The Chinese University of Hong Kong
The Nethersole School of Nursing
CADENZA Training Programme

CTP002 – Psychosocial and Spiritual Care

Chapter 10
The roles of religiousness and spirituality in improving health status of older adults: an update of evidence-based practice

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Chapter 10
The roles of religiousness and spirituality in improving health status of older adults: an update of evidence-based practice

Course Outline

- Historical development in research of religion/spirituality and health in later life
- Mechanisms of the religion/spirituality-health relationship
- Updated empirical evidence on the relationships between religion/spirituality and health in older adults
- Future directions of research in religion/spirituality and health in later life

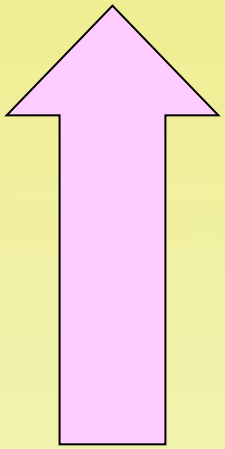
Historical development in research of spirituality/religion and health

Historical development in research of spirituality/religion and health

"Since the 19th century, over 230 published empirical studies have appeared in the epidemiologic-medical literature in which one or more indicators of spirituality or religiousness, variously defined, have been statistically associated in some way with particular health outcomes." (Levin, 1993, p.54)

Quantity of spirituality research (1966-2003)

Year	Total quantity of spirituality research in three health care databases (MEDLINE. CINAHL and HealthSTAR) for each time period
2000-03	2,843
1996-99	1,147
1991-95	565
1986-90	285
1981-85	152
1976-80	72
1966-75	54
1966	21



(O'Connor & Meakes, 2005)

Key word used in the searches: spiritual

Major reasons for increased interest by researchers

- An increase in the practice of holistic medicine by various healthcare professionals, including family medicine, nursing, occupational therapy, physiotherapy, oncology, psychology, etc.
- More creative in using quantitative research in studying religion/spirituality (RS) and health.
- Producing more and higher quality empirical evidence.
- A change in attitude by many scientists towards RS in admitting that RS may play a major role in a person's physical and mental health.

(O'Connor & Meakes, 2005)

Activity

Click on the following link to know more about the openness of psychiatrists to discuss spiritual concerns.

http://abcnews.go.com/Health/Healthday/story?id=4509877&page=1

Mechanisms of the religion/spirituality - health relationship

Mechanisms of the RS- health relationship

Introduction

- Five mechanisms were identified to determine the beneficial effects of religious involvement and spirituality on health
    1. Controlling health-related risks
    2. Social support
    3. Religious coping
    4. Psychological states
    5. Life meaning or self esteem

(Ellision and Levin, 1998)

1. Controlling health-related risks

- Some religions prohibit at-risk health behaviours, e.g. eliminate or at least reduce the use of tobacco and alcohol, premarital sexual experiences and other risky sexual activity, use of foods that may contribute to high cholesterol and heart problems, and strong prohibitions against the use of illegal drugs.
- It is believed that the prohibitions can only explain 10% of the impact.

(George et al., 2000)

2. Social support

- May be attributed to the fellowship, support, and social bonds developed among people who are religiously affiliated.
- Studies indicate that people who regularly attend religious services reported (1) larger social networks; (b) more contact with those social networks; (3) more help received from others; (4) more satisfaction with their social support network.

(Ellison & George, 1992; Zuckerman et al., 1984)

- Social support only explained 5%-10% of the relationship between religion and health.

(Idler, 1987; Zuckerman et al., 1984)

3. Religion and coping

- Religious or spiritual involvement may cultivate more effective ways of dealing with stressful events and conditions.
- 21 types of religions coping activities were developed that can represent five key religious functions:
  - the search for meaning,
  - the search for mastery and control,
  - the search for comfort and closeness to God,
  - the search for intimacy and closeness to God,
  - the search for a life transformation.
- However, it does not capture all religious coping methods that are specific to Western and non-Western cultures.

(Pargament et al., 2000)

4. Psychological states

4. Psychological states

- Religious and spiritual involvement may foster positive emotion, such as forgiveness, love and contentment
- It may also lead to negative emotion such as guilt and fear
- It enhances psychological health through providing outlets for the release of negative emotions

(Ellision and Levin, 1998)

5. Life meaning or Self esteem

- People who are religious understand "their role in the universe, the purpose of life, and develop the courage to endure suffering." (George et al., 2000, p.110)
- It is believed that life meaning buffers clients from stress.
- It affects 20%-30% of a client's physical and mental health. (Antonovsky, 1980; Idler, 1987)

Updated empirical evidence on the relationship between religion/spirituality and health in older adults

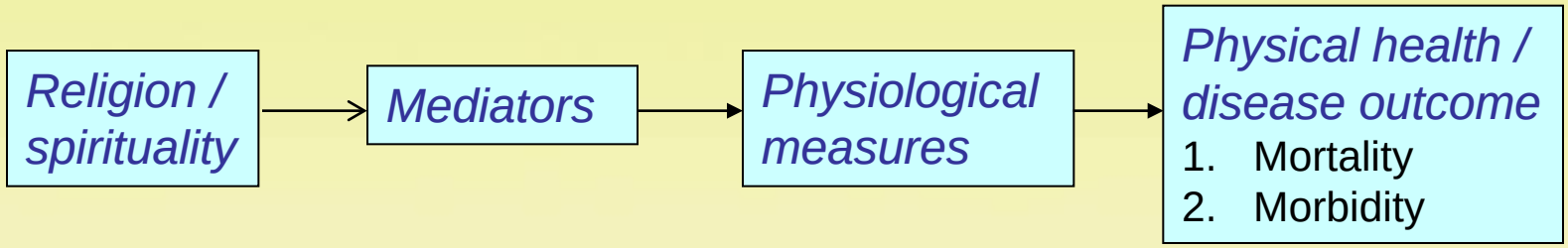
Empirical evidence on the relationship between RS and health in older adults

- A conceptual model was proposed by Oman & Thoresen (2005) to explain the impact of RS factors on health.

Description of the model:

It is suggested that RS factors act on physiological measures through mediating factors. Change in physiological functioning can alter physical health and disease outcomes.

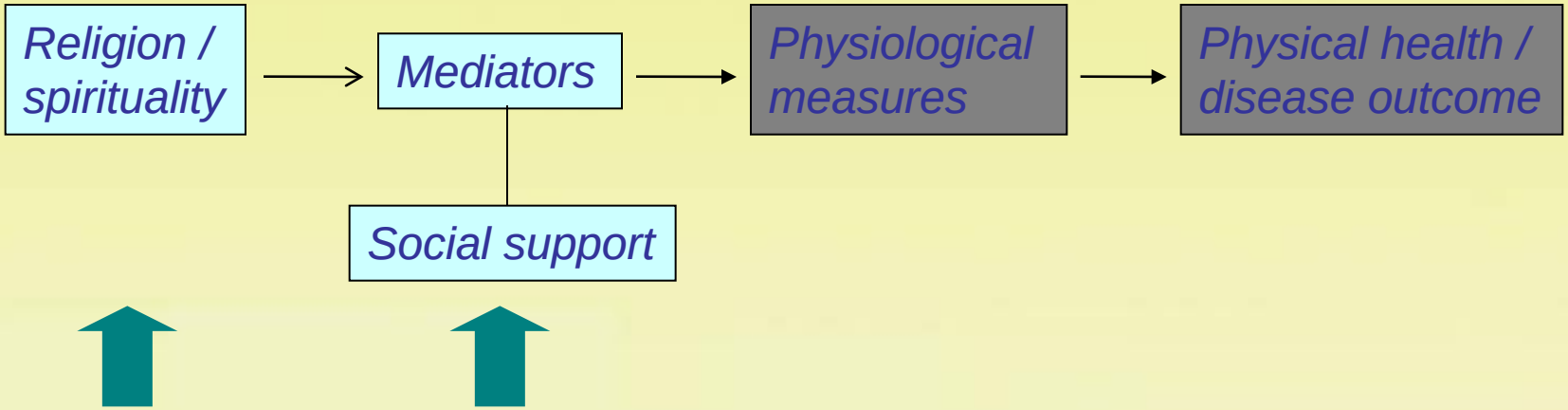
(Oman & Thoresen, 2005)



Causal influence of religion/spirituality on physical health outcome

(Oman & Thoresen, 2005)

RS and mediators – Social support



(Oman & Thoresen, 2005)

Social support in older adults

- It is suggested that social support may be conceived as a kind of coping assistance, which might explain why different dimensions of social support are sometimes most protective among different populations that possess different resources and experience different stressors. (Thoits, 1986)

Empirical evidence:
Koenig, Hays and colleagues (1997) found that frequency of private religious activities (prayer and Bible study) was associated with significantly greater social support in a random sample of 4,000 community dwelling older adults after controlling for multiple demographic and health factors, including church attendance.

Social support in older adults

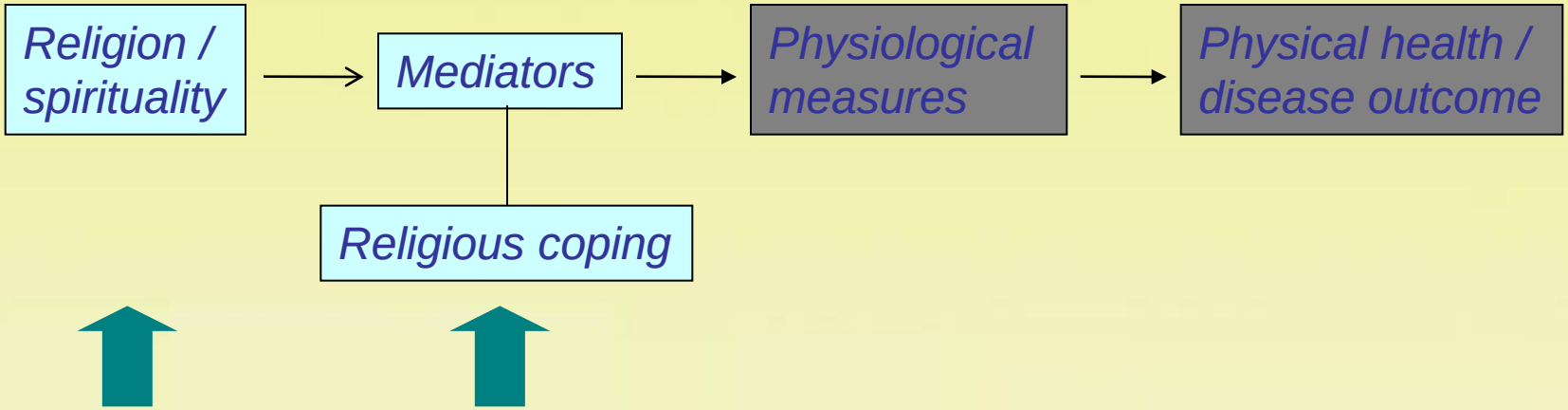
Empirical evidence:
Longitudinal studies of RS factors and social support reported that frequent service attendees were less likely to become or to remain socially isolated, and were more likely to become or to remain married over 28 years.

(Strawbridge et al., 2001)

- Mechanism of social support in reducing morbidity and mortality remains unclear. In addition, there is lack of evidence of social support in explaining the RS-health relationship.

(George et al., 2002)

RS and mediators - religious coping



(Oman & Thoresen, 2005)

Religious coping in older adults

- It is believed that religion offers a response to the "problems of human insufficiency" (Paragment & Brandt, 1998). When we are pushed beyond our resources and recognise our fundamental vulnerability, religion offers some solutions in the form of spiritual support, explanations for puzzling and difficult life events and a sense of control.

(Paragment & Brandt, 1998)

Empirical evidence

40 percent or more of those with serious medical illness reported their religious faith was the most important factor that enabled them to cope (more important than family, friends, work or other known coping resources). (Koenig, 1997)

Religious coping in older adults

Empirical evidence:

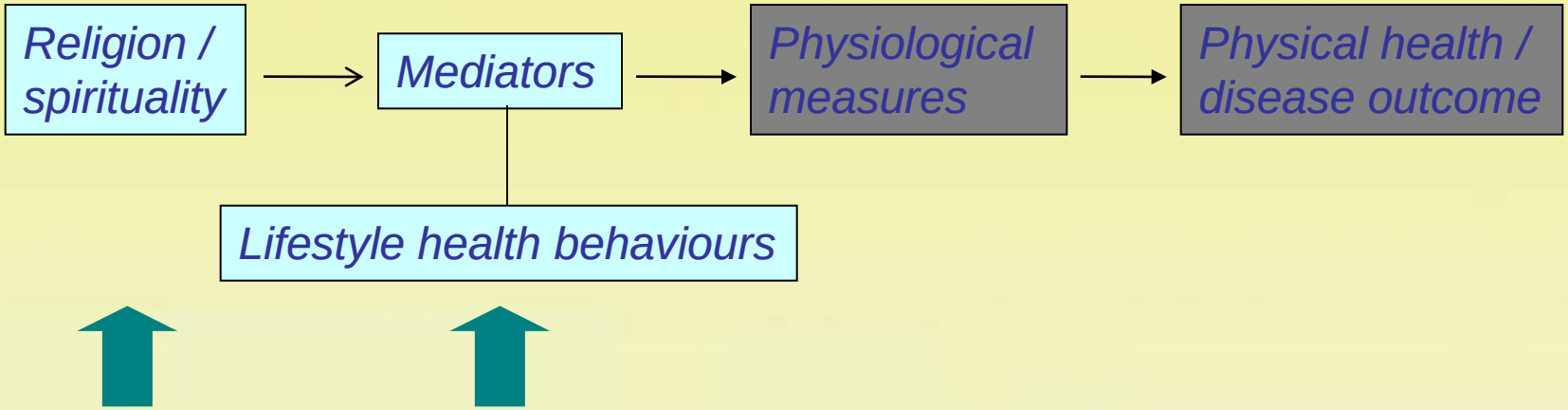
A study of 100 healthy community-dwelling older adults found that religious methods were the most common form of coping, particularly among women (nearly two-third of whom used religion as their primary coping strategy during stressful periods).

(Koenig et al., 1988)

In a longitudinal study of religious coping among medically ill elderly patients, spiritual discontent and demonic reappraisals at baseline were associated with a 19-28% increased risk of mortality 2 years later, even after controlling for other important demographic and predictor variables (including physical and mental health variables).

(Pargament, et al, 2001)

RS and mediators – lifestyle health behaviours



(Oman & Thoresen, 2005)

Lifestyle health behaviours in older adults

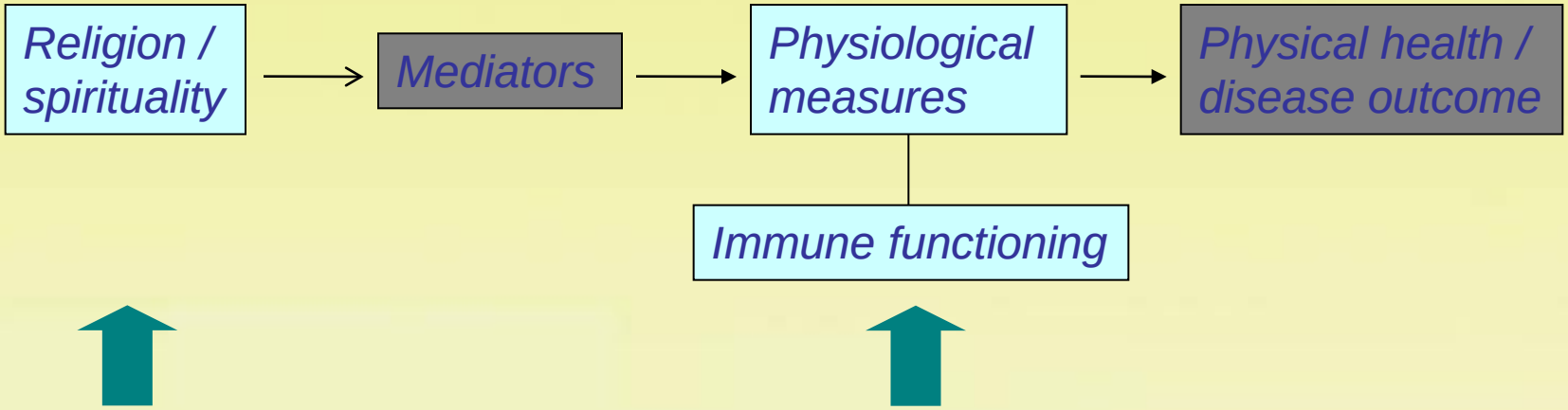
- Certain religions promote a more healthy lifestyle

Empirical evidence:

Strawbridge et al. (1997) found that frequent church attendees were more likely to change their health behaviours for the better during the 28 years of study. Even after controlling the initial differences, frequent attendees were more likely to (1) quit smoking, (2) reduce their drinking, (3) increase the frequency with which they exercised, (4) stay married to the same person, and (5) increase their number of social contacts than were infrequent attendees.

(Strawbridge et al., 1997)

Religion/spirituality and immune functioning



(Oman & Thoresen, 2005)

Serum levels of interleukin-6 in older adults

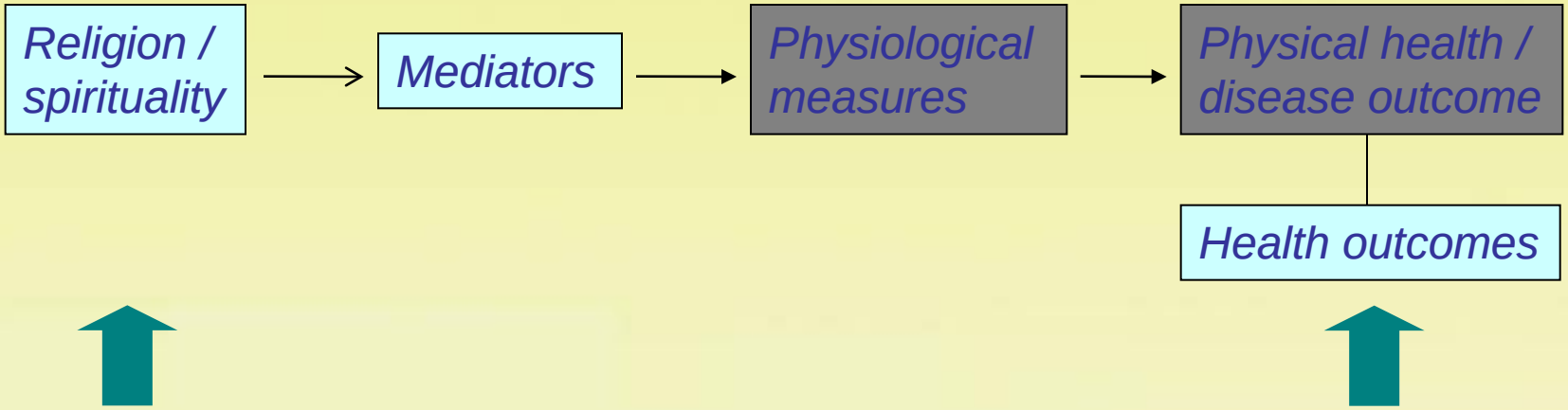
- The first study to examine religious activity and immune function by measuring serum levels of interleukin-6 (IL-6) and other biological indicators of inflammation in 1,718 older adults. (Koenig, Cohen et al., 1997)

Key findings:
Older adults who attended religious services were 49% less likely than non-attendees to have high serum IL-6 (>5pg/ml). It remained significant after controlling demographics, chronic illness and physical functioning (dropped to 42% less likely).

- It is hypothesised that religious involvement may reduce stress and stress-induced neuroendocrine and immune changes.

(Koenig, Cohen et al., 1997)

Religion/spirituality and health outcomes



(Oman & Thoresen, 2005)

Promoting health behaviours

- Studies that have observed a direct positive effect of religion on physical health (Koenig, 1997; Strawbridge et al., 1997) point to the positive consequences that derive from the risk-averse lifestyle behaviours associated with frequent church attendance in general and specifically with membership in strict religious sects and denominations.

Empirical evidence:
Koenig and colleagues (1998) reported that religiously involved people tended to be more compliant with their medical treatments.

(Koenig, 1997; Strawbridge et al., 1997)

Promoting health behaviours

Empirical evidence:

Religiously involved people received better monitoring for medical illness (tend to check up on each other, particularly if someone is having health problems or does not show up at church on Sunday) and might have greater access to health service (church members providing transportation).

(Koenig, 2000)

Cardiovascular morbidity

- The effects of RS on cardiovascular morbidity can be explained by the following ways:
  1. Religious beliefs and practices may enhance health by the effects on emotional health. Psychological stress triggers a "fight-flight" response in the body that causes a release of steroid hormones and catecholamine (epinephrine and non-epinephrine) from the adrenal glands. Steroid hormones act to weaken the immune system whereas catecholamines lead to high blood pressure and vascular damage that may result in heart attacks or stroke. (Koenig, 2000)
  2. Religious beliefs provide comfort and facilitate coping with stress and lead to a reduction of stress.

Cardiovascular morbidity

3. It is suggested that the protective effects of religion on cardiovascular morbidity are mediated through psychological mechanisms that maintain hope and regulate levels of depression, fear and anxiety.

(Kaplan, 1976)

Empirical evidence:

Community-dwelling elderly men who noted religion to be very important (attitudinal variable) and without diagnosable cardiovascular disease were found to have lower blood pressure levels than those who noted religion somewhat or not at all important (even after controlling for socioeconomic status, smoking and body size).

(Larson et al., 1989)

Greater religiousness has been associated with fewer strokes.

(Colantonio et al, 1992)

Summary: RS and health

- The effects of religious belief and practices on physical health are not always positive for older people.
- It is important to note that research literature on the religiosity and physical health relationship is less consistent and compelling than the literature on the relationship between religion and mortality and religion and mental health.

(Wink & Dillon, 2002)

Activity

Click on the following link to see whether doctors' spiritual beliefs make a difference.

http://www.cbsnews.com/stories/2007/04/09/health/webmd/main2666009.shtml?source=search_story

Religion/spirituality and mortality

General risks of dying

- A number of studies suggest that religious attendance is a powerful predictor of survival.
  - Oman and Reed (1998) reported that frequent church attendees (1,931 older residents of Marin County in San Francisco), particularly those who also volunteered time to help others, were significantly less likely to die during the 5-year follow-up even after other predictors of survival were controlled.
  - Koenig and colleagues (1999) replicated the study of Strawbridge and colleagues (1997) and followed 4,000 randomly selected older adults for 6 years. The results indicated that frequent church attendance predicted a 28% reduction in mortality.

(Oman and Reed ,1998; Koenig and colleagues, 1999)

General risks of dying

General risks of dying

- Those attending religious services once a week or more in 1965 were almost 25% less likely to have died than persons attending service less frequently after 28-year follow-up. This effect was particular strong among women who attended services once a week or more, whose risk of dying during the study period was reduced by 35% (this effect of mortality was seen after controlling demographics, social factors, health, and health behaviours).

(Strawbridge et al., 1997)

Risks of dying due to surgery

- People who reported not receiving strength and comfort from religion were considerably more likely to die during the 6 months following the elective open heart surgery than were people who reported receiving a great deal of strength and comfort from religion. (Oxman et al., 1995)

Risk of dying due to disease

- Religious attendance was associated with lower hazard of death from most causes, including circulatory diseases, respiratory diseases, diabetes, infectious diseases, and external causes

(Hummer et al., 1999)

Risk of dying - results from meta-analysis

- The meta-analysis of studies between public religious involvement[1] and mortality revealed that, on average, people who are highly religious have 29% higher odds of being alive at a given follow-up than do people who are less religious after adjusting for some covariates (McCullough, 2000). He also stated that "it is probably accurate to say that religious involvement-mortality relationship is one of most well-established findings in the religion and health literature" (p.63).

(McCullough, 2000)

[1] refers to religious activities taking place in public settings, e.g. church

Why public religious involvement but not private?

- May be partially explained due to the psychosocial resources such as: attending religious services, being a member in religious groups or connection with religious people.

(Goldbourt et al., 1993; Idler & Kasl, 1997)

Negative effect of RS on health

Possible reasons of negative effect of RS on health

- Certain types of religious beliefs may contribute at times to certain negative health effects for some people:
  - are repressive and controlling rather than guiding and liberating
  - instill fear, foster obsessive-compulsive traits, and lead to closed-mindedness and prejudice (Freud, 1907)
  - may encourage members to refuse medical care or stop medications with potentially disastrous consequences

(Coakley & McKenna, 1986)

Future directions of religion/spirituality and health in later life

Causal relationships of RS in health outcomes

- More methodological rigorous design studies / additional replication in other populations to foster our understanding of RS-physical health relationship.
- Further examine the linkage of religious attendance and RS factors to specific major diseases.
- A more careful study of person and psychological factors and various physiological process that could clarify pathways linking RS to health outcomes.
- Include studies that examine the benefit of RS mediators, such as providing help to others (selfless service or altruistic behaviour), forgiveness, and meditation.

(Thoresen et al., 2002)

Areas for future research

- Delineate the distinctions between religious belief and spirituality.
- Whether religious attendance impacts health or reduces all-cause mortality.
- Whether all religious groups have an equally positive impact on physical health.
- Whether becoming spiritual or religious late in life has any relevance to overall health.
- Whether socioeconomic status (living in a better or healthy community) is a better explanation for good physical health.

(Glicken, 2005)

Areas for future research

- Whether men and women and diverse ethnic and racial groups are equally affected by religious/spiritual involvement.
- Whether people who are inclined to become spiritually or religiously involved are more likely to be physically and emotionally healthy to begin with.
- Whether there is a hierarchy in power between religious involvement and spirituality.

(Glicken, 2005)

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The End of Chapter 10