link between religious attendance and subjective happiness, not only should the positive externalities be taken into account in the policy considerations, but also the positive effects in raising people's various domains of subjective happiness.

Second, there are many differences in the types of religious participation between Western countries dominated by Christianity and Eastern-culture countries with a Confucian culture. For example, in Taiwan, most people are affiliated with folk beliefs, which are mixed with Confucianism, Taoism and Buddhism under less organized institutional settings, and their religious practices often differ greatly from someone who regularly attends a church or synagogue. Even though substantial differences in mean levels of subjective well-being have been found across cultures and countries (Inglehart and Klingemann, 2000; Diener et al. 2003; Liao et al., 2005), little empirical research has been done to examine the link between happiness and religious attendance within an Eastern-culture country.

Third, freedom and individualism are often positively associated with people's subjective happiness (Diener, et al., 1995; Frey and Stutzer, 2000; Inglehart and Klingemann, 2000), but the political systems and the developments of democracy that allow freedom and individualism to prevail in Eastern-culture societies are not in the same form as those in Western countries. In an Eastern society with a culture and value system emphasizing more on collectivism and tolerance (Diener and Lucas, 2000; Eid and Diener, 2001; Lu et al., 2001), little has been known about how this may affect the connections between the religion attendance and happiness. Finally, despite that the positive impacts of religious attendance on overall happiness and health are well documented (Idler, 1987; Ellison, 1991; Levin, 1996; Ferraro and Kelley-Moore, 2000), it is still not very clear what the potential relationships are between religious attendance and other aspects of life satisfaction such as interpersonal relationship, being free of worry, financial status, and marital life.

The rest of this paper is organized as follows. A brief review of studies on happiness and religions is presented in section 2. Section 3 provides a description about religions in Taiwan. Section 4 describes the empirical strategy and data used in this study. In section 5, the empirical results are discussed. Finally, some conclusion remarks are provided in section 6.

## 2. Previous Literature

### 2.1 Determinants of subjective Well-being

In recent years, economic research has shown a growing interest in the determinants of people's subjective happiness or life satisfaction. For the concern of unreliability and inaccuracy of self-reported data, economists have been reluctant to use the indicators of self-assessed happiness as a measure of an individual's utility. Recent studies (Kahneman, Diener, and Schwartz, 1999; Frey and Stutzer, 2002; Alesiona et al., 2004) show that data of self-reported happiness has a substantial consistency as a measure to reflect an individual's objective well-being. This certainly extends economic research to an area that has been largely neglected and complements our understanding from analyzing objective measurements.

The subjective happiness or life satisfaction can be attributed to domain satisfactions at the micro level such as personal financial status (Easterlin, 1974; Veenhoven, 1991; Easterlin, 1995; Clark and Oswald, 1996; Frey and Stutzer, 2002; Stutzer, 2004), interpersonal relationship, health condition, marriage satisfaction (Clark and Oswald, 2002), and job satisfaction (Clark, 1996; Clark et al., 1996; Clark, 1997). At the macro level, variables such as the inequality of income distribution (Alesina et al., 2004), inflation and the unemployment rate (Di Tella et al., 2001; 2004), political freedom (Inglehart and Klingemann, 2000), societal security (Frey and Stutzer, 2000), and the amenity of the environment are influential for subjective happiness.

As for the macro level, Di Tella et al. (2001; 2004) and Wolfers (2003) find that an individual's subjective happiness is positively correlated with society's gross domestic product, and negatively correlated with inflation, and unemployment rate. Unemployment benefits also have a positive impact on national well-being. Alesina et al. (2004) show that individuals are less likely to report themselves happy when the inequality of the society's income distribution is large, and there is a difference in the attitude of the poor and people on the left of the political spectrum toward inequality between European countries and the U.S. Relatively, the poor and the left-wingers in the European countries care more about inequality than those in the U.S. In addition to the effects of inflation, the unemployment rate, and income distribution, Di Tella and MacCulloch (2005) also find that individuals report themselves to be happier when the political party they support is in power. While Inglehart and Klingemann (2000) report very low levels of subjective well-being in former communist countries of Europe and Asia, a study by Hayo and Seifert (2003) suggests that economic well-being plays a significant role in explaining the variation in overall life satisfaction of people in countries of Eastern Europe during the transformation process of their economic and political systems.

To the extent of the micro level, Easterlin (1974; 1995; 2001) argues that subjective happiness is not only related to the level of absolute income, but also to the relative income compared with a reference group. Similar results are found in Frank (1997), Clark and Oswald (1996), Tsou and Liu (2001), Graham and Pettinato (2002), and Blanchflower and Oswald (2004a).

Other demographic variables such as age, gender, educational attainment, personal unemployment, and marital status have been found to correlate with subjective happiness. Clark and Oswald (1996), Clark (1997), and Theodossiou (1998) suggest that there is a U-shaped relationship between age and subjective happiness. While Clark and Oswald (1996) show that males tend to report a lower level of happiness than females, studies by Argyle (1998) and Travers and Richardson (1993) indicate that unmarried women are happier than unmarried men, and women obtain less satisfaction from marriage than men. Hartog and Oosterbeek (1998) point out that people with an average education are happier than those with a low and those with a high education level, and Stutzer (2004) finds a similar result in a study incorporating the role of income aspirations in the evaluation of individual happiness. Moreover, Winkelmann and Winkelmann (1998) show that unemployment has a considerable negative impact on life satisfaction.

Graham et al. (2004) assess the reverse relationship between happiness and income as well as health by examining the effects of happiness on income, health, and other factors. Their results suggest that people who report a higher level of happiness make more money and tend to be in better health, and therefore factors such as self-esteem and optimism attributing to happiness appear to influence individuals' wealth and health. Other economic research related to subjective happiness include Blanchflower and Oswald's (2004b) investigation on the links between income, sexual behavior, and reported happiness, as well as the study by Gruber and Mullainathan (2005) suggesting that higher excise taxes can improve social welfare by making smokers happier.

## 2.2 Religion and subjective Well-being

Religious attendance has been considered to have two types of effects on an individual's utility level. The first type is that religious attendance influences an individual's after-life consumption through the accumulation of religious capital that was originally modeled by Azzi and Ehrenberg (1975). By contrast, the second type is caused by the effect of religious attendance on an individual's utility level in his/her current life for raising subjective happiness through various domains of life satisfaction either physically or psychologically.

Findings from previous studies using data from Western countries (Ellison, 1991; Argyle, 1999; Ferraro and Kelley-Moore, 2000; Soydemir et al., 2004) show that religious attendance is positively related to subjective happiness. These findings suggest that religious attendance has a positive impact on mental and physical health, and therefore overall happiness can be increased with a high level of satisfaction with personal health (Witter et al., 1985; Ellison, 1991; Ferraro and Albrecht-Jensen, 1991; Atchley, 1997). On the mental aspect, religious affiliation provides social integrations and emotional support through various religious congregations and ritual events (Ellison and George, 1994; Ellison 1995; Krause et al., 1999). Religious involvement also tends to reduce health-detrimental behaviors and mitigate mental suffering from distress associated with physical illness (Idler, 1987).

The linkage between religious involvement and subjective happiness has been broadly studied by social scientists. Using data from the General Social Survey of the U.S., Ellison (1991) finds that individuals with stronger religious attachment have higher levels of life satisfaction and personal happiness, as well as fewer negative psychosocial experiences. Findings from Wikstrom (1987), Umberson (1987), Ellison and Gay (1990), Ellison (1995), Levin and Chatters (1998), and Buss (2000) also indicate that religious attendance is positively associated with life satisfaction and human happiness. Ferriss (2002) points out that happiness is associated with the frequency of attendance at religious services, and happiness is related to the concept of good life defined by certain religious beliefs.

A few economic studies have emerged lately in investigating the possible relationship between subjective happiness and religious attendance. For example, using data from Western Europe, Greene and Yoon (2004) report that an individual's life satisfaction is positively correlated with the degree of religious attachment, whereas Soydemir et al. (2004) find evidence from the Southwest United States indicating that individuals who attend religious activities regularly are more likely to report themselves healthier and happier than those who attend less regularly or have no attendance.

In sum, these results from previous studies suggest that religious involvement may raise the level of well-being in at least four ways: through social integration and support, through the establishment of personal relationships with a divine other, through the provision of systems of meaning and existential coherence, and through the promotion of more specific pattern of religious organization and personal lifestyle (Ellison, 1991). Specifically, the social integration and support can be provided by churches and other organized religious groups by offering institutional settings and regular chances for interactions between persons with similar values. Members of religious communities may have more reliable social networks and better social control in promoting fundamental norms to maintain more healthy lifestyles, and develop better interpersonal and familial relationships. Moreover, religious participation often can bolster individual self-esteem and self-efficacy through the divine interaction provided by religious communities and can develop a sense of meaning and purposes in life (Crandall, 1980; Idler, 1987; Petersen and Roy, 1985; Pollner, 1989).

### 3. Religion in Taiwan

Religions in Taiwan are polytheistic and syncretistic. Among the various religions, folk beliefs, Buddhism, and Taoism have been considered as the traditional religions in Taiwan.<sup>1</sup> Buddhism entered Taiwan before the arrival of the Dutch in 1624, and its popularity has been steadily increasing ever since immigrants from the Fukien and Kwangtung areas of mainland China brought Chan Buddhism into Taiwan during the Ching dynasty. Even though Taoism is an indigenous Chinese religion, it also became widespread as early immigrants from mainland China came into Taiwan from across the strait. The folk beliefs of Taiwan are very similar to those of the Fukien and Kwangtung regions, as immigrants coming across to Taiwan in the late Ming and early Ching dynasties preserved the traditional forms of their home regions in their basic folk beliefs. By contrast, Christianity first penetrated Taiwan when the Dutch arrived with the Protestant religion over 300 years ago, and Catholicism came to Taiwan through Spain.

Folk beliefs in Taiwan are a mixture of ethical ideology and philosophy of Confucianism, Buddhism, and Taoism. In the mixture, Confucianism is often considered to be a system of social and ethical philosophies that emphasize ritual actions beyond the formal sacrifices and religious ceremonies that are courtesies and accepted standards of behaviors in everyday life. With the system of Confucian values, the basis of human civilization for a society can be formed with a stable, unified, and enduring social order as well as humaneness among people in society. Nowadays, Confucian values have become transcendent ideals of perfection and philanthropy in pursuing moral and spiritual fulfillments.

Although not mutually exclusive to Confucianism, Taoism offers some alternative approaches to the way of life.<sup>2</sup> Taoism considers Tao (way or path) as the ultimate origin of all creation and the force that lies behind the functions and changes of the nature world. Taoism teaches that the order and harmony of nature is more stable and enduring than any states or institutions constructed by humans, and human life can only flourish in accordance with Tao, the power of nature. The tenets of Taoism are based on the worship of heaven and carrying out its Tao. Therefore, Taoist ideals emphasize the love of nature, good moral conduct, and the affirmation of life, health, well-being, vitality, longevity, and immortality. Taoist believers worship a huge pantheon of deities and immortals including folk heroes, famous generals, and sages, and they have doctrines of rewarding goodness and punishing wrongdoing in one's afterlife.

Buddhist beliefs are based on the law of Karma, which is the belief that good conduct will be rewarded and evil conduct will be punished. The cycle of reincarnation is linked to Karma in that a human may be reincarnated in another existence as a different type of creature according to the good and evil actions he has done in a previous life. This repetitive cycle of birth, life, death, and rebirth is continued until one reaches Nirvana, a state of non-being or voidness.

In general, traditional religions in Taiwan are combinations of beliefs, superstitions and cultural practices descended from generation to generation. Unlike Christianity as an organized religion, Taiwanese traditional religions are usually practiced outside of the control of clergy or the supervision of theologians without formally recognized founders, creed, theology and ecclesiastical organizations. Believers often worship for secular goals like seeking healing for illness, solace, peaceful mind and guidance in times of trouble, or averting misfortune. Hence, many elements of traditional religions stem from animistic or fetishistic practices and these are inevitably related to their secular goals and ritualistic nature. Though religious observance in Eastern religions may occur around shrines in the home, it is not exactly equivalent to attending a temple or other place of worship. To some extent, shrines in the home are more limited to the worship of ancestry. Indeed, many deities of Eastern religions are only presented and worshiped at temples or altars, and attending a temple more frequently does reflect a stronger commitment and attachment to the religion.<sup>3</sup> Moreover, temple attendance may provide individuals more opportunities for social interactions, such as informal gatherings, volunteering activities, or group studies of doctrines that can lead to more sources of social support. Whether frequently attending a temple also can lead to a higher level of satisfaction in the aspect of interpersonal relationship as those found in Western societies as suggested by previous literature (e.g. Stark, 2006) is certainly one of the main focuses in this study.

#### 4. Empirical Strategy and Data

Following most previous literature, it is assumed that the subjective well-being of an individual  $H_i$  is a function of a set of demographic and personal characteristics  $X_i$  such as age, gender, marital status, education level, income level and employment status, and the religious attendance  $A_i$ . A simple empirical model describing the relationship between an individual  $i$ 's subjective happiness and the socio-economic variables can be written as:

$$H_i = \alpha + \beta_1 X_i + \beta_2 A_i + \varepsilon_i. \quad (1)$$

This study uses the data from the Taiwan Social Change Survey (TSCS) in the year 1999 to investigate the relationship between religiosity and people's social and economic characteristics in Taiwan. Since 1984, the TSCS has been conducted annually with different main topics by the Institute of Sociology at the Academia Sinica. The topic on religious behaviors was surveyed in 1999 with a nationwide sample of 1,925 respondents aged from 20 to 64 years old. I am using the 1999 wave of this survey program for my presentation because it not only contains information about respondents' overall level of happiness, but also provides information about the satisfactions with interpersonal relationship, health, marriage, and financial status. This allows me to investigate the potential influences of religious attendance in different dimensions of individuals' subjective well-being. The purpose of this survey is to gather information about people's religious attitudes, including the type of religion, religious giving, and religious participation, along with other basic demographic characteristics such as age, gender, educational background, income level, and so on.

There are ten possible responses to the question about types of religion: none, folk beliefs, Buddhism, Taoism, Catholic, Protestant, I-Kuan Tao, Soka Gakkai, Muslim, and others. As shown in Table I, 33.6% of the respondents adhere to folk beliefs in Taiwan, 26.3% of the respondents are affiliated with Buddhism, and 12.7% of the respondents are affiliated with Taoism. Adding up the adherents of I-Kuan Tao and Soka Gakkai, about 75.3% of the respondents are affiliated with Eastern religions, while only 7.2% of the respondents adhere to the Western religions of Protestantism and Catholicism.

Along with information about religious behaviors, the TSCS also contains records of respondents' subjective evaluation of their happiness and various domains of life satisfaction including being free of worry in daily life, financial status, interpersonal relationship, health condition, and marital life. As in most studies on well-being, the measurement of subjective happiness in the TSCS is obtained by asking respondents the following question:

*Taken all together, how would you say things are these days – would you say that you are very happy, pretty happy, happy, not very happy, or very unhappy?*

According to respondents' answers to this question, the level of happiness from "very happy" to "very unhappy" is coded from 4 to 0. Information about other domains of life satisfaction is also collected in the TSCS by asking respondents similar questions and the levels of domain satisfaction are coded with the same approach. Since overall happiness can be seen as an aggregation of various aspects of life satisfaction (e.g. van Praag et al., 2003), five domains of life satisfaction – being free of worry, financial status, interpersonal relationship, health status, and marital life – are also used in this study to investigate their potential relationships with religious attendance and other important demographic variables.

Table II lists the definitions of variables used in this study. The respondents' religious attendances are classified into five categories according to the frequency of attending temple or church. Four dummy variables, Attendd4 (3 or 4 times every month), Attendd3 (1 or 2 times every month), Attendd2 (3 or 4 times every year), and Attendd1 (1 or 2 times every year) are created to capture the difference in religious attendance. As argued in previous literature (e.g. Koenig et al., 2001; Benjamins et al., 2006), this measurement for religious attendance is used as a general reflection of an individual's religious involvement and commitment. To examine the effect of relative income on subjective happiness and specific domains of life satisfaction, the relative income of a respondent is measured by comparing the respondent's income with the average income of a reference group according to age and gender. The average income of a respondent's reference group is assumed as the average earned income reported in the Taiwan Manpower Utilization Survey (TMUS), which provides the average earned income categorized by age and gender. With these reference incomes, the relative income of a respondent is calculated by the respondent's personal income divided by his or her reference income.



Table III reports the summary statistics of the variables used in this study for the full sample and for two sub-samples of respondents adhering to Eastern Confucian- Buddhist religions and Western Judeo-Christian religions, respectively. Comparing these two sub-samples, the average levels of absolute and relative incomes for the respondents adhering to Eastern religions are slightly higher than those for the respondents who are Protestant or Catholic. However, the mean values of overall happiness and domain life satisfactions for the respondents of Eastern religions are all smaller than those for the respondents of Western religions. Partially caused by the differences in religious practices, ritual events, and structures of religious organizations, respondents from Western religions also have a much higher average frequency of religious attendance and a higher average level of religious giving than those respondents adhering to Eastern religions. For the adherents of Western religions, those who attend church 3 or 4 times every month (Attendd4), 1 or 2 times every month (Attendd3), 3 or 4 times every year (Attendd2), and 1 or 2 times every year (Attendd1) account for 54.68%, 24.46%, 7.91%, and 12.95%, respectively. By contrast, among the believers of Eastern religions, these percentages are much lower at 2.76%, 2%, 3.59%, and 5.04%, respectively. In other words, only 4.76% of the adherents of Eastern religions regularly attend temple at least 1 or 2 times every month, but 79.14% of the believers of Christianity attend church at least once or twice every month.

## 5. Empirical Results and Discussion

Since the dependent variable in the empirical model described as equation (1) is the level of happiness or a specific domain of life satisfaction that is coded as a discrete variable, an ordered logit model will be appropriate for the estimation.

Table IV reports the estimation result with the full sample including all respondents. As found in previous studies using data of Western countries (e.g. Ellison, 1991; Argyle, 1999; Soydemir et al., 2004), both religious attendance and religious giving have a significantly positive relationship with overall subjective happiness. Nevertheless, the significantly positive relationship between religious attendance and overall happiness only appear when individuals regularly attend temple or church at least 3 or 4 times every month. If the frequency is less than 3 or 4 times every month, happiness is not significant related to religious attendance. In other words, the potential positive effects of religious attendance on happiness may occur only when individuals frequently attend church or temple at least 3 or 4 times every month. While female respondents tend to have a higher level of overall happiness, the years of schooling is negatively correlated with happiness. As for the economic variables, absolute and relative incomes are positively associated with the level of overall happiness. These findings are mostly consistent with the results of earlier studies that emphasize the importance of an individual's comparison income relatively to a reference group. By contrast, unlike the results from previous studies, marital and employment statuses appear to have no significant relationship with the level of overall happiness.

Gender differences also exist in some domains of life satisfactions. Female respondents are less satisfied with their financial status, but male respondents are more satisfied with their interpersonal relationship, health condition, and marital life than female respondents. There are U-shaped relationships between age and the satisfaction for being free of worry and between age and the satisfaction with health condition. While more years of schooling tend to bring more worries to life, married individuals have a higher level of satisfaction with their interpersonal relationships than unmarried individuals, and divorced individuals have a lower level of satisfaction in their financial status. One possible reason explaining the negative relationship between education and the satisfaction for being free of worry is that aspiration causes more worries and aspiration is strongly related to educational attainment.

In addition to overall happiness, those who attend church or temple at least 1 or 2 times every month appear to report higher levels of satisfactions in interpersonal relationship, health condition, and marital life. These links between religious attendance and domain satisfactions can largely be explained by the social integration and support as well as the intensity of religious beliefs such as sense of meaning and comprehensibility in life and behavioral conformity derived from religious practices, congregations, and ritual events. However, religious attendance is not significantly related to the satisfactions for being free of worry or the satisfaction with financial status. This may result from the reason that worry is caused by the adversities and unpredictability in various aspects of daily life, and religiosity enhances more of psychological well-being rather than those in terms of financial satisfaction. In a society with most people adhering to Eastern religions such as Taiwan, those who attend temple or church more frequently tend to have higher levels of overall happiness and domain satisfactions as those in Western countries dominated by Christianity.

While a high level of absolute income can lead to a higher level of overall happiness, satisfaction with financial status, and health condition, and the level of relative income has positive relationships with financial and marital satisfactions, respondents with a higher level of relative income tend to have more worries in their lives. That is, compared to other individuals in the reference group, when an individual has a higher level of economic achievement, he or she appears to have more worries in life. This result is striking in that the level of relative income used commonly as an important measurement of subjective well-being not only has positive relationships with an individual's overall happiness and the satisfactions in financial status and marital life, but it is also negatively associated with the satisfaction for being free of worry. One possible explanation for this outcome is that those who have a higher level of relative income may have more worries caused by more responsibilities and burdens in their daily lives and works.

Some recent studies in the psychology literature argue that there are significant differences in subjective happiness and various domains of satisfaction across cultures (Diener and Diener, 1995; Suh et al., 1998; Oishi et al., 1999), while others indicate that individual differences within societies generate much of the variation in subjective well-being than those caused by cultural differences (Matsumoto et al., 2001; Scollon et al., 2002). It is of interest to investigate the differences in the effects of religious attendance across religions within a country. To examine the effects of religious attendance on overall happiness and specific domains of satisfaction across religions for people in Taiwan, two sets of different estimations are conducted. One has a sub-sample of respondents adhering to Eastern religions and the other has a sub-sample of respondents affiliated with Western religions. Comparing these two different estimations results, the differences in the relationship between religious attendance and the measures of subjective well-being can be known.

Table V reports the results with the sub-samples of respondents affiliated with Eastern religions and Western religions, respectively. Eastern religions include folk beliefs, Buddhism, Taoism, I-Kuan Tao, and Soka Gakkai, and Western religions consist of Catholic and Protestant.

For adherents of Eastern religions, the relationships between age and years of schooling with overall happiness and specific domains of satisfaction appear to be similar to those from the estimation with the full sample. However, for the respondents adhering to Eastern religions, employed individuals appear to be less satisfied with health condition but more satisfied with marital life. While those who make a large amount of religious contribution tend to have higher levels of overall happiness, financial satisfaction, and satisfaction in health condition, the frequency of religious attendance is positively associated with overall happiness, health condition, and the satisfaction with marital life. As expected, these results may be explained by that the level of happiness and some domain satisfactions in life are positively related to religiosity because many fundamental norms such as health behavior, personal lifestyles, marital fidelity, and familial relationship are often promoted through religious activities.

Absolute income is positively associated with an individual's overall happiness and specific domains of satisfaction for being free of worry, with a financial status, and one's health condition. Individuals with higher levels of relative income are likely to be more satisfied with financial and health conditions, but less satisfied with being free of worry and interpersonal relationship. Once again, for the respondents adhering to Eastern religions, personal economic achievement has positive and negative links with subjective well-being, and more religious attendance can raise the levels of overall happiness and satisfactions in one's health condition and marital life.

The estimation results with sub-sample of respondents adhering to Western religions are also reported in Table V. Female respondents tend to have more worries than male respondents and have lower level of satisfaction with their financial status. Unlike respondents adhering to Eastern religions, there is no significant U-shaped relationship between age and subjective well-being for the respondents affiliated with Christianity, and years of schooling is not significantly related to overall happiness and specific domains of satisfaction. Married individuals have higher levels of overall happiness, but also have more worries in life. Divorced individuals are less satisfied with their financial status.

Some previous studies have suggested that Catholicism and Protestantism differently influence individual life as well as many dimensions of society such as politics, crime, and economy. The denominational differences in the influence of religious attendance on subjective well-being may be considerable. To further examine whether there are significant differences across religious denominations, this study further estimates the relationships between subjective well-being and religious attendance in four different dimensions – being free of worry, satisfaction with financial condition, satisfaction with interpersonal relations, and satisfaction with health condition, with the sub-samples of the folk believers, the adherents of Buddhism, and the adherents of Protestantism, respectively.<sup>4</sup> The results from these estimations are reported in Table VI. Most of the results appear to be very similar to the results with the classification of Eastern and Western religions. In particular, religious attendance is positively associated with the satisfaction with health condition for the adherents of folk beliefs and Buddhism. However, religious attendance has no significant relationship with the satisfaction with interpersonal relations for the adherents of folk beliefs and Buddhism. This appears to be consistent with the phenomenon in Taiwan where traditional religions are polytheistic and syncretistic with blended elements from aspects of folk beliefs, Buddhism, and Taoism.<sup>5</sup> By contrast, for the Protestants, those who attend church 3 or 4 times every month report a higher level of satisfaction with interpersonal relations. Again, this result may be partially explained by the nature of Protestantism with churches to offer opportunities for social interactions that are beneficial for interpersonal relationship. In addition, being divorced has negative relationships with the satisfactions with being free of worry and financial condition for the folk believers, and divorced Protestants report a lower level of satisfaction with financial condition. Thus, the results from the cross-denominational examination of the relationship between religious attendance and subjective well-being with the estimations of sub-samples of Folk believers, Buddhists, and Protestants are mostly consistent with the results using the classification of Eastern and Western religions.

In general, happiness and the satisfactions with interpersonal relationship and marital life are positively related to religious attendance. As the results show, there is one main difference in the relationships between religious attendance and domain satisfactions for the adherents of Eastern and Western religions. For the believers of Eastern religions, religious attendance is positively associated with the level of satisfaction in one's health condition, but is not significantly related to the satisfaction with interpersonal relationships. By contrast, for the adherents of Western religions, individuals who attend church more frequently appear to have a higher level of satisfaction with interpersonal relationships, but church attendance has no significant relationship with one's health condition. This result may be partially explained by the nature of Western religions with churches and synagogues to offer more institutional settings and regular opportunities for social interactions that are beneficial for interpersonal relationship. By contrast, with less organized religious communities, religious attendance for adherents to Eastern religions differs greatly from someone who regularly attends a church or synagogue. Christian and Jewish services have the interpersonal natures, while the practices of Eastern religions are relatively more autonomic. Therefore, social integration and support derived from the practices and ritual events of Eastern religions may be less significant.

*While the level of absolute income is negatively related to the satisfaction with interpersonal relationships for the respondents adhering to Christianity, the level of relative income is positively associated with their overall happiness and satisfaction with financial status. Again, economic achievement appears to have positive and negative links with the subjective well-being of respondents affiliated towards Christianity. Comparing the coefficients of absolute and relative incomes between Eastern and Western religions, the negative link of economic achievement with subjective well-being appear in relative terms to a reference group for respondents adhering to Eastern religions. This negative link is in absolute terms for the respondents affiliated with Western Christianity. This finding tends to partially explain the difference in philosophy between collectivism emphasized in Eastern culture and individualism dominating the Western culture.*

## 6. Concluding Remarks

It has been argued by social scientists that religious attendance is positively associated with people's subjective well-being measured by the levels of overall happiness and various domains of life satisfactions. A large body of literature using data from Western countries has found supporting evidence on this argument. However, there are considerable differences in the forms of religious practices and value systems between Eastern religions and Western religions. Little research has been done to investigate whether the positive link between religious attendance and subjective well-being also exists for a society dominated by Eastern religions of Confucianism, Taoism, and Buddhism. This paper has made an attempt to fill this gap by examining the relationships between religious attendance and happiness and various domain satisfactions in life with data from Taiwan. The results from this study offer some empirical evidence for a cross-religion comparison within an Eastern country by estimating two different sub-samples with adherents of Western Christianity and Eastern religions.

The main findings from this study can be summarized as follows. First, overall happiness and the satisfaction with marital life are positively related to religious attendance for the adherents of Eastern religions as well as for people affiliated with Christianity. While religious attendance is positively correlated to the satisfaction with health for the adherents of Eastern religions, the believers of Christianity who attend church more frequently tend to have a higher level of satisfaction with interpersonal relationships. Second, for the believers of Eastern religions, those who make more religious contributions are likely to report a higher level of happiness and satisfactions with financial and health conditions. Third, for the people affiliated with Eastern religions, female individuals have lower levels of overall happiness and financial satisfaction than male individuals, but male individuals tend to be more satisfied with their interpersonal relationships and health conditions than female individuals. Fourth, educational attainment is negative associated with overall happiness and being free of worry for the adherents of Eastern religions. Fifth, for individuals adhering to Eastern religions, those who have a higher level of relative income appear to report a lower level of satisfaction with interpersonal relationships and have more worries in life.

Overall, religious attendance has a strongly positive relationship with overall happiness for the people in Taiwan regardless of the difference in religious affiliation, but it is not significantly related to financial satisfaction. Moreover, for the adherents of Eastern religions, both absolute and relative incomes have no strong relationship with satisfaction with marital life, but people with a higher level of relative income tend to have more worries in life and a lower level of satisfaction with interpersonal relationships. It appears that there are differences in the relationship between religious attendance and subjective well-being for the adherents of Eastern religions and for believers of Christianity. This may attribute to the less organized religious communities for those affiliated with Eastern religions and the differences in practices between Eastern religions and Christianity.

**Notes:**

1. A brief review on the traditional religions of Taiwan can be seen in the Cultural Taiwan, Government Information Office of Taiwan, [www.roc-taiwan.org.za/taiwan/5-gp/culture/](http://www.roc-taiwan.org.za/taiwan/5-gp/culture/), and [www.gio.gov.tw/taiwan-website/5-gp/brief/info04\\_19.html](http://www.gio.gov.tw/taiwan-website/5-gp/brief/info04_19.html).
2. The founder of Confucianism is Confucius, Master Kong (551-479 B.C.), during the Chou dynasty. An excellent brief introduction of Confucianism and Taoism can be seen in Berling (1982). Taoist philosophy was formulated by Lao Tzu (the Old Master, 5<sup>th</sup> century B.C.) in the *Tao Te Ching* (Classic of the Way and its Power) and later formalized as a religion by Tao-ling Chang during the Eastern Han dynasty (A.D. 25-220).
3. For the folk beliefs and Buddhism in Taiwan, there are many different deities worshiped in different temples. These deities can prevent people from bad lucks and suffering and provide good fortunes to believers who worship them. In general, the adherents of folk beliefs worship their own ancestors at home and worship various deities in different temples. As a result, the adherents of folk beliefs and Buddhism often attend temples to worship and make contributions to temples in return for a better life with deities' protections and provisions of good fortunes (Jordan, 1985; Tao and Yeh, 2007). According to the Department of Civil Affairs, Ministry of the Interior, Taiwan, there are approximately 22,850 (excluding 8,753 home shrines) temples of folk beliefs, Buddhism, and Taoism (excluding 8,753 home shrines). Moreover, according to the Survey of Social Development Trends of Taiwan 2003, 53.84 % of the people who have ever made a contribution to non-profit organizations are making their contributions to religious groups. The average amount of religious contribution is NT\$ 6,044. Some previous literature (e.g. Stark, 2006) suggests that the organized churches are more effective in promoting social activities and developing dense interpersonal attachment than temples. Here, in this study, for the believers of folk religions in Taiwan, it is postulated that those who attend temples more frequently have more opportunities provided by temples to access social activities and develop dense interpersonal attachments than those who attend less frequently. For example, one of major religious events for the adherents of folk beliefs is the Ma Zu (Goddess of the Sea) border-tour of incense-offering that is held every year during March of the lunar year. During the tour, thousands of worshipers will travel a distance of over 300 kilometers on foot and pass by more than eighty participating temples, and they will enhance their faith and build up friendship with people along the way as a group of strong faith-worshipers. Many other types of ritual events and religious celebrations for other popular deities of folk beliefs, Buddhism, and Taoism are also very common in Taiwan (Hou, 2007). A recent study by Yeager et al. (2006) using data from Taiwan suggests that religious attendance is positively associated with self-assessed health but indexes of religious beliefs and practices appear to have no significant relationship with self-assessed health. The results from Yeager et al. (2006) are consistent with what have been found in this study showing that the folk believers and Buddhists who attend a temple 3 or 4 times every month tend to report a higher level of satisfaction with health condition.

4. The estimations with the sub-sample of Protestantism for the overall happiness and the satisfaction with marital life do not generate sufficient variation in the dependent variable. Thus, Table VI does not show the estimations with overall happiness and the satisfaction with marital life as the dependent variables.

5. For example, it is very common that the Taiwan folk deity Ma Zu (Goddess of the Sea), and the Buddhist deity Guan Yin (Goddess of Mercy), are worshiped in the same temple. More details can be seen in *A Brief Introduction to Taiwan*, [www.gio.gov.tw/taiwan-website/5-gp/brief/info04\\_19.html](http://www.gio.gov.tw/taiwan-website/5-gp/brief/info04_19.html), The Government Information Office of Taiwan as well as in *Taiwan Yearbook, 2006*, Government Information Office of Taiwan.

### Literature:

- Alesina, A., Di Tella, R., and R. McCulloch. 2004. "Inequality and Happiness: Are Americans and Europeans Different?" *Journal of Public Economics* 88: 2009-2042.
- Argyle, M. 1998. *The Psychology of Happiness*, Routledge, London.
- Argyle, M. 1999. "Causes and Correlates of Happiness." in D.D. Kahneman and N. Schwartz, eds. *Well-being: The Foundations of Hedonic Psychology*. New York: Russell Sage: 353-373.
- Atchley, R.C. 1997. "The Subjective Importance of Being Religious and Its Effect on Health and Morale 14 Years Later." *Journal of Aging Studies* 11: 131-141.
- Azzi, C., and R. Ehrenberg. 1975. "Household Allocation of Time and Church Attendance." *Journal of Political Economy* 83: 27-56.
- Benjamins, M., Trinitapoli, J., and C.G. Ellison. 2006. "Religious Attendance, Health Maintenance Beliefs, and Mammography Utilization: Findings from a Nationwide Survey of Presbyterian Women." *Journal for the Scientific Study of Religion* 45(4): 597-607.
- Berggren, N. 1997. "Rhetoric or Reality? An Economic Analysis of the Effects of Religion in Sweden." *Journal of Socio-Economics* 26: 571-596.
- Berling, J.A. 1982. "Asian Religions." *Focus on Asian Studies*, Vol. II, No.1: 5-11, Asia Society, AskAsia.
- Blanchflower, D.G., and A.J. Oswald. 2004a. "Well-Being over Time in Britain and the USA." *Journal of Public Economics* 88: 1359-1386.



- Blanchflower, D.G., and A.J. Oswald. 2004b. "Money, Sex and Happiness: An Empirical Study." *Scandinavian Journal of Economics* 106(3): 393-415.
- Buss, D.M. 2000. "The Evolution of Happiness." *American Psychologist* 55(1):15-23.
- Clark, A.E. 1996. "Job Satisfaction in Britain." *British Journal of Industrial Relations* 34: 189-217.
- Clark, A.E. 1997. "Job Satisfaction and Gender: Why Are Women so Happy at Work?" *Labor Economics* 4: 341-372.
- Clark, A.E., and A.J. Oswald. 1996. "Satisfaction and Comparison Income." *Journal of Public Economics* 61: 359-381.
- Clark, A.E., and A.J. Oswald. 2002. "A simple Statistical Method for Measuring How Life Events Affect Happiness." *International Journal of Epidemiology* 31(6): 1139-1144.
- Clark, A.E., Oswald, A.J., and P.P. Warr. 1996. "Is Job Satisfaction U-shaped in Age?" *Journal of Occupational and Organizational Psychology* 69: 57-81.
- Crandall, R.C. 1980. *Gerontology: A Behavioral Approach*, Addison-Wesley, Reading, M.A.
- Diener, E., and M. Diener. 1995. "Cross-culture Correlates of Life Satisfaction and Self-esteem." *Journal of Personality and Social Psychology* 68: 653-663.
- Diener, E., Diener, M., and C. Diener. 1995. "Factors Predicting Subjective Well-being of Nations." *Journal of Personality and Social Psychology* 69: 851-864.
- Diener, E., and R.E. Lucas. 2000. "Explaining Differences in Societal Levels of Happiness: Relative Standards, Need Fulfillment, Culture, and Evaluation Theory." *Journal of Happiness Studies* 1: 41-78.
- Diener, E., Oishi, S., and R.E. Lucas. 2003. "Personality, Culture, and Subjective Well-being: Emotional and Cognitive Evaluations of Life." *Annual Review of Psychology* 54: 403-425.
- Di Tella, R., MacCulloch, R.J., and A.J. Oswald. 2001. "Preferences over Inflation and Unemployment: Evidence from Surveys of Happiness." *American Economic Review* 91: 335-341.

- Di Tella, R., MacCulloch, R.J., and A.J. Oswald. 2004. "The Macroeconomics of Happiness." *Review of Economics and Statistics* 85: 809-827.
- Di Tella, R. and R. MacCulloch. 2005. "Partisan Social Happiness." *Review of Economic Studies* 72: 367-393.
- Easterlin, R.A. 1974. "Does Economic Growth Improve the Human Lot?" In Paul A. David and Melvin W. Reder, eds., *Nations and Households in Economic Growth: Essays in Honour of Moses Abramovitz*, New York: Academic Press, Inc.
- Easterlin, R.A. 1995. "Will Raising the Incomes of All Increase the Happiness of All?" *Journal of Economic Behavior & Organization* 27: 35-47.
- Easterlin, R.A. 2001. "Income and Happiness: Towards a Unified Theory." *Economic Journal* 111: 465-484.
- Eid, M., and E. Diener. 2001. "Norms for Experiencing Emotions in Different Cultures: Intra- and Intranational Differences?" *Journal of Personality and Social Psychology* 81: 869-885.
- Ellison, C.G.. 1991. "Religious Involvement and Subjective Well-being." *Journal of Health and Social Behavior* 32: 80-99.
- Ellison, C.G.. 1995. "Race, Religious Involvement and Depressive Symptomatology in a Southeastern U.S. Community." *Social Science and Medicine* 40: 1561-1572.
- Ellison, C.G., and D.A. Gay. 1990. "Region, Religious Commitment and Life Satisfaction among Black Americans." *Sociological Quarterly* 31: 23-145.
- Ellison, C.G., and L.K. George. 1994. "Religious Involvement, Social Ties and Social Support in Southeastern Community." *Journal for the Scientific Study of Religion* 33: 46-76.
- Ferraro, K.F., and C.M. Albrecht-Jensen. 1991. "Does Religion Influence Adult Health?" *Journal for the Scientific Study of Religion* 30: 193-202.
- Ferraro, K.F., and J.A. Kelley-Moore. 2000. "Religious Consolation among Men and Women. Do Health Problems Spur Speaking?" *Journal for the Scientific Study of Religion* 30: 220-234.

- Ferriss, A.L. 2002. "Religion and the Quality of Life." *Journal of Happiness Studies* 3: 199-215.
- Frank, R.H. 1997. "The Frame of Reference as a Public Good." *Economic Journal*, 107: 1832-1847.
- Frey, B.S., and A. Stutzer. 2000. "Happiness, Economy and Institutions." *Economic Journal* 110: 918-938.
- Frey, B.S., and A. Stutzer. 2002. "What Can Economists Learn from Happiness Research?" *Journal of Economic Literature* 40: 402-435.
- Graham, C., and S. Pettinato. 2002. "Frustrated Achievers: Winners, Losers and Subjective Well-being in New Market Economies." *Journal of Development Studies* 38:100-140.
- Graham, C., Eggers, A., and S. Sukhtanker. 2004. "Does Happiness Pay? An Exploration Based on Panel Data from Russia." *Journal of Economic Behavior & Organization* 55: 319-342.
- Greene, K.V., and B.J. Yoon. 2004. "Religiosity, Economics and Life Satisfaction," *Review of Social Economy* 62: 245-261.
- Gruber, J., and S. Mullainathan. 2005. "Do Cigarette Taxes Make Smokers Happier?" *Advances in Economic Analysis & Policy* 5(1): Article 4.
- Hartog, J., and H. Oosterbeek. 1998. "Health, Wealth, and Happiness: Why Pursue a Higher Education?" *Economics of Education Review* 17: 245-256.
- Hayo, B., and W. Seifert. 2003. "Subjective Economic Well-being in Eastern Europe." *Journal of Economic Psychology* 24: 329-348.
- Hou, H.D. 2007. "Introduction Guide to Dajia Mazu Sightseeing Cultural Festival." Government of Taichung County, Taiwan.
- Hull, B. 2000. "Religion Still Matters." *Journal of Economics* 24: 35-48.
- Hull, B., and F. Bold. 1995. "Preaching Matters: Replication and Extension." *Journal of Economic Behavior & Organization* 27: 143-149.
- Iannaccone, L. 1998. "Introduction to the Economics of Religion." *Journal of Economic Literature* 36: 1465-1495.

- Idler, E.L. 1987. "Religious Involvement and the Health of the Elderly: Some Hypothesis and an Initial Test." *Social Forces* 66(1): 226-238.
- Inglehart, R., and H.D. Klingemann. 2000. "Genes, Culture, Democracy, and Happiness." in *Culture and Subjective Well-being*, Diener and Suh, eds., Cambridge, M.A.: MIT Press.
- Jordan, D.K. 1985. *Gods, Ghosts, & Ancestors: Folk Religion in a Taiwan Village*. 2nd Edition, Caves Books, Taipei.
- Kahneman, D., Diener, E., and N. Schwartz. 1999. *Well-being: The Foundations of Hedonic Psychology*, Russell Sage Foundation, New York.
- Koenig, H.G., McCullough, M., and D. Larson. 2001. *The Handbook of Religion and Health*. Oxford University Press, New York.
- Krause, N., Ingersoll-Dayton, B., and J. Liang. 1999. "Religion, Social Support, and Health among the Japanese Elderly." *Journal of Health and Social Behavior* 40: 405-421.
- Levin, J.S., and L.M. Chatters. 1998. "Religion, Health and Psychological Well-being in Older Adults: Findings from Three National Surveys," *Journal of Aging and Health* 10: 504-531.
- Liao, P.S., Fu, Y.C., and C.C. Yi. 2005. "Perceived Quality of Life in Taiwan and Hong Kong: An Intra-culture Comparison." *Journal of Happiness Studies* 6: 43-67.
- Lipford, J., McCormick, R., and R. Tollison. 1993. "Preaching Matters." *Journal of Economic Behavior & Organization* 21: 235-250.
- Lu, L., Gilmore, R., and S.F. Kao. 2001. "Cultural Values and Happiness: An East-West Dialogue." *Journal of Social Psychology* 141(4): 477-493.
- Matsumoto, D., Grissom, R.J., and D.L. Dinnel. 2001. "Do Between-culture Differences Really Mean that People Are Different?" *Journal of Cross-Culture Psychology* 32: 478-490.
- Oishi, S., Diener, E., Lucas, R.E., and E. Suh. 1999. "Cross-cultural Variations in Predictors of Life Satisfaction: Perspectives from Needs and Values." *Personality and Social Psychology Bulletin* 25: 980-990.
- Oishi, S. 2000. "Culture and Memory for Emotional Experiences: On-line vs. Retrospective Judgments of Subjective Well-being." *Diss. Abstr. Int.* 61(10-B): 5625.

- Petersen, L.A. and A. Roy. 1985. "Religiosity, Anxiety, and Meaning and Purpose: Religion's Consequences for Psychological Well-Being." *Review of Religious Research* 27: 49-62.
- Pollner, M.. 1989. "Diving Relations, Social Relations, and Well-Being." *Journal of Health and Social Behavior* 30: 92-104.
- Scollon, C.N., Diener, E., Oishi, S., and R. Biswas-Diener. 2002. "Culture, Self-concept, and Memory for One's Emotions." Working paper, University of Illinois, Urbana-Champaign.
- Soydemir, G.A., Bastida, E., and G. Gonzalez. 2004. "The Impact of Religiosity on Self-assessments of Health and Happiness: Evidence from the US Southwest." *Applied Economics* 36: 665-672.
- Stark, R. 2006. "Religious Competition and Roman Piety." *Interdisciplinary Journal of Research on Religion*, Vol. 2, Article 6.
- Stutzer, A. 2004. "The Role of Income Aspirations in Individual Happiness." *Journal of Economic Behavior & Organization* 54: 89-109.
- Suh, E., Diener, E., Oishi, S., and H.C. Triandis. 1998. "The Shifting Basis of Life Satisfaction Judgments across Cultures: Emotions versus Norms." *Journal of Personality and Social Psychology* 74: 482-493.
- Taiwan Year Book, 2006. Government Information Office of Taiwan.
- Tao, H., and P. Yeh. 2007. "Religion as an Investment: Comparing the Contributions and Volunteer Frequency among Christians, Buddhists, and Folk Religionists." *Southern Economic Journal* 73(3): 770-790.
- Theodossiou, I. 1998. "The Effects of Low-pay and Unemployment on Psychological Well-being: A Logistic Regression Approach." *Journal of Health Economics* 17: 85-104.
- Travers, P., and S. Richardson. 1993. *Living Decently: Material Well-Being in Australia*. Melbourne, Oxford University Press.
- Tsou, M.W., and J.T. Liu. 2001. "Happiness and Domain Satisfaction in Taiwan." *Journal of Happiness Studies* 2: 269-288.

- Umberson, D. 1987. "Family Status and Health Behaviors: Social Control as a Dimension of Social Integration." *Journal of Health and Social Behavior* 28: 306-349.
- van Praag, B.M.S., Frijters, P., and A. Ferrer-i-Carbonell. 2003. "The Anatomy of Subjective Well-being." *Journal of Economic Behavior & Organization* 51: 29-49.
- Veenhoven, R. 1991. "Is Happiness Relative?" *Social Indicators Research* 24: 1-34.
- Wikstrom, O. 1987. "Attribution, Roles, and Religion: A Theoretical Analysis of Sunden's Role Theory and Attributional Approach to Religious Experience." *Journal for the Scientific Study of Religion* 26: 384-390.
- Winkelmann, L., and R. Winkelmann. 1997. "Why Are the Unemployed so Unhappy? Evidence from Panel Data. *Economica* 65: 1-15.
- Witter, R.A., Stock, W.A., Okun, M.A., and M.J. Haring. 1985. "Religion and Subjective Well-being in Adulthood: A Quantitative Synthesis." *Review of Religious Studies* 26: 332-347.
- Wolfers, J. 2003. "Is Business Cycle Volatility Costly? Evidence from Survey of Subjective Well-being." NBER working paper 9619.
- Yeager, D.M., Gleib, D.A., Au, M, Lin, H., Sloan, R.P., and M. Weinstein. 2006. "Religious Involvement and Health Outcomes among Older Persons in Taiwan." *Social Science and Medicine* 63: 2228-2241.

**Information about the author:**

Wen-Chun Chang  
Department of Public Finance  
National Taipei University

**Appendix:**

*Table 1. The distribution of religions in Taiwan*

Type of religion	Number of respondents adhering to	Percentage %
None	262	13.6
Folk beliefs	643	33.6
Buddhism	506	26.3
Taoism	245	12.7
Catholic	47	2.4
Protestant	92	4.8
I-Kuan Tao	52	2.7
Soka Gakkai	3	0.2
Muslim	3	0.2
Others	69	3.6
Total	1,925	100

Source: Taiwan Social Change Survey (TSCS), 1999.

Table II. Definitions of variables

Variable	Definition
Gender	If male, gender = 1; if female, gender = 0
Age	Age of respondent
Age2	Square of age
School	Years of schooling
Married	Dummy variable of marital status, married = 1, otherwise = 0
Divorce	Dummy variable of marital status, divorced = 1, otherwise = 0
Employed	Dummy variable of employment status, if employed = 1, otherwise = 0
Attendd4	Dummy variable, if attending temple or church 3 or 4 times every month, attendd4 = 1, otherwise = 0.
Attendd3	Dummy variable, if attending temple or church 1 or 2 times every month, attendd3 = 1, otherwise = 0.
Attendd2	Dummy variable, if attending temple or church 3 or 4 times every year, attendd2 = 1, otherwise = 0.
Attendd1	Dummy variable, if attending temple or church 1 or 2 times every year, attendd1 = 1, otherwise = 0.
Giving	Amount of the respondent's religious giving in NT\$1,000
Y	Amount of respondent's family monthly income in NT\$1,000
RY	Relative income of the respondent, defined as the respondent's personal income divided by the average income of people with the same age in Taiwan
Happiness	Taken all together, how would you say things are these days – would you say that you are very happy (= 4), fairly happy (= 3), happy (= 2), not too happy (= 1), or very not happy (= 0)?
Free of worry	Do you have any worries these days? No worry = 3; very few worries = 2; some worries = 1; lots of worries = 0.
Financial	What do you think about your financial condition these days? Financial satisfaction, very good = 3; good = 2; not very good = 1; very bad = 0.
Relations	Do you have any problem with getting along with people these days? Interpersonal relations, very good = 3; good = 2; not very good = 1; very bad = 0.
Health	What do you think that your health condition in the next three to five years will be? Very good = 4; better than now = 3; the same as now = 2; worse than now = 1; very much worse than now = 0.
Marriage	What do you think that your marriage condition in the next three to five years will be? Very good = 4; better than now = 3; the same as now = 2; worse than now = 1; very much worse than now = 0.



Table III. Summary statistics

Variable	Full sample		Eastern religion		Western religion	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Gender	0.4997	0.5	0.4969	0.5	0.446	0.499
Age	44.72	11.7	45.31	11.74	43.84	10.07
School	10.723	4.312	10.311	4.336	10.935	4.346
Married	0.753	0.431	0.771	0.42	0.77	0.42
Divorce	0.02	0.139	0.016	0.751	0.043	0.204
Employed	0.757	0.429	0.763	0.426	0.734	0.444
Attendd4	0.0618	0.2409	0.0276	0.1639	0.5468	0.4996
Attendd3	0.0343	0.1820	0.0200	0.1401	0.2446	0.4314
Attendd2	0.0338	0.1807	0.0359	0.1861	0.0791	0.2709
Attendd1	0.0483	0.2145	0.0504	0.2188	0.1295	0.3370
Giving	4.002	14.074	3.705	13.552	10.44	22.06
Y	61.03	46.48	59.11	45.0	56.62	44.16
RY	0.77	0.799	0.743	0.751	0.729	0.782
Happiness	2.54	0.85	2.51	0.84	2.83	0.94
Free of worry	1.42	0.88	1.43	0.89	1.39	0.83
Financial	1.73	0.57	1.72	0.56	1.76	0.57
Relations	2.42	0.8	2.41	0.8	2.56	0.77
Health	1.58	1.04	1.54	1.01	1.88	1.27
Marriage	1.72	1.4	1.69	1.33	2.32	1.67
Number of observations	1,925		1,449		139	

Table IV. Ordered logit estimates – full sample

Variable	Happiness	Free of worry	Financial	Relation	Health	Marriage
Constant	4.98*** (0.69)	3.70*** (0.72)	2.17*** (0.81)	4.42*** (0.75)	3.26*** (0.71)	8.08*** (1.23)
Gender	-0.16* (0.09)	0.052 (0.094)	-0.33*** (0.11)	0.23** (0.097)	0.2** (0.091)	0.25* (0.13)
Age	-0.029 (0.033)	-0.094*** (0.034)	0.023 (0.038)	-0.025 (0.036)	-0.085*** (0.033)	-0.059 (0.053)
Age2	0.034 (0.034)	0.1312*** (0.035)	-0.020 (0.039)	0.048 (0.037)	0.067* (0.034)	0.002 (0.056)
School	-0.018** (0.009)	-0.022** (0.009)	-0.008 (0.011)	-0.013 (0.010)	0.001 (0.009)	-0.001 (0.014)
Married	0.19 (0.14)	0.114 (0.14)	0.164 (0.163)	0.33** (0.14)	0.066 (0.14)	
Divorce	-0.062 (0.326)	-0.34 (0.34)	-0.97*** (0.35)	0.11 (0.34)	0.36 (0.32)	
Employed	-0.067 (0.129)	0.083 (0.13)	-0.139 (0.15)	0.19 (0.14)	0.008 (0.13)	0.062 (0.191)
Attendd4	1.14*** (0.19)	0.215 (0.189)	0.111 (0.220)	0.893*** (0.245)	0.556*** (0.201)	1.686*** (0.253)
Attendd3	0.339 (0.241)	0.151 (0.242)	0.154 (0.279)	0.254 (0.275)	0.576** (0.247)	0.698** (0.296)
Attendd2	0.169 (0.241)	0.267 (0.249)	0.143 (0.289)	-0.022 (0.264)	0.254 (0.241)	0.036 (0.327)
Attendd1	0.227 (0.20)	-0.187 (0.208)	-0.092 (0.234)	-0.121 (0.213)	0.073 (0.202)	0.348 (0.249)
Giving	0.006* (0.003)	-0.001 (0.003)	0.008* (0.004)	0.002 (0.004)	0.007** (0.003)	0.001 (0.004)
Y	0.003** (0.001)	0.001 (0.001)	0.01*** (0.002)	0.0001 (0.001)	0.003** (0.001)	0.0002 (0.002)
RY	0.156* (0.082)	-0.149* (0.084)	0.47*** (0.102)	-0.14 (0.085)	0.066 (0.083)	0.263** (0.115)
Mu(1)	2.21*** (0.083)	3.07*** (0.055)	2.52*** (0.11)	3.25*** (0.06)	0.81*** (0.04)	0.96*** (0.23)
Mu(2)	4.84*** (0.056)	3.99*** (0.062)	7.53*** (0.17)	4.32*** (0.06)	3.46*** (0.07)	6.56*** (0.073)
Mu(3)	6.61*** (0.067)				4.50*** (0.11)	7.18*** (0.073)
$\chi^2$	84.53	89.83	200.49	81.99	85.28	163.64
Log-likelihood	-2321.59	-2143.50	-1450.26	-1829.62	-2443.71	-1102.44
N	1925	1925	1925	1925	1925	1291

Note: Standard errors are presented in parentheses. \*\*\*, \*\*, and \* represent statistical significance at 1%, 5%, and 10%, respectively.

Table V. Ordered logit estimates – for adherents of Eastern and Western religions, respectively

Variable	Happiness		Free of worry		Financial	
	Eastern religions	Western religions	Eastern religions	Western religions	Eastern religions	Western religions
Constant	4.47*** (0.82)	3.63 (2.60)	4.12*** (0.84)	0.64 (3.01)	2.25** (0.96)	8.71*** (3.18)
Gender	-0.29*** (0.11)	-0.48 (0.36)	0.13 (0.11)	-0.72* (0.40)	-0.29** (0.13)	-1.01** (0.42)
Age	0.003 (0.038)	-0.12 (0.12)	-0.12*** (0.039)	0.10 (0.14)	0.013 (0.044)	-0.19 (0.15)
Age2	0.0005 (0.040)	0.103 (0.13)	0.165*** (0.041)	-0.10 (0.16)	-0.010 (0.046)	0.21 (0.16)
School	-0.022** (0.011)	-0.013 (0.037)	-0.027** (0.011)	-0.036 (0.04)	-0.009 (0.012)	-0.0057 (0.044)
Married	0.032 (0.164)	0.94** (0.45)	0.257 (0.170)	-0.74* (0.48)	0.17 (0.19)	0.47 (0.53)
Divorce	-0.006 (0.423)	0.87 (0.82)	-0.369 (0.435)	-0.34 (0.86)	-0.74 (0.46)	-1.83** (0.95)
Employed	-0.075 (0.153)	0.53 (0.53)	0.111 (0.156)	0.18 (0.53)	-0.004 (0.17)	-0.25 (0.55)
Attendd4	0.875*** (0.314)	1.714*** (0.447)	0.285 (0.006)	0.503 (0.463)	-0.117 (0.356)	-0.051 (0.489)
Attendd3	0.532 (0.355)	0.200 (0.443)	0.551 (0.350)	0.298 (0.483)	0.339 (0.440)	-0.169 (0.515)
Attendd2	0.210 (0.268)	0.618 (0.646)	0.254 (0.275)	0.950 (0.693)	0.077 (0.317)	0.871 (0.780)
Attendd1	0.318 (0.230)	-0.148 (0.512)	-0.145 (0.237)	-0.264 (0.573)	-0.116 (0.264)	-0.013 (0.623)
Giving	0.010** (0.004)	-0.001 (0.0010)	-0.00002 (0.0036)	0.0060 (0.0082)	0.014*** (0.005)	-0.0055 (0.010)
Y	0.003** (0.001)	-0.0044 (0.0054)	0.0024* (0.0014)	-0.0062 (0.0058)	0.012*** (0.002)	0.0017 (0.0066)
RY	0.119 (0.102)	1.06** (0.46)	-0.204* (0.104)	0.39 (0.38)	0.36*** (0.13)	0.76* (0.44)
Mu(1)	2.24*** (0.094)	2.42*** (0.20)	3.05*** (0.064)	3.76*** (0.23)	2.50*** (0.12)	3.62*** (0.41)
Mu(2)	4.86*** (0.066)	3.98*** (0.23)	4.00*** (0.072)	4.63*** (0.25)	7.66*** (0.21)	7.81*** (0.48)
Mu(3)	6.7*** (0.08)					
$\chi^2$	49.46	34.53	92.01	12.98	152.18	22.16
Log-likelihood	-1739.54	-160.31	-1619.13	-136.19	-1075.58	-107.18
N	1449	139	1449	139	1449	139

Note: Standard errors are presented in parentheses. \*\*\*, \*\*, and \* represent statistical significance at 1%, 5%, and 10%, respectively. Eastern religions include folk beliefs, Buddhism, Taoism, I-Kuan Tao, and Soka Gakkai and Western religions include Catholic and Protestant.

Table V. (continued) Ordered logit estimates – for adherents of Eastern and Western religions, respectively

Variable	Relation		Health		Marriage	
	Eastern religions	Western religions	Eastern religions	Western religions	Eastern religions	Western religions
Constant	4.05*** (0.87)	5.93 (3.64)	3.24*** (0.85)	2.60 (2.57)	7.80*** (1.44)	3.70 (4.94)
Gender	0.19* (0.11)	0.43 (0.46)	0.19* (0.11)	0.21 (0.35)	0.079 (0.15)	-0.24 (0.50)
Age	-0.002 (0.041)	-0.125 (0.18)	-0.075* (0.039)	-0.074 (0.12)	-0.067 (0.062)	0.095 (0.22)
Age2	0.029 (0.043)	0.158 (0.20)	0.059 (0.040)	0.049 (0.13)	0.014 (0.065)	-0.154 (0.23)
School	-0.007 (0.011)	-0.004 (0.050)	0.005 (0.011)	-0.041 (0.034)	-0.007 (0.017)	-0.026 (0.050)
Married	0.27 (0.17)	1.022 (0.531)	-0.08 (0.17)	0.45 (0.44)		
Divorce	0.167 (0.42)	0.17 (1.228)	0.211 (0.422)	0.27 (0.78)		
Employed	0.247 (0.16)	-0.66 (0.65)	-0.257* (0.153)	0.64 (0.44)	0.42* (0.23)	-0.201 (0.65)
Attendd4	0.479 (0.380)	1.211*** (0.518)	0.789** (0.329)	0.318 (0.405)	0.909** (0.430)	0.961* (0.571)
Attendd3	0.070 (0.379)	0.330 (0.543)	0.036 (0.358)	0.461 (0.417)	0.180 (0.491)	0.125 (0.532)
Attendd2	-0.225 (0.286)	1.050 (0.870)	0.242 (0.266)	0.771 (0.654)	-0.011 (0.386)	0.617 (0.847)
Attendd1	0.053 (0.249)	-0.919 (0.576)	0.151 (0.233)	-0.300 (0.491)	0.455 (0.289)	-0.685 (0.616)
Giving	0.0015 (0.0045)	0.0010 (0.013)	0.0093** (0.0037)	0.0001 (0.0077)	0.0054 (0.0045)	-0.002 (0.010)
Y	0.0015 (0.0015)	-0.011* (0.006)	0.0027* (0.0015)	0.0046 (0.0048)	0.0009 (0.0022)	-0.011 (0.008)
RY	-0.20* (0.11)	0.70 (0.49)	0.17* (0.11)	-0.13 (0.31)	0.18 (0.15)	0.87 (0.57)
Mu(1)	3.53*** (0.07)	2.60*** (0.27)	0.80*** (0.05)	1.16*** (0.16)	0.79*** (0.23)	3.90*** (0.24)
Mu(2)	4.58*** (0.07)	3.60*** (0.28)	3.65*** (0.09)	2.55*** (0.19)	6.51*** (0.088)	4.60*** (0.25)
Mu(3)			4.77*** (0.15)	3.61*** (0.25)	7.13*** (0.089)	
$\chi^2$	54.93	26.15	68.14	12.69	91.16	13.17
Log-likelihood	-1377.90	-102.94	-1776.55	-211.45	-808.93	-92.66
N	1449	139	1449	139	991	99

Note: Standard errors are presented in parentheses. \*\*\*, \*\*, and \* represent statistical significance at 1%, 5%, and 10%, respectively. Eastern religions include folk beliefs, Buddhism, Taoism, I-Kuan Tao, and Soka Gakkai and Western religions include Catholic and Protestant.

Table VI. Ordered logit estimates – for adherents of Folk beliefs, Buddhism and Protestantism, respectively

Variable	Free of worry			Financial		
	Folk beliefs	Buddhism	Protestantism	Folk beliefs	Buddhism	Protestantism
Constant	5.75*** (1.32)	3.95*** (1.37)	-1.79 (3.65)	3.11** (1.47)	2.73* (1.64)	12.58*** (4.07)
Gender	0.34** (0.17)	-0.18 (0.18)	-0.85* (0.49)	-0.0035 (0.19)	-0.68*** (0.22)	-1.14** (0.53)
Age	-0.20*** (0.062)	-0.12* (0.064)	0.22 (0.17)	-0.0054 (0.068)	-0.016 (0.077)	-0.32* (0.19)
Age2	0.24*** (0.063)	0.16** (0.065)	-0.19 (0.19)	-0.0054 (0.069)	0.043 (0.80)	0.32 (0.20)
School	-0.029* (0.017)	-0.013 (0.018)	-0.014 (0.046)	-0.015 (0.18)	0.019 (0.023)	-0.036 (0.050)
Married	0.42 (0.28)	0.10 (0.27)	-0.59 (0.66)	0.36 (0.32)	-0.19 (0.33)	0.65 (0.71)
Divorce	-3.04** (1.21)	0.70 (0.58)	0.19 (1.14)	-3.61*** (1.31)	-0.61 (0.69)	-3.71*** (1.32)
Employed	0.12 (0.24)	-0.0004 (0.26)	0.14 (0.62)	-0.038 (0.26)	0.0925 (0.31)	-0.090 (0.65)
Attendd4	0.25 (0.65)	0.12 (0.46)	0.068 (0.55)	0.46 (0.80)	-0.45 (0.58)	-0.16 (0.60)
Attendd3	1.20 (0.98)	0.13 (0.51)	-0.18 (0.65)	0.40 (1.10)	0.83 (0.72)	0.12 (0.68)
Attendd2	-0.58 (0.57)	0.49 (0.45)	1.18 (0.80)	-0.51 (0.55)	0.39 (0.59)	1.12 (0.87)
Attendd1	-0.23 (0.42)	-0.055 (0.36)	-0.29 (0.69)	-0.76* (0.44)	1.03** (0.48)	0.12 (0.76)
Giving	0.0090 (0.0081)	-0.0005 (0.0048)	0.0082 (0.0090)	0.037*** (0.011)	0.0086 (0.0065)	-0.0014 (0.011)
Y	0.0040 (0.0025)	0.0014 (0.0021)	-0.0078 (0.0063)	0.013*** (0.0032)	0.012*** (0.0030)	-0.0025 (0.0068)
RY	-0.27 (0.19)	-0.093 (0.15)	0.27 (0.40)	0.16 (0.22)	0.32* (0.19)	0.79 (0.46)
Mu(1)	3.19*** (0.10)	2.85*** (0.10)	3.89*** (0.29)	2.93*** (0.20)	2.32*** (0.21)	4.23*** (0.55)
Mu(2)	4.15*** (0.11)	3.82*** (0.12)	5.02*** (0.33)	8.02*** (0.33)	7.49*** (0.33)	8.50*** (0.61)
Mu(3)						
$\chi^2$	58.36	40.72	11.48	81.80	63.55	20.66
Log-likelihood	-693.50	-582.63	-88.50	-483.75	-351.83	-67.89
N	643	506	92	643	506	92

Note: Standard errors are presented in parentheses. \*\*\*, \*\*, and \* represent statistical significance at 1%, 5%, and 10%, respectively.

Table VI. (continued) Ordered logit estimates – for adherents of Folk beliefs, Buddhism and Protestantism, respectively

Variable	Relation			Health		
	Folk beliefs	Buddhism	Protestantism	Folk beliefs	Buddhism	Protestantism
Constant	2.29* (1.32)	5.70*** (1.48)	7.88* (4.38)	2.65** (1.34)	3.40** (1.35)	-2.37 (3.12)
Gender	0.19 (0.17)	0.042 (0.19)	-0.33 (0.54)	0.37** (0.17)	-0.0017 (0.18)	0.52 (0.43)
Age	0.073 (0.063)	-0.044 (0.070)	-0.18 (0.21)	-0.041 (0.063)	-0.086 (0.062)	0.19 (0.15)
Age2	-0.045 (0.064)	0.077 (0.073)	0.22 (0.24)	0.015 (0.064)	0.075 (0.064)	-0.20 (0.15)
School	-0.016 (0.017)	0.013 (0.019)	-0.013 (0.058)	0.0052 (0.016)	0.0087 (0.018)	-0.064* (0.040)
Married	0.050 (0.28)	0.38 (0.28)	1.19* (0.68)	-0.056 (0.29)	-0.012 (0.27)	-0.96 (0.63)
Divorce	-0.67 (0.90)	0.57 (0.69)	-2.38 (1.54)	0.73 (1.17)	0.084 (0.58)	-0.41 (1.10)
Employed	0.24 (0.24)	-0.052 (0.28)	-0.71 (0.73)	-0.21 (0.23)	-0.27 (0.25)	0.055 (0.53)
Attendd4	29.17 (995931)	0.19 (0.58)	1.28** (0.60)	1.54** (0.73)	0.93* (0.51)	0.024 (0.49)
Attendd3	-0.058 (0.92)	0.24 (0.61)	0.21 (0.66)	0.14 (0.88)	-0.033 (0.55)	0.64 (0.55)
Attendd2	-0.41 (0.51)	-0.32 (0.51)	1.30 (0.93)	-0.10 (0.50)	0.044 (0.44)	1.25 (0.80)
Attendd1	0.045 (0.45)	-0.030 (0.37)	-0.66 (0.70)	-0.014 (0.40)	0.15 (0.34)	-0.27 (0.59)
Giving	0.029 (0.021)	-0.0005 (0.0058)	0.0058 (0.015)	0.0056 (0.0082)	0.0074 (0.0048)	0.0037 (0.008)
Y	0.0003 (0.0026)	0.0013 (0.0023)	-0.016** (0.0068)	0.0048* (0.0026)	0.0016 (0.0022)	0.0048 (0.0053)
RY	-0.12 (0.18)	-0.15 (0.16)	0.78 (0.49)	-0.034 (0.18)	0.26* (0.15)	-0.083 (0.34)
Mu(1)	3.34*** (0.11)	4.14*** (0.12)	3.21*** (0.32)	0.88*** (0.072)	0.77*** (0.074)	1.14*** (0.20)
Mu(2)	4.59*** (0.11)	5.09*** (0.12)	4.23*** (0.33)	4.08*** (0.16)	3.25*** (0.14)	2.83*** (0.25)
Mu(3)				5.14*** (0.26)	4.43*** (0.21)	3.91*** (0.33)
$\chi^2$	43.30	25.53	22.03	36.67	25.36	14.12
Log-likelihood	-615.35	-463.48	-71.54	-749.88	-658.48	-133.85
N	643	506	92	643	506	92

Note: Standard errors are presented in parentheses. \*\*\*, \*\*, and \* represent statistical significance at 1%, 5%, and 10%, respectively.