Introduction and Overview

Studies generally suggest a positive relationship between religious beliefs and practices and mental health among elderly populations in Western Judeo-Christian culture. It is well documented that religion is considered as an important source of emotional and social support in the face of challenging life events, especially among elderly, because persons in later life may be particularly open and reactive to religious beliefs. Nevertheless, little research on religion and mental health has been conducted in contexts beyond conceptualizations of western biblical perspectives. In this study, we explore the relationship among religion, family stressors and stress in a diverse cultural setting-Taiwan. As Musick et al (2000) pointed out, assumptions of meaning in religious activities and its connection to aging process vary in different cultural settings and religious traditions, and thus the link between religion and health among older adults may vary as well. Consequently, the investigation in a culturally diverse setting may be particularly valuable in examining the robustness of the relationship between religion and health (Krause et al 2002).

An important purpose of this study is to examine the buffering effect of religion on psychological distress in the presence of family stressors among elderly Taiwanese. Previous research suggests that family relationship plays a center role on well-being among Asian elders. Evidence shows that elderly in Taiwan may be particularly vulnerable to negative family interactions because seniors in household tend to value more of integration and harmony of the family (Yang and Cheng 1987; Lu et al 2002). Hence, it is likely that religion may be an important source of comfort in the face family problems.

Very limited research examines mental health consequences of religiosity and family stressors even in the western context. Strawbridge and colleagues(1998) provided some evidence that non-organizational religiosity may exacerbate family related stressors on mental health. Although their study has provided valuable insights, religion measures in their study were more related to “salience of religion in everyday life” rather than directly capturing religious coping. To address the theoretical gap between religion and family stressors, this study incorporates functional aspects of religious involvement (e.g. coping) with behavioral aspects of religion (e.g. religious attendance and private religious practices) to better understand the effects of multiple facets of religion on mental health among elders in Taiwan(Ellison and Levin 1998; Krause et al 2002).

Theoretical Framework

Religion and Mental Health

Enhanced emotional health and better coping strategies may be among the most important outlets for the buffering effect of religion. Religion appears to have protective effects for well-being of individuals in many situations (Idler et al 2003). Studies often show that people who are more religiously involved tend to have higher self-esteem and feelings of self-worth (e.g. Watters 1992). Also, people who report having stronger faith are more likely to be happier and more satisfied with their life (Ellison 1991). Koenig et al (2000) argued that religion helps individuals to make wise decisions and avoid unnecessary stressors that can reduce well-being. In other words, individuals with strong religiosity can draw on the beliefs of their faith to put their own life in a larger context, to learn from others who encounter the same problems, and to gain hope for the future (Idler et al 2003).

Religion and Family Stressors

For the best of our knowledge, there is limited research directly examining the link between religious coping and family stressors and their effect of emotional well-being. The only study that deals with mental health consequences between religiosity and family stressors was conducted by Strawbridge et al (1998) with Alameda County Survey, investigating stress buffering effect of both organizational(attendance) and non-organizational(prayer and spiritual beliefs) religiosity on family and non-family stressors. They concluded that religiosity may buffer non-family stressors, but exacerbate depression among those facing family crises including abuse, marital problems, caregiving and negative relationship with children. Strawbridge and colleagues (1998) reasoned that since family harmony and solidarity is highly valued and expected by religious communities, conflict and problems within the family may be particularly surprising and distressing among religious persons (Ellison 1994; Strawbridge et al 1998). As a result, religious coping resources may be most helpful for stressors outside the individual; whereas family problems are considered as personal or spiritual defects, and thus religious sources are less helpful (Koenig et al 2001).

Taiwanese context

Religion in Taiwan

As Musick et al (2000) pointed out, religious behaviors are inherently shaped by

culture. Religions in Taiwan, like many of other Asian countries (e.g. Japan), are very different from the western Judeo-Christian orientations because regular institutionalized participation in formal worship services is not deeply ingrained as regular worship in the US (Krause et al. 2002). Instead, a great deal of worship takes place at home, or temples whenever needed. With economic development and expansion of education, religion continues to play a center role in Taiwanese society (Katz 2003).

It is difficult to identify the particular faith of Taiwanese people because most belong to one or more religion. The majority of people in Taiwan practiced a mixture of Daoist and Buddhist and folk religion (ancestor worship). Taiwanese people do not usually define themselves as believers of any particular religious doctrines. Like Japan, many of the Taiwanese religious behaviors tend to focus on specific goals, such as relief of pain, search of a mates, and success in examination (Musick et al 2000). In other words, people tend to pray/worship or visit the temple/church in time of stress.

Negative Family Interaction

This study focuses on Taiwan, an East Asian island, where Confucian philosophy is usually considered as the dominant value system in the society. Confucian philosophy shapes Taiwanese culture and provides basic teachings to interpersonal relationship for thousands years. Based on the Confucian philosophy, the life of individual is only the extension of family lineage and continuation of one's ancestors (Lu, Gilmour & Kao 2001). Therefore, traditional Chinese culture considers family or clan as the center of life. Individuals tend to minimize themselves to pursue the glorification of the whole family. It applies to the commitment of family responsibilities and emphasis on respect to the elderly. Taken as a whole, we argue that negative family interaction in a collectivist culture with special emphasis on interpersonal relationship and filial piety may be particularly demoralizing to the elderly, because support and respect to the elderly is a moral obligation in Taiwan. Family stressors, thus, may threaten older adults' hope and access to support that is expected to have strong impact on their emotional well-being.

Research Questions

1. Whether religious attendance, private religious practices and religious coping have protective effects against psychological distress among elderly Taiwanese? If so, does any of the above religious behavior predict mental health outcomes better than others?
2. Whether older adults experiencing family stressors report higher or lower level of religiosity or coping behaviors than those without family stressors.

3. Whether religiosity buffer or exacerbate the relationship between family stressors and psychological distress?
4. Do the religion stress buffering/exacerbating effects differ by gender, education or expectation toward children's support?

Data

The data for this study came from 1999 (wave 4) of Survey of health and living status of the elderly in Taiwan. The analysis presented below focus solely on wave 4 of interviews because it was the latest and the only wave with complete religion measures. The investigation of long term effect of religious beliefs on health outcomes will be available after the release of wave 5 data.

After taking into account missing cases (listwise deletion), there are 1669 Taiwanese elders in this study who are age 70 or above. There are approximately half male and half female. About half of the elderly in this sample had no formal education. Only 15% of the elderly reported never attending any religious service or visit a temple. Most of the elderly had ever had at least one kind of religious coping behavior.

Measures

Religious Behaviors and Religiosity

Religious attendance

Religious attendance was measured by how often did the respondents visit church or temples (or attend any religious service). Responses range from never (coded 1) to often (coded 4). Higher number indicates more frequent attendance to religious services.

Religious coping

Religious coping was measured with three indicators that assessed whether respondents turned to deity during difficulties, whether they consulted one of the gods when adversity arose, and whether they asked a deity to help them overcome the stressors they faced. Responses range from never (coded 1) to often (coded 4). Higher score represents greater use of religious coping. The reliability of this index is .92.

Private religious practices

Private religious practice was assessed with three items asking whether respondents offered prayers at home, read sacred scriptures, and watched or listened to religious programs on TV or the radio. Responses range from never (coded 1) to often (coded

4). Higher number represents greater involvement in private religious practices. The reliability for this index is .50.

Family Stressors

Negative family interaction

Respondents were asked to rate the availability of three types of support from their family: a). willingness of others to listen when the respondent needs to talk; b). level of caring provided to the respondent and c) reliability of others to provide sick care. d) level of respect to respondents' opinions when making important decisions. Responses categories range from always good (coded 1) to always good (coded 5). Higher score indicates stronger level of negative family interaction.

Financial Hardship: It is measured by one single question across two waves: "Do you (and your spouse) have enough money or any difficulty meeting monthly living expenses or other expenditures? " Reponses were "enough money, with some left over" (1), "Just enough money, no difficulty" (2), "some difficulty" (3), "much difficulty" (4), "enormous difficulty" (5).

Psychological Distress

Psychological Distress: The level of depression is measured by C-ESD scale, the number of symptoms respondents experienced for 1-4 or more days in the previous weeks. Those symptoms are based on the CES-D scale which has been used extensively and include: (a) "have a poor appetite," (b) "feel that doing anything was exhausting," (c) "sleep poorly," (d) "in a trouble mood," (e) "feel lonely," (f) "feel people around weren't friendly," (g)"feel anguished," (h)"have no will to do anything. The response categories are: "often (over 4 days)" = 3, "sometimes (2-3 days)" = 2, "rarely (1 day)"= 1, "no" = 0. Responses were averaged across non-missing items, and higher number represents higher level of depression. The alpha reliability for depression scale is .82.

Control Variables

The effect between religion, family stressors and psychological well-being will be evaluated after the control of demographic variables including *age*, *sex*, *education*, *marital status* and *living arrangement*, as well as health status (*self-rated health*) to rule out possible selection effect.

Analysis strategy:

The analysis will proceed in four stages with the adjustment of sociedemographic

factors, living arrangement and health conditions.

1. Examining the link between institutional religious attendance, private religious practices and religious coping on psychological distress among elderly in Taiwan: **OLS Regression**
2. Examining the connection between family stressors and religious attendance, practices and coping: **OLS Regression**
3. Examining the buffering or exacerbating effects of religious attendance, practices and coping of family stressors on depression: **Logistic Regression**
4. Examining gender, education and expectation differences on religion stress buffering/exacerbating effects: **Three way interaction term**

Preliminary Results

Table 1 presents standardized coefficient for the connection between religiosity and psychological distress (Stage 1). Results thus far shows that even with the control of sociodemogaphic factors, physical health and living arrangement, religious attendance is negatively associated with psychological distress; while, private religious practices have no effects on emotional well-being. Surprisingly, religious coping shows a significant positive effect on psychological distress, meaning that people with more religious coping behaviors are much more likely to feel distress than others. Although further investigation is needed, this results seem to reflect part of the nature of Taiwanese religious behaviors in the sense that people “turn to God when needed.(Musick et al 2002)” Therefore, elderly who have more religious coping behaviors are very likely to be the ones that are most in need of comfort.

Besides, in the preliminary analysis (not shown), we also examined the product term between family stressors and religiosity on mental health (stage 3). The preliminary results show that religious attendance buffers the effect of financial hardship and negative family interaction on psychological distress. However, religious coping seems to exacerbate emotional stress of negative family interaction among Taiwanese elders. The nature of Taiwanese religious behaviors and salience of family relationship to the elderly may account for the insights of these findings.

Table 1: Association between Religiosity and Psychological Distress

	Model
Independent Variable	Std. Coefficient
Age	0.008
Sex	0.019
Marital Status	-0.078***
Education	-.040***
Economic Hardship	.171***
Living Alone	.036
Physical Health	.348***
Religious Attendance	-.131***
Private Religious Practices	.009
Religious Coping	.132***
R-Square	.262
Adj R-Sq	.257

*P<.05;**P<.01; ***P<.001

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