
6 Religious and social capital and health

Ephraim Shapiro and Chen Sharony

INTRODUCTION

Religion plays a prominent role in many societies. It has been described as a system of beliefs and practices of those within a community, with rituals designed to acknowledge, worship, communicate with, and come closer to the sacred, divine or ultimate truth or reality (Koenig, 2008). Religion can potentially affect many aspects of a person's life, including health related ones. Although there is more than one definition of religion, it is generally agreed that there is an important social element to religion, as opposed to spirituality which often focuses on the individual and is increasingly seen as distinct from religion (Mercandante, 2014).

Religion is a unique construct, one that can be measured, quantified, and examined in relation to health outcomes. There are many measures of religion such as religious affiliation, denomination, prayer, beliefs, rituals performed, and religious knowledge as well as multidimensional measures such as intrinsic and extrinsic religiosity, religious coping, locus of control, and religious intensity (Koenig, 2011).

There is a substantial and growing body of evidence which supports a largely positive and beneficial connection between religion and health (Levin, 1994; Ellison and Levin, 1998; Koenig et al., 2012; Idler, 2014). However, the relationship between religion and health can vary depending on the measure of religion and measure of health and it can also vary by religious group (Koenig et al., 2012).

Participation in a religious community, as indicated by church attendance in particular, is the measure most associated with decreased mortality and improved health status in numerous studies, and reviews of the literature consistently report evidence of a positive relationship between religious attendance and health (McCullough et al., 2000; Levin, 2001; Powell et al., 2003; Koenig et al., 2012; Pargament, 2013). This is noteworthy as congregational attendance is the measure of religion that seems most connected to social capital and to related social factors such as social support, cohesion and networks. At the same time, measures of private religiosity such as individual prayer have more often been associated with negative health outcomes (Koenig et al., 2012).

RELIGION AND DIFFERENT HEALTH OUTCOMES

Mortality

A review article of several longitudinal studies estimated that church attendance is associated with a 25 percent decrease in risk of mortality after controlling for a variety of demographic, socioeconomic and health-related factors as well as healthy lifestyle, social support, and depression (Powell et al., 2003). Koenig et al. (2012) identified a total of 120 studies before the year 2000 dealing with religiousness and longevity. Of those, 82 studies (68 percent) found that greater religious involvement predicted greater longevity. Their literature review from the last ten years identified an additional 63 studies. Of those, 40 (63 percent) found significantly greater longevity among the more religious groups. Studies have consistently indicated that religious involvement, particularly religious attendance, predicts a longer life-span. The benefits of participation in a religious community are long lasting and one study found that even 28 years later, mortality risk is reduced by church attendance (Strawbridge et al., 1997).

Physical Health

As well as being associated with reduced mortality, religion can affect health status and morbidity through decreasing the incidence and severity of different types of illnesses (Chatters, 2000; Koenig et al., 2012; Pargament, 2013).

There is substantial evidence of an association between religious involvement and self-reported health status (McCullough et al., 2000; Koenig et al., 2012). Congregational attendance is the measure of religion most associated with improved health status (Powell et al., 2003). This relationship has been found across a range of countries, although the strength of the relationship can vary by individual and contextual factors, such as social status, gender and extent of religiosity in the country (Nicholson et al., 2009).

In terms of morbidity, there is an association between religious attendance and chronic diseases for health outcomes (Powell et al., 2003). Cardiovascular disease demonstrates the strongest association with religious attendance (Powell et al., 2003) as increased religiosity has been linked with lower blood pressure and stroke incidence. It has also been linked with lower incidence of cancer and diabetes, although the evidence is more mixed (Powell et al., 2003; Koenig et al., 2012).

Religiosity is also connected with lower incidence and severity of infectious diseases. In general, it is positively related to a good immune

system and a majority of studies on the topic found lower rates of infection or viral load among the religious (Koenig et al., 2012). This may be related to lower stress as well as to religious practices. For example, some studies have also found that circumcision, prescribed by both Judaism and Islam, lowers the risk of HIV and HPV, although it doesn't necessarily benefit all who are circumcised (Friedman et al., 2016).

Mental Health

There is a large body of literature on the relationship between religion and mental health with a generally, although not consistently, positive association found (Pargament, 2013). Overall, there is less depression and faster remission of depression among religious people. A meta-analysis which examined findings on the religion-depression relationship that included almost 100,000 subjects from 147 studies found a small but consistent positive effect (Smith et al., 2003). In a literature review of 178 rigorous studies on depression, over 67 percent of them reported an association between greater religiosity/spiritual involvement and less depression, faster recovery from depression, or fewer depressive symptoms while only 7 percent of studies found a negative association (Bonelli et al., 2012).

There is evidence of a link between mental and physical health and the connection goes in both directions connected with religion as positive and negative forms of religious coping are related to positive and negative psychological adjustment to stress. For example, religion is also related to lower suicide rates. Of 70 studies, two-thirds found fewer suicides and suicide attempts and less favorable attitudes towards suicides, but only 6 percent found the reverse. Possible reasons include that religion can reduce stress and depression or enable better coping with stress. Some religions also prohibit suicide altogether.

Health Behaviors

Religious involvement is related to many healthy behaviors. With the exception of weight, religious involvement is associated with positive health behaviors in the majority of studies in most of the behavior categories. Of 32 studies examining the relationship between religiosity and exercise, 25 of them (68 percent) found that greater religious involvement was associated with more exercise or physical activity. As for diet and weight, there are no consistent findings with regard to the impact of religious denomination. Examining the relationship between religious involvement and weight, 7 of 36 studies (19 percent) reported lower weight among the more religious while 14 (39 percent) reported greater weight and the

remainder reported mixed findings. In terms of the relationship between religiousness and cigarette smoking, 135 studies examined this. Of those, 122 (90 percent) reported less smoking among the more religious. A total of 95 studies have examined the relationship between religiosity and risky sexual behaviors, with 82 (86 percent) of them reporting an inverse relationship (Koenig et al., 2012).

CAUSAL MECHANISMS

A leading explanation for the generally positive relationship between religion and health is an increase in social capital and related social resources among the religiously involved and their institutions.

Types and Measurement of Social Capital

The basic definition of social capital, suggested by Putnam et al. (1993) is: “Characteristics of social organization such as trust, norms and social networks that can improve society’s efficiency by facilitating coordinated actions” (p. 167). There are several definitions of social capital in the literature, but most of them include trust, social integration, and civic action. Putnam also distinguished between different types of social capital: bridging social capital deals with the actor’s social network, or the connections between groups. Bonding social capital deals with internal social relationships within an organization or group; that is what brings the group to cohesion and to achieving common goals. Linking social capital is related to hierarchical structures such as social capital resulting from an interaction with representatives of formal institutions (police, social workers, bank tellers, etc.).

Social capital in general is measured by surveys, using questions concerning level of trust, number of friends etc. Other measures are the Civic Community Index, developed by Putnam. It is based on voting patterns, newspaper readership and prevalence of sports and associational clubs. The Petris Social Capital Index (PSCI) looks at community voluntary organizations using public data available for the entire United States. The PSCI measures the number of people employed in voluntary organizations in a given area (per 1000 people) (Scheffler and Brown, 2008). The PSCI includes organizations affiliated with religion, veterans groups, and labor unions. Since religious organizations are one of the main forms of organizations, religious communities would be expected to have a high level of social capital according to this measure (Scheffler and Baghat, 2013). For example, Brown et al. (2006) showed that the proportion of community

social capital attributable to religious groups, as measured by the Petris index, is inversely and strongly related to the number of cigarettes that smokers consume. However, they did not find overall community social capital attributable to religious groups to be related to the overall prevalence of smoking.

Religion and Social Capital

Religious involvement has been identified as an important component of social capital. Putnam argued that “faith communities in which people worship together are arguably the single most important repository of social capital in America” (Putnam, 2000, p. 66).

Effective norms in religious society may constitute a powerful form of social capital. This process is an ongoing cycle, with members meeting regularly, exchanging favors, developing trust, and joining together to practice their faith in a manner that is essential for civic engagement and civil society (Cnaan et al., 2003).

Church affiliation is the most common form of association in American society (Putnam, 2000). Religious behavior may also contribute to social capital formation in the sense that volunteering, charitable contributions and other distinct acts of kindness can help to provide a safety net for members of the society (Smidt, 2003). According to Wood (1997), religious institutions play a distinctive role within inner-city contexts because “those settings that previously generated trust and sustained broad social networks have deteriorated badly: unions, blue-collar workplaces, cultural associations, families and so forth” (p. 601). In fact, within inner-city neighborhoods, religious institutions are among the few institutions that still are trusted (Coleman, 2003).

Studies have showed that religious people exhibit more prosocial behavior (Furrow et al., 2004; Saroglou et al., 2005). People are more likely to give money and time, even to secular efforts, if they are church members (Wuthnow, 1996). They are also significantly more likely to vote if they are church members (Wald et al., 1993). Even having neighbors who attend church can be a critical factor in predicting whether the youth in a neighborhood will lack jobs, use drugs or engage in criminal activity (Case and Katz, 1991). The social capital of churches, it seems, spills over beyond their members into whole neighborhoods. As a result, church-based communities have the ability to turn-around low income neighborhoods (Coleman, 2003). Verba et al. (1995) argue that religion significantly increases the democratic potential of the United States. Churches are superior to their two main competitors, the workplace setting and non-political civic organizations such as the rotary club, in bringing

transferable civic skills to the more disenfranchised; the workplace and non-political civic organizations tend to benefit those who already have human capital such as the middle class.

Some forms of religiosity, such as traditional Catholicism, remain intensely hierarchical in structure. Other forms nurture horizontal relations of interactions (congregational forms of Protestantism and Judaism and certain forms of Catholicism). However, only a horizontal authority structure generates social capital (Coleman, 2003).

Koenig et al. (2012) found that of 14 studies that have examined religion and social capital, 11 (79 percent) reported significant positive associations. In addition, 62 of 74 studies (82 percent) found a significant positive relationship between religiousness and social support, social cohesion and social networks.

Research has especially focused on bonding social capital, perhaps because of Putnam's emphasis on it. For example, the beliefs of Evangelical Protestants seem to be connected both to increased bonding social capital and fewer risky health behaviors such as binge-drinking (Ford, 2006; Scheitle and Adamczyk, 2009).

However, there is evidence of a positive relationship between bridging and linking social capital and religion and health as well. A study showed that religious affiliation and in particular religious community function, gives a high level of bridging social capital because of increased networking with officials. Belonging to a church was found to have increased the chances of getting to know elites in three of four categories (political, business, economic); interestingly, the study found no such relationship for the high level of attendance in churches (Wuthnow, 2002).

Another study examined faith-based linking social capital and health. It surveyed over 1100 women from 45 churches in the Los Angeles area about use of church-based mobile mammography services. The study found important potential for increased use of preventive screening services resulting from linking social capital (Derose et al., 2002).

Social Capital, Religion and Health

Some studies found that the effect of social capital and religion on health outcomes varies by population group: Krause et al. (2011) found that informal church-based support is associated with a healthy lifestyle among older African-Americans but not older Whites. Assari (2013) tested whether social support and ethnicity mediate/moderate the association between religious involvement and subjective health in the United States. Hierarchical regression was performed for a national household probability of adult African-American, Caribbean blacks, and whites. The findings

suggested that ethnicity affects how church-based social support mediates the association between religious involvement and subjective health. The results showed a moderating mediation effect of ethnicity and social support on the linkage between religious involvement and subjective health; it is only among African Americans that social support is a pathway for the beneficial health effect of religious involvement.

An Israeli study compared the varying effect of individual-level social capital indices on health level between Jews and Arabs (Baron-Epel et al., 2008). The authors found a strong influence of social capital on the level of health among Jews but a weaker effect among Arabs. However, they found a high level of trust within the family (bonding social capital) and low level of trust in the extended community (bridging social capital) among Arabs, while among Jews they found higher level of trust in the extended community. This could be related to the Arabs being a minority in Israel. Among the Arabs, the extent of support and number of daily social connections are higher, but this does not translate into good health. The authors argue that in less affluent societies, social capital has a lesser effect on health.

FINDINGS FOR SPECIFIC RELIGIONS

In this part we focus on three religious populations: Christians, Jews, and Muslims. We included members of these religions both because the research literature has primarily involved these populations and because they are the most social religions, such as an emphasis on congregational prayer.

Christians

Most of the studies that have examined relationships between religion and mental, social, behavioral, and physical health have been conducted in predominantly Christian populations. A majority of these studies report that those who are more religious or spiritual experience fewer negative mental health problems (less depression, suicide, anxiety, alcohol and drug use). Negative health behaviors such as cigarette smoking, a sedentary lifestyle, poor diet, and risky sexual behaviors are less frequent among more religious Christians, with the exception of obesity. Physical health status is also higher among Christians who are more religious, including better self-rated health, less coronary artery disease, better cardiovascular functions, lower blood pressure, less cerebrovascular disease, less dementia, slower decline in memory with age, better immune functions, better endocrine

functions (lower stress hormone levels), and lower rates of cancer (Koenig and Shohaib, 2014).

Koenig and Shohaib (2014) reviewed 121 prospective studies that examined relationships between religiosity and overall mortality, of which 106 (88 percent) were in Christian-majority populations. Of these, 72 (68 percent) found significantly greater longevity or reduced mortality in those who were more religious, whereas 7 (6 percent) reported greater mortality.

Jews

In their review of research, Levin and Schiller (1987) found that when comparing religious groups, there appears to be relatively lower mortality risk in more behaviorally strict religious populations such as Haredi (Ultra-Orthodox) Jews. One of the ways that religious involvement impacts health is through the kind of religious belief system that requires a commitment strong enough to lead to changes in health-related behaviors. As a result, for Orthodox Jews, who generally are more likely to be committed to a strictly observant life style than Jews in the other denominational categories, participation in synagogue life has observable implications for health.

Billings (1891) was among the earliest medical experts to suggest that religious affiliation may be a contributing factor to differential health outcomes among social groups, exemplified by distinctive patterns of morbidity, mortality, and longevity among Jews. A lower relative incidence of uterine and cervical cancer among Jews (and Muslims), for instance, was observed throughout the world (Kennaway, 1948).

Anson et al. (1991) surveyed a random sample of members of a religious kibbutz ($n = 105$) and non-religious kibbutz ($n = 125$) in Israel. The two kibbutzim had similar demographic characteristics but membership in the religious kibbutz was associated with greater well-being and fewer physical symptoms of illness.

Levin (2011) studied the effect of religious observance on health among the Jewish population in the United States. Seven of eight religious measures were positively associated with one or more health indicators, with two measures of synagogue involvement remaining significant on an adjusted basis. The most interesting finding from these analyses is the importance of synagogue participation for health, but primarily for those Jews who value traditional forms of Jewish observance. Another study found that experiencing a high level of spiritual struggles was predictive of poorer physical and mental health in Jews generally, but of better physical and mental health among Orthodox Jews (Rosmarin et al., 2009).

Kalter-Leibovici et al. (2016) aimed to determine social characteristics associated with smoking status among ethnically diverse populations in Israel. They found that religiosity was significantly and independently associated with smoking status for both males and females. Participants in both the observant and very religious categories were less likely to report cigarette smoking compared to secular men and, especially, compared to secular women.

Chernichovsky and Sharony (2015) found that the health status of Ultra-Orthodox Jews in Israel was relatively good despite low socio-economic status. A multivariate analysis found that religious observance has a significantly positive effect on the probability that a subject will report “very good” health status. The authors showed that common measures of social capital had a positive effect on health and suggested that this explained the positive connection between religion and health.

Muslims

A smaller number of studies were performed about the connection between health and religion among Muslims than for Christians and Jews. Koenig and Shohaib (2014) reviewed studies on religion and social capital among Muslims, and found that social and community health is almost always better among Muslims who are more religious. Social health means greater social support, greater marital satisfaction and stability, lower delinquency and crime, and in about half of studies, greater social capital (Koenig and Shohaib, 2014).

Burazeri et al. (2008) conducted a case-control study involving 457 consecutively admitted Albanian patients with nonfatal acute coronary syndrome between 2003 and 2006. A significant linear trend between level of religiosity and heart disease was present in these relationships for both Muslims and Christians using different religiosity measures. For example, those who always fasted during Ramadan were 72 percent less likely to have acute coronary syndrome compared to those who never fasted.

Kark et al. (2006) analyzed data on coronary arterial disease (CAD) events among 76 200 Palestinian Arabs and 226 500 Jews ages 25–74 in Jerusalem between 1995 and 1997. They concluded that rates of CAD events among Palestinian Arabs were not only higher than in Jews, but also compared to rates found in 21 other developed countries.

A study found that prayer during midlife significantly reduced the likelihood of mild cognitive impairment after age 65 among Arab women in Israel (Inzelberg et al., 2013).

Two studies examined the relationship between religiosity and self-rated health (SRH) among Muslims, although neither was in Muslim-majority

populations. In one study, frequency of religious attendance and importance of religious devotion was positively related to better SRH among both immigrant and native-born adolescents in Bosnia-Herzegovina (Sujoldzic et al., 2006). In the other study religious attendance was negatively related to SRH among older adults in Kenya, where 12 percent of the population is Muslim (Kodzi et al., 2011).

Koenig and Shohaib (2014) concluded that because of the links found between religiosity and better mental, social, and behavioral health in Muslims, there is every reason to expect that these benefits would spill over into better physical health as well. However, because of a lack of research on the relationship between religiosity and most areas of physical health in Muslim populations, it is difficult to draw firm conclusions.

Hodge et al. (2015) examined the effect of discrimination and spirituality on depression using a sample of self-identified Muslims in the United States. They found that saying daily prayers was associated with a lower likelihood of reporting elevated levels of symptoms of depression.

Other studies found lower health care utilization among Muslims: Al-Karenawi (2002) used national hospitalization records ($n=15\ 698$) and found that Arab patients significantly underutilize mental health services, compared to Jewish patients. Merom et al. (2012) used a random sample of Palestinians and Israelis, aged 25–74 years living in East and West Jerusalem, populations who are primarily Muslim and Jewish respectively. Analyses were stratified by sex, in order to investigate physical activity levels. The authors found that substantial proportions of Palestinian women, and subgroups of Palestinian men, are insufficiently active.

RELIGIOUS CAPITAL AND HEALTH

The consistent positive correlation between religion and social resources, have caused some to question whether the effects of religion on well-being are simply due to social capital and other social factors rather than the impact of religion (Sloan et al., 1999; Bagiella et al., 2005; Sloan, 2006). However, many studies have continued to find an association between health/well-being and religious involvement, even after controlling for social factors (Koenig et al., 2012). Characteristics of religion, not merely the social capital produced, can potentially affect health outcomes. It is important, therefore, to go beyond merely looking at the role of religion in a social context, to understanding how the specific content of the religion itself can potentially influence health.

There are distinctive aspects of religion such as beliefs, behaviors, rituals, and outlook that can serve as a resource (Iannacone, 1990; Stark and Finke,

2000; Finke and Daugherty, 2002). The term religious capital was developed by an economist (Iannacone, 1990). It has rarely been examined in terms of its relationship with health despite the fact that elements of religious capital can potentially impact health; religious capital has been given far less attention than social capital in regards to impact on health outcomes.

Religious capital consists of the degree of mastery of and attachment to a particular religious culture (Stark and Finke, 2000). The mastery of the religious culture refers to learning the knowledge, skills, and rituals of a specific religion, e.g., bible stories, when to say amen, following liturgies, etc. (Iannacone, 1990). However, religious capital includes more than knowledge; it also includes an emotional attachment to a particular religious culture (Stark and Finke, 2000).

Factors related to the nature of religion such as rituals, meanings and beliefs play an important if often neglected role in studies of the impact of religious involvement on health (Levin, 1996; Krause et al., 2016). Religious doctrines can lead to a perspective on human nature and society that leads to attitudes associated with better physical and mental health outcomes (Chatters, 2000; Levin, 2011; Krause et al., 2017).

The idea of transcendence which is a part of the basic definition of religion underlies the wider perspective that religion provides (Berger, 1967; Stark and Finke, 2000). Religious beliefs related to meaning and having a positive worldview can be related to better health. These beliefs give each person's life value, importance and significance. These include belief in a loving merciful god, belief in a continued existence after death, and belief that human life is special and worthy of respect and preservation at great cost (Koenig et al., 2012). Koenig et al. (2012) found that 42 of 45 studies (93 percent) reported significant positive relationship between religiosity and purpose or meaning in life.

Health interventions may be more effective when placed in the context of elements of a religion such as its values (Emmons, 2000). For example, belief among Christians that "My body is a temple" can have a positive impact on health (Krause et al., 2017). Risk moderation, coping and use of services also play potentially important roles that impact health (Ford and Kadushin, 2002; Pargament, 2013).

Personality characteristics are related to religious beliefs and at the same time can also affect health. For example, volunteering can increase religious capital (Park and Smith, 2000) and also improve the health of the volunteers themselves as well as those for whom services are being performed (Kim and Konrath, 2016). The effects of altruism and optimism found among religions are believed to mediate the association between religious involvement and health outcomes (Krause, 2005; Steffen and Masters, 2005). Gratitude and humility are also traits associated with

both religion and positive health outcomes and they can improve the health of the individual as well as those in his religious group (Koenig et al., 2012). Religion gives people hope that there are better times ahead. That hope can motivate individuals to think and behave in ways that help them recover. Koenig et al. (2012) found that 26 of 32 studies (81 percent) reported a significant positive relationship between religiousness and optimism.

The idea of sacred and religious rituals are other elements that distinguish religion from other social phenomena (Hill and Pargament, 2003). For example, a day of rest that is holy can potentially lead to better mental health (Loewenthal and Dein, 2016).

Religious capital may also affect health-related behaviors that are associated with lower mortality and morbidity. Specific doctrines and beliefs can have generally protective benefits. Religious proscriptions and prescriptions can affect behaviors associated with health status such as smoking, substance abuse, risky sex, nutrition and exercise (Levin, 1996, 2001; Hill et al., 2007; Idler, 2014).

It is important to stress that religious capital does not always have a positive impact on health. Some theological beliefs can harm health. Adherence to religious explanations for illness, such as sin, and reliance on divine intervention for a cure may interfere with medically appropriate care seeking. Another example is increased resistance to vaccinations among certain groups of the religiously involved, both in general or where it may be perceived to be associated with sexual activity such as with the HPV vaccine (Shelton et al., 2013). Religion can also have a negative impact on mental health. For example, religious struggles can be harmful to health if someone feels abandoned by his or her religion in contrast to others in the community, leading to negative coping with illness (Ellison and Lee, 2009; Pargament, 2013).

Although a distinct mechanism, religious capital is theorized to work with social capital and other social resources to influence health as religious orientations and practices are reinforced and supported in a religious communal context (George et al., 2002). The limited numbers of studies examining religious and social capital together do provide support for the positive effect of both of them on health.

An early study, from around the time the term religious capital was coined, compared 22 matched religious and non-religious kibbutzim in Israel over 16 years and found that despite similar demographics, ideological outlooks, focus on egalitarianism, social cohesion and health care access, those living in the religious kibbutzim had longer life spans (Kark et al., 1996). The likeliest explanation was increased religious capital, although the authors did not use that term.

Using a sample of 720 people from six congregations in Great Britain, Williams (2008) defined a scale for what he called religious social capital, which looked at different types of social capital within a religious cohort. A study of about 300 urban youth found that churches increased access to religious social capital (Mason et al., 2012). An association was found between religious support and social religiosity with decreased alcohol and drug use; private religiosity did not have this protective effect. An analysis of a survey of over 10 000 adults of found that that social capital is a mediator for the relationship between religion and health (Yeary et al., 2012). Another study found a positive association of religious capital with health status among 803 African-Americans (Holt et al., 2012).

METHODOLOGICAL ISSUES AND ADDITIONAL RESEARCH NEEDED

It is important to stress that while there is a growing and compelling body of evidence supporting a connection between religion and health, especially related to underlying social factors, this connection is not without methodological challenges as critics have pointed out (Sloan et al., 1999; Bagiella et al., 2005).

Many studies are cross-sectional so we cannot reject the hypothesis that those in better health or with healthier behaviors are likelier to want to attend church. However, there is no reason to expect this and some evidence that in fact religion can attract those who are sicker (Hvidt et al., 2016). Further, evidence from longitudinal studies still supports a generally positive relationship between religion and health.

Some critics have also noted that perhaps those lacking adequate functional status cannot participate in religious communities, leading to a spurious finding that those who attend services are in better physical health. However, studies of younger cohorts have also found a generally positive relationship between religious involvement and health; therefore, physical capability is unlikely to be an explanatory factor for variations in health by attendance level (Shapiro, 2010; Koenig et al., 2012).

There are also issues of external generalizability. The validity of the measures and findings may vary across religions and cultures leading to unique health issues for each religion (Idler, 2014). For example, differences in the focus on community among religions as well as differences in beliefs and proscribed behaviors may lead to different findings among some religions not covered in this chapter, such as Hindus and Buddhists.

Many studies are self-report, which can also make comparisons among groups difficult. For example, it is possible that differences in rates of

depression between religions is related to some groups being more likely to complain about it.

There are some who assert that church attendance is inflated because of social desirability bias (Bagiella et al., 2005; Sloan, 2006). Many researchers disagree that this is a major issue, however (Strawbridge et al., 1997; Levin, 2009), and religious service attendance is still widely used as an independent variable when examining health status (Koenig et al., 2012).

The extent to which religious and social capital applies to those who participate within a faith community but are not religious themselves is unclear. Moreover, it is likely that even among those who are religious, there are variations in the extent of its influence. The motivation for and content of religious congregational attendance could affect to an unknown degree the potential association between social capital, social capital magnified, religious capital and health.

The relationship between religion and health is complex and can be difficult to study, including adequately accounting for all potential confounding variables. As a result, findings should be interpreted with caution and there is a need for additional research. Although this chapter provides a number of potential explanations for the generally better health among the religious involved, there is a need for discovery of additional mechanisms and for better operationalization of concepts of religious capital to guide for future research on the topic.

POLICY IMPLICATIONS

The connection between religion and health can help policymakers take advantage of the fact that religious communities can play such an important role in people's lives for both social and religious reasons, especially those of vulnerable populations (Trinitapoli et al., 2009; Idler, 2014). Policies can be developed and implemented to take advantage of these opportunities in improving population health and reducing health inequalities. Studies presented in this chapter suggest a possible opportunity for physical and mental health to be improved by using religious as well as social capital. There is a wide range of programs that some congregations have developed but that can be implemented on a more systematic basis. For example, lay health ministries, faith-based community health workers, sermons by religious leaders addressing health topics, and exercise programs in congregations are all examples of interventions that have a religious component, not merely a social one with potential positive impact on health (Campbell et al., 2007; Trinitapoli et al., 2009).

There are also health policy implications in terms of both efficiency as well as effectiveness of faith-based interventions. For example, the government can potentially play a role in promoting such interventions and the use of volunteerism found in religious communities can prove a cost-effective means for health promotion (Park and Smith, 2000; Dilulio, 2007). It should be noted however, that programs should be tailored to different religious communities because of different beliefs, practices and roles of religious institutions.

CONCLUSION

This chapter presents evidence of a largely positive relationship between social capital as well as religious capital, with generally better health outcomes found among the religious involved. The relationship is a complex one, however, with multiple causal mechanisms. Variations exist by a number of dimensions including measures of health, measures of religion, and community being studied and there are also methodological challenges to studying the topic of religion and health. Nevertheless, the connection between religious capital, social capital and health has much supporting it and has potentially important implications for public policy, although there is a need for additional research to better understand the nature of the association between religious and social factors and health.

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