ABSTRACT

Physician and Patient Interactions:
The Role of Beliefs and Values in Directing Clinical Conversations

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This dissertation examines how physicians' beliefs and values influence the content of their conversations with patients. After an introductory chapter, chapter two primarily provides an overview of the data and the religious beliefs and practices of physicians in the United States. Physicians in the United States tend to be more spiritual and less religious, and practice and affiliate more than the general population but believe less. These trends, in turn, relate to how they converse with patients.

Chapter three focuses on who discusses religion and spirituality with patients and why this might be the case. A physician's ability to connect with patients depends at least in part on his or her ability to empathize with them, but some physicians will be disadvantaged in their ability to connect due to a lack of shared experiences. Being able to connect with a religious patient will depend on the physician's own religious/spiritual orientation and whether they see a connection between religion and medicine. Using a mediated bi-factor structural equation model, I find that physicians who are religious and spiritual are most likely to have made this religion-medicine link and talk to patients about it.

Instead of asking who talks to patients about religion, chapter four analyzes how physicians react when it does come up with patients. By analyzing a series of mediated path models, I again find that those physicians who have connected their beliefs and the work they do are least likely to avoid religion in the clinical context.

Chapter five examines whether there is a relationship between physicians' religious characteristics and the religious characteristics of their county when predicting religious clinical interactions. After proposing competing hypotheses stating that the population characteristics will be important and that structural constraints are more important, I find that the population characteristics do not influence clinical conversations.

Chapter six briefly reviews the theoretical implications of the empirical chapters and considers the importance of the findings for future research. In doing do, I suggest a number of potentially helpful future developments.

Physician and Patient Interactions:
The Role of Beliefs and Values in Directing Clinical Conversations

by

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A Dissertation

Approved by the Department of Sociology

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

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CHAPTER ONE

Introduction

When a patient walks into their physician's exam room, they have a pretty good idea how the conversation will go. Maybe not the specifics, but they have expectations for the conversation's general contours. It is interesting that there can be fairly reliable expectations for this interaction when physicians are almost as diverse as the patients they treat. Having said this, it is also true that not all physicians have the same bedside manner, however, and not all physicians include the same content in their conversations with their patients.

What is more interesting than the fact that these interactions are highly patterned is the specific deviations from the expected script. Just as the medical content of physician and patient conversation is not random, neither are deviations into spiritual and religious matters. What predicts the content of a physician's discussion with patients? This research project explores why some physicians see religious content as relevant to their clinical conversations, while others don't.

Religious beliefs are common in the United States (Putnam, Campbell, and Garrett 2010) and they often play a large role in how Americans make sense of their world and experiences (Berger 1990; Froese and Bader 2010; see also Curlin and Moschovis 2004). When someone becomes sick or ill, they try to make sense of that experience just like any other experience in their life (Toombs 1987). Making sense of an illness can be confusing for those with a religious worldview because religion is not traditionally a part of medical interactions. Quite often this "meaning work" is

compartmentalized and given to different professionals; the physician tasked with helping the patient make sense of her medical troubles and a chaplain or pastor helping her make sense of her experiences in the terms of the rest of her life (Marty 1982). In other words, the already disadvantaged patient is given the additional task of integrating the input received from the medical professional and the, for lack of a better phrase, religious professional. It may be for this reason that many patients would like their physician to know about or speak with them about their religious beliefs (Bernard, Quill, and Tulsky 1999; Bushwick and King 1994; Ehman et al. 1999; King and Bushwick 1994; MacLean et al. 2003; Williams et al. 2011). The challenge, on the other hand, is that few physicians recognize the presence of this desire (Koenig et al. 1991). When it is a part of the medical interaction, such as praying with a patient, it is very often initiated by the patient and not the physician (Cadge and Ecklund 2009).

Research focusing on which physicians are more likely to discuss religiosity or spirituality with patients generally shows that it is primarily the more religious physicians. For example, Luckhaupt et al. (2005) find that just under half of their physician sample think that they should play a role in the religious or spiritual lives of their patients, but that doing so depends on both the patient's condition as well as the personal characteristics of the physician. Curlin et al. (2005) found that all of the physicians who participated in their qualitative study thought religion influenced health but they tended to de-emphasize religion's influence on actual health outcomes. Medical specialties also tend to differ in the degree to which they think religion is relevant to their work, with psychiatrists (Curlin, Lawrence, Odell, et al. 2007) and oncologists tending to include religion more often (Cadge, Ecklund, and Short 2009). Grossoehme et al. (2007)

show that, at least for pediatricians, it is generally the physicians who either are or have had more exposure to religious beliefs or experiences that pay more attention to religiosity and spirituality in clinical settings. While physicians who have received training on how to include religion in their patient interactions do so more often, interestingly it is primarily the more religious physicians who report having exposure to such training in the first place (Rasinski et al. 2011). The frequency of discussing religion or spirituality often increases as the severity of the patient's medical need increases (Ramondetta et al. 2011), but the work is then frequently passed off to a chaplain (Cadge, Calle, and Dillinger 2011). Much of this research helps understand who may be likely to discuss religious or spiritual topics with patients, but why this may be the case is underdeveloped.

I expand on this work by providing theoretical groundwork leading to specific hypotheses to clarify why it is that some physicians include beliefs in their interactions with patients while other do not. When trying to make sense of why some physicians see religion as pertinent for medical interactions and other do not, it is necessary to include ideas regarding the solidification of meaning and perceptions as these play a big part in role performance and contextualized understandings of interactions; what is going on and how one ought to respond. Luckily sociologists have developed frameworks for this endeavor, and these frameworks help us make sense of what a physician does in the exam room. Berger and Luckmann's (1966) landmark phenomenological approach unpacks how people attach meaning and coherence to their experiences, extrapolating their own experiences to others as a method for "knowing" the thoughts of strangers. The gulf separating one's "knowledge" of another's thoughts, based on extrapolated experience,

can be vast or negligible. Giddens (1984) argues that all people strive for consistency in their experiences and try to make sense of others' actions within the constraints of social structures. This is clarified and expanded by Sewell (1992), who says the interaction of individuals and structure leads to the development, solidification, and change of durable, transposable cultural schemas. Finally, Vaisey (2008, 2009) argues that people function with a dual cognitive structure, whereby much 'culture' informs the fast acting, unconscious dimension, allowing social actors to play appropriate roles and react in social situations without time-intensive reflection.

What this means for the medical interaction is that both the patient and the physician will enter into their interaction with one another with clear expectations for that interaction - what is appropriate conduct in the interaction and what is relevant and not relevant. Somerville et al. (2008) even talk about the existence of a conversational canon, where medical interactions tend to be fairly standardized as if there is a set, predetermined conversation (see also Dimond 2013). If patients need or want religion to be a part of their experience with illness, but their perception of medicine does not include religion, they are unlikely to introduce those topics to their physician. In the same way, if a physician does not associate their practice of medicine with religious beliefs and values, then they are also not likely to include religion in their interactions and may even avoid it when it is brought up by the patient. This is the point refined by the present work: a patient's desire for their religious beliefs to be a part of medical interactions is often present, and likely increases with the severity of their illness, but the inclusion of religion or spirituality in clinical conversations will primarily depend on whether or not the physician has formed a cognitive link between the two.

Chapters

Data regarding physician beliefs and clinical practices is from the *Religion and Spirituality in Medicine: Physicians' Perspectives* (RSMPP) survey (Curlin et al. 2006; Curlin, Lantos, et al. 2005; Curlin, Lawrence, Chin, et al. 2007). This survey, fielded in 2003, includes responses on topics such as the religious beliefs of physicians, their patient interactions and what role they think religion and spirituality has in the care of their patients. The survey was a stratified random sample of 2,000 physicians from the American Medical Association Physician Masterfile. The sample was stratified by physician specialty. The survey was self-administered and of the 2,000 selected physicians, 1,820 were eligible after removing those who were either no longer practicing or had incorrect addresses. As such, according to AAPOR response rate definition 4, the survey response rate was 63% and did not differ by age, region or whether the physician was certified or not (American Association for Public Opinion Research 2011). Men and foreign medical graduates were slightly less likely to respond, and weights were calculated to compensate for this as well as the sample stratification (Curlin et al. 2006).

This data was merged with two additional data sources in some chapters (see individual chapters for further discussion). First I have included data from the 2000 *Religious Congregation and Membership Study* (RCMS), which provides measures reflecting the percent of the population that maintain a membership at a religious place of worship within each county in the United States. This information was attached to each physician within the sample so as to control for the religious concentration of their county. This data was collected by the Association of Statisticians of American Religious Bodies and the Glenmary Research Center. There are, however, some known

sampling issues, so I use the adjusted adherence rates as calculated by Finke and Scheitle (2005). Second, two measures from the 2000 US Census are used for county-level controls in Chapter five. The Gini coefficient and the percent with greater than a high school education in each county was again connected to the physician according to the county in which they reside. Gini coefficients are a reflection of the county's inequality and the measure ranges from zero (perfect equality) to one (perfect inequality).

Chapter two is meant primarily as an introduction to the data, showing trends of physician religiosity and spirituality in the United States and how these characteristics may relate to their patient interactions. As compared with the general US population, physicians tend to attend religious services slightly more often and they tend to be more "spiritual" and less "religious" or neither religious or spiritual (see also Ecklund and Long 2011). There is also a greater concentration of Jewish, Hindu, Muslim, Orthodox, Mormon and Buddhist physicians than the wider US population. While physicians who attend religious services more often also tend to speak with patients more often about their religious or spiritual beliefs, this may be better explained by the physician's religious/spiritual orientation and their belief that religion and spirituality influences patient health – an initial indication that cognitive links between the two may be important.

Chapter three focuses on the question of who discusses religion and spirituality with patients and why this might be the case. Any given physician's ability to connect with patients depends, at least in part, on his or her ability to successfully extrapolate his or her own experiences to patients. It follows that some physicians will be disadvantaged in their ability to connect with patients due to a lack of shared experiences. I posit that a

physician's ability to make a religious or spiritual connection with patients will depend primarily upon their own religious/spiritual orientation. Their orientation will need to be one which has allowed them to have made a cognitive connection between their medical practice and religious beliefs. To model these relationships, I constructed a bi-factor structural equation model with two key results. First, religious and spiritual physicians are more likely than other physician religious orientations to have formed a connection between medicine and religious beliefs. Second, this connection and the physician's religious orientation have implications for who includes religion or spirituality in clinical interactions with patients. Religious and spiritual physicians appear to be most proactive in including religion/spirituality in their patient interactions as a result of their cognitive connection between medicine and religion. Spiritual but not religious physicians, on the other hand, can empathize with a patient's desire for the inclusion of religion but because their own beliefs tend to not be universal and associated with meaning making systems (Ammerman 2013) their inclusion will be much more pragmatic.

Instead of asking who includes religion or spirituality in their clinical interactions, Chapter four focuses on how the physician responds when these topics do come up in their clinical encounters. Connecting sociological ideas of schemas and cognition with recent work on religious/spiritual orientations, I theorize four different ways a physician could respond to religiosity or spirituality in the clinic and specify which orientation would be most likely to take each approach. They could see a direct relationship between medicine and religion, take a pragmatic approach, think of the two as non-overlapping dimensions of life or reject that there is any relationship between the two. Using five different dependent variables, I create path models to evaluate these relationships. The

most consistent finding was that religious and spiritual physicians were most likely to have formed a connection between medicine and religion, and as such, most actively included religiosity and spirituality in their clinical interactions.

Chapter four ends with a short discussion about the strength of the association between "cultural" and "structural" variables and the various dependent variables. This is the topic of Chapter five where I focus on whether or not patient population characteristics within the physician's county are related to the inclusion of religion or not. I specify two competing hypothesis – one predicting the importance of the population characteristics and a second predicting the dominance of structural relationships. The first argues that we should see a greater frequency of religious clinical conversations in counties where there are more religious people, and hence a greater number of religious patients. The second argues that social structure as reflected by the physician's relationships and the strength of those connections will influence his or her perception of the physician's role. These perceptions will then strongly influence their clinical interactions almost without consideration for whether or not these perceptions are in line with the patient population. In other words, the religiosity of the patient population will *not* matter but the religious orientation and associated clinical schemas of the physician will. Support is found for the second hypothesis and I further discuss the importance of different structural associations for the physician's perception of what a "good" physician does in the clinic.

Chapter six serves as a conclusion, quickly summarizing the findings by highlighting the theoretical contributions and implications of the findings. Specifically, I highlight patients' need for help in making sense of their illness and how their physician

helps facilitate this process and the potential role for religious beliefs. All physicians do their best to provide the best care they can for their patients, but ironically in trying to be a good physician they may overlook the patient. Chapter five shows that the physician's structural ties may be more powerful in driving the content of their clinical interactions than the background of the patients they tend to interact with. I also suggest paths for future research, specifically mentioning four areas. Trust is an important interpersonal element between patients and their physician, and having personally oriented conversations with patients including how their personal life is affected by illness and helping them find sources of social support can serve to engender levels of trust. Second, while it is true that individual physicians develop routines of care over time, it is also true that these routines permeate specific organizations over time. If a physician's structural location is a powerful predictor his or her patient interactions, then it would also be helpful to situate physicians within the organization they are embedded. Finally, I suggest ties to both the meaning of religion in believer's lives more generally as well as its place within a "secular" social institution such as medicine.

CHAPTER TWO

Physicians in the United States: An Introduction to Beliefs and Affiliations

In a recent report from NPR, Marcelo Gleiser told a story about a street-side radio interview he had done while in Brazil (Gleiser 2013). He spoke of how a meteor collision explained the extinction of the dinosaurs without reference to God. After hearing this possibility, a man voiced his concern that Gleiser was trying to take God, one of the few brighter corners of his life, away from him. This religious man expresses a common concern that science has an underlying agenda to disprove religion or at the very least discount religious truths as unscientific. Many professional scientists share this view (Ecklund 2010) and medicine may be no different.

In health care, the emphasis on a scientific approach to the body provides modern medicine with a dominant position of cultural authority (Light 2004; Numbers and Sawyer 1982; Starr 1982). This can become problematic, however, when we take into account the fact that physicians with a scientific view of illness interact with patients who have different worldviews and emotional needs, not merely a scientific puzzle that needs solving. Prior research shows that many patients would like their physician to speak with them about, or at least be aware of, their religious beliefs (Koenig et al. 1991, 2010; Robinson et al. 2006; Wexler and Corn 2012; Williams et al. 2011), and that religious beliefs help some families make sense of a loved one's experience of being ill (Barnes et al. 2000). There is a gap between the desire and the provision, with research also showing that physicians may be reluctant to engage with patients in this way (Koenig et al. 1991; Marty 1982; Puchalski and Larson 1998; Williams et al. 2011).

10

This is a pertinent topic, as it is clear that social support is an essential dimension of health (Wolff et al. 2013), as it is tied to physical health (Cohen 1988; House, Landis, and Umberson 1988; Seeman 2001; Uchino, Cacioppo, and Kiecolt-Glaser 1996; Uchino 2006) and mental health (Atienza, Collins, and King 2001; Fiala, Bjorck, and Gorsuch 2002; Karademas 2006; Murrell, Norris, and Chipley 1992). It has also been persuasively argued that religious networks or associations play a very important role in people's anticipated social support (Edgell, Tranby, and Mather 2013), and religious communities have previously been highlighted as important sources of social support (Ellison et al. 2009; Krause 2006). An important and as yet understudied question, however, is whether physicians are an additional dimension of this religious social support. If patients want their physician to speak with them about religious beliefs, then it appears there is a desire for this kind of social support. Further, if there is a gap between the desire and the provision of this support (Koenig et al. 1991), then the question becomes – what are the characteristics of those physicians who are more willing to engage with patients in this way?

The aim of this study is to report the religiosity and spirituality of physicians in the United States and investigate how these characteristics affect interactions with patients. Who tends to speak with patients about religion and spirituality? What specialties are more religious than others? I look at the relationship between congregational attendance, belief that religion influences patient health and the self-identified religious/spiritual orientation of the physician. While some have argued that commonly used self-reported attendance rates are useful because they indicate self-perceived religious identity (Brenner 2011a, 2011b, 2012), following Jang and Franzen

(2013) I argue that the physician's religious/spiritual orientation is a more useful indication of worldview, and as such is also a better predictor of their patient interactions.

Data

The data for this study comes from the *Religion and Spirituality in Medicine: Physicians' Perspectives* (RSMPP) survey. The RSMPP covers physicians' religious beliefs, patient interactions and views regarding the role of religion in medicine (Curlin et al. 2006; see Curlin, Lantos, et al. 2005; Curlin, Lawrence, Chin, et al. 2007). The survey sample was a stratified random sample of 2,000 physicians from the American Medical Association Physician Masterfile age 65 and younger. The sample was stratified by physician specialty so as to oversample some medical specialties such as geriatrics, pediatric specialties, pulmonary, critical care and psychiatry (Curlin, Lantos, et al. 2005). The survey was a mailed, self-administered questionnaire sent out in 2003. Respondents were mailed up to 3 questionnaires, with the third mailing including $20 so as to increase responses. Of the 2,000 potential respondents, 180 were no longer practicing or had incorrect addresses, leaving 1,820 eligible physicians. The response rate for the survey was 63% ($n = 1144$), according to *AAPOR* response rate definition 4, and did not differ by age, region or whether the physician was certified or not, although men and foreign medical graduates were slightly less likely to respond (Curlin et al. 2006; American Association for Public Opinion Research 2011). Weights to account for this are included and used unless otherwise noted.

As the purpose of the present study is to introduce some trends that are further expanded in later chapters, the tables and figures presented here are simple bivariate relationships. Attendance was measured with a single question and nine response options

12

ranging from "never" to "several times a week." To assess how much the physician

speaks with patients about religion or spirituality, they were asked "do you ever inquire

about a patients' religious/spiritual issues?" Two forms of this variable were used here.

One form was a dichotomous measure (Figure 1 and Figure 4), which reflected either a

"yes" or "no" response to the question above. The second form was a five-point ordinal

measure (see Figure 3), which ranged from "never" to "always." The measure reflecting

the physician's belief that religion or spirituality matters for health read, "overall, how

much influence do you think religion/spirituality has on patients' health?" The response

options were also an ordinal scale, ranging from "very little" to "very much."

I have used the same religious/spiritual typology used by Jang and Franzen

(2013). This is a combination of two questions. The first read, "to what extent do you

consider yourself a religious person? Would you say you are…" with four response

options ranging from "very religious" to "not religious at all." This was immediately

followed by the second which was the same, saying "spiritual" instead of religious.

These two were combined into a four-part, nominal typology of self-identified

orientations: spiritual but not religious (SBNR), religious and spiritual (RAS), religious

but not spiritual (RBNS), and neither religious or spiritual (NROS).[1] As pointed out by

Jang and Franzen, this typology is advantageous because the religious dimension and the

spiritual dimension relate to one's beliefs and worldviews in different ways, reflecting a

fuller understanding of individuals' religious identity. Beyond this point, however, this

typology is useful because it allows us to differentiate those respondents whose

spirituality is not in opposition to organized forms of religion from those whose is.

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[1] I will also refer to SBNR and RBNS physicians as "spiritual" and "religious," respectively.

Table 2.1

Religious Characteristics of Physicians and U.S. Population

Variable	Physicians	U.S. Population
Attendance		
Never	10	19
1x/month or less	44	41
2x/month or more	46	40
Religious/spiritual orientation		
RAS	53	53
SBNR	21	9
RBNS	4	9
NROS	22	29
Affiliation		
Protestant	38.8	54.7
Catholic	21.7	26.7
Jewish	14.1	1.9
None	10.6	13.3
Hindu	5.3	0.2
Muslim	2.7	0.5
Orthodox	2.2	0.5
Mormon	1.7	0.4
Buddhist	1.2	0.2
Other	1.8	1.6
Try to carry beliefs into all of life	58	73
Believe in God	76	83
Believe in life after death	59	74

Source: Curlin et al. 2005.

Results

It is helpful to know how similar or dissimilar physicians are religiously as compared with the U.S. population. Table 2.1 shows percent comparisons as presented in Curlin, Lantos, et al. (2005). There are a number of interesting differences to note. First, physicians attend religious services more often, there are fewer religious nones and fewer claim to be not religious or spiritual as compared with the general population. This is, however, belayed by the fact that fewer believe in God and life after death than the U.S. population. Second, interesting differences exist between the general population and

physicians in terms of their religious affiliations. There are fewer Protestants, Catholics and nones, but significantly more Jews, Hindus, Muslims, Orthodox, Mormon and Buddhist physicians as compared with the general population. This is important because it means that it may not be uncommon for the physician to hold a set of religious beliefs not shared by their patient population, which should at least theoretically influence their level of comfort in having religious/spiritual conversations with patients. Third, there are many more spiritual physicians than the general population, which makes sense as prior work has shown that scientists tend to re-conceptualize their religious beliefs as "spiritual" beliefs (Ecklund, Park, and Sorrell 2011). Finally, and more pertinent to the present discussion, significantly fewer physicians make an attempt to carry their religious beliefs over into the rest of their life. While this would require further research, it may be possible that they are primarily thinking of their profession as it is a dominant part of their life and identity and this is an indication that they do not see how their beliefs apply to the work they do.

As Brenner (2011a, 2011b) has argued, self-reported church attendance rates may relate more to how the respondent wants to portray their religious identity than it relates to how often they actually step inside a place of worship. Additionally, congregational attendance is commonly used measures to predict other beliefs and behaviors. If one's religious identity is reflected in their reported attendance and one's identity is related to actions, then self-reported congregational attendance should also be related to a physician's clinical interactions. This is because "providers' habitus is rooted in their upbringing, clinical training, socialization as doctors, their clinical experiences, and the organizational contexts in which they work; it then generates personal perceptions and

expectations around responsibility, good doctoring and good patienthood" (Dubbin,

Chang, and Shim 2013:116). This means that if the physician is religious, her beliefs will

shift her perception of the relationship between religion and health care. Cultural

background, in that case, gives the physician the perception that medicine and religious

beliefs are foreign to one another.
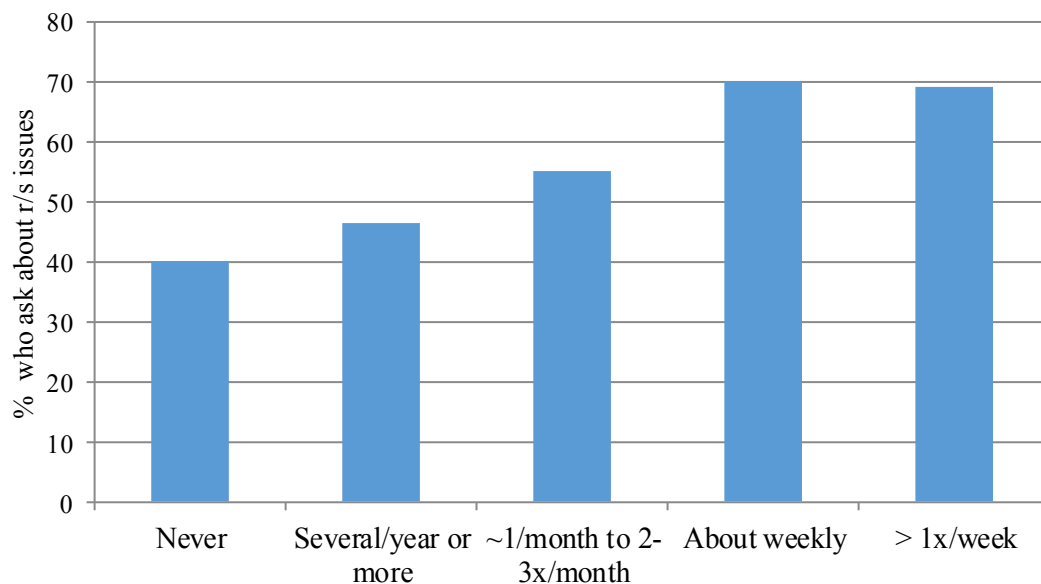
Figure 2.1: *Percent of physicians who ask about R/S issues by how often they attend religious services*

Figure 2.1 shows the relationship between a physician's religious services

attendance and the percent who report they ask patients about religious or spiritual topics.

Only 40% of physicians who never go to church report that they ask patients about

religious or spiritual topics. On the other hand, just fewer than 70% of physicians who

report attending religious services more than once per week and greater than 70% who

report going weekly say they discuss religious or spiritual topics with their patients.
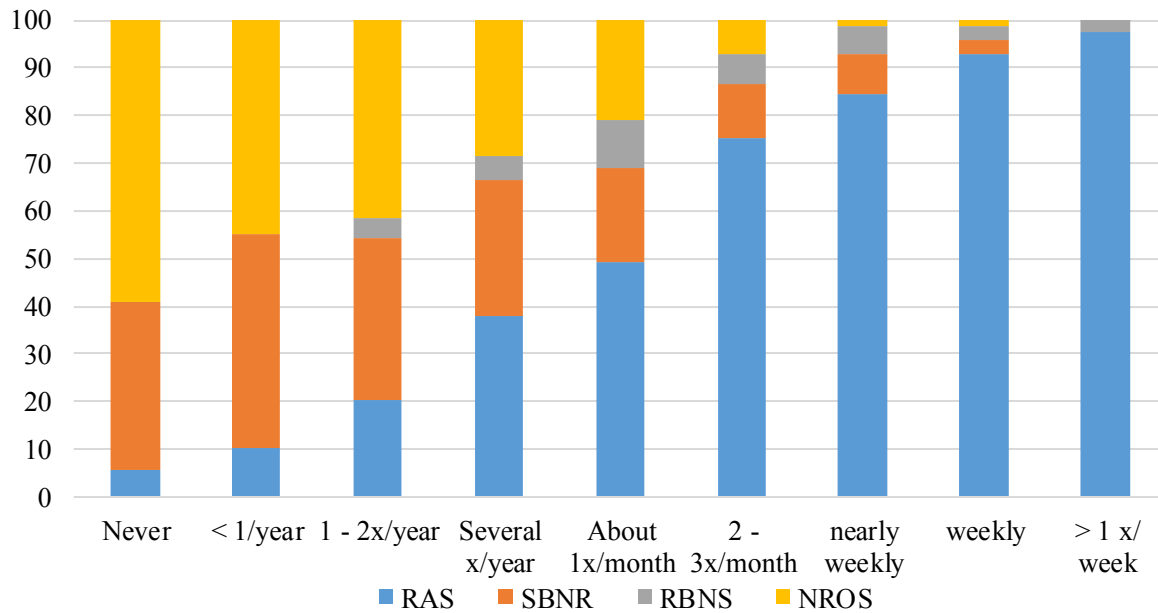
Figure 2.2: *Physician's religious service attendance by their R/S orientation*

If self-reported attendance rates are a reflection of one's own self-perceived religious identity, then it would be helpful to have an idea what that identity may be. Figure 2.2 shows self-reported attendance rates broken down by the physician's religious/spiritual orientation – SBNR, RAS, RBNS and NROS. We see in Figure 2 that all religious/spiritual orientations do not report attending religious services at the same rate as one another. The bulk of those who never go to church are either only spiritual or NROS, which makes sense as both tend to have an aversion to being a part of organized religion (Fuller 2001; Saucier and Skrzypinska 2006; Zinnbauer et al. 1997; Zwissler 2007). As we move up the x-axis of Figure 2.2 to higher attendance rates, the proportion of SBNR and NROS physicians decreases while the proportion of religious physicians (both RAS and RBNS) increases. This also is an expected trend, as the religious

dimension of the typology tends to be more related to participation in or at least more

openness to organized religion (Pepper, Jackson, and Uzzell 2010; Schlehofer, Omoto,

and Adelman 2008; Wink et al. 2007; Zwissler 2007).
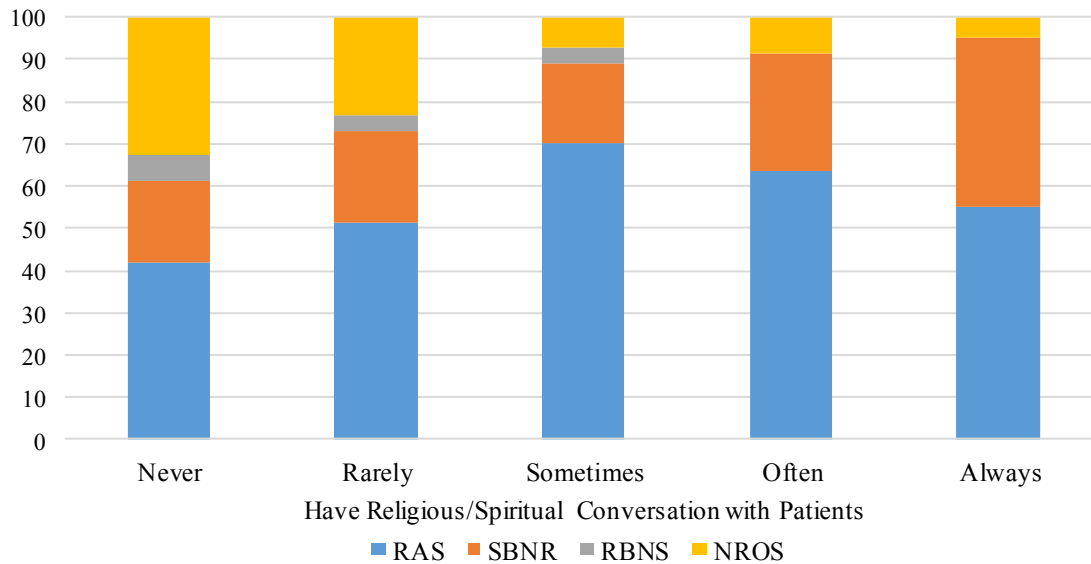
Figure 2.3: *Percent reporting R/S conversations by physician's R/S orientation*

   While it does appear to be the case that attendance is related to an openness to

talking to patients about religious or spiritual topics, important differences are buried by

the assumption that reported attendance rates are tied to a religious identity that is then

related to clinical interactions. Specifically, religious physicians (both RAS and RBNS)

tend to attend church more often than other physicians, but Figure 2.3 shows that these

are *not* the two religious/spiritual orientations most likely to speak with their patients

about religious/spiritual topics. Both spiritual and spiritual and religious physicians are

most likely to speak with their patients about these topics. This means that one of the

religious/spiritual orientations most likely to report going to church (RBNS) speak with

patients about religious/spiritual topics less often while one of the religious/spiritual

18

orientations least likely to report attending church (SBNR) is one of the two orientations that speak with patients more often about these topics.

It makes sense that a religious physician may talk with her patients about religious topics more often than non-religious physicians. On the other hand, just because a professional holds one personal belief or another does not necessarily mean that they will have connected that personal belief to their professional work. In other words, it is entirely possible for a physician to hold a personal belief, but for this belief to be disconnected from her sense of an ideal patient interaction and ideal medical care. This is why it is important to know not only the religious/spiritual orientation of the physician, but also whether they think religion is relevant to the health of their patient. This should give us a better idea the degree to which the physician's personal beliefs have been integrated with their professional habitus (Dubbin et al. 2013). Thus the domain of their medical work is infused with meaning from personal experiences that are neither directly nor by necessity connected to their work (Schutz 1962a, 1962b; Toombs 1987).
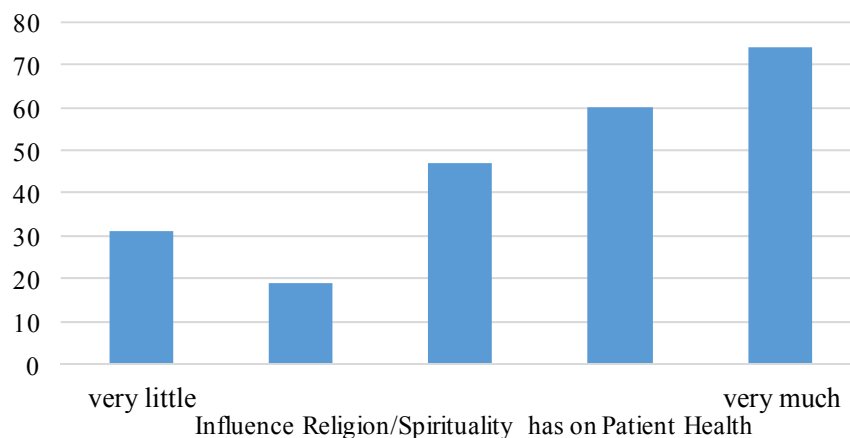
Figure 2.4: *Percent of physicians who ask about R/S issues by their belief that religion and spirituality influences patient*

Figure 2.4 shows that there is indeed a strong relationship between thinking that religiosity and spirituality influence patient health and asking patients about religious or spiritual issues. For those physicians who think religion does not influence patient health outcomes, conversations include religious or spiritual topics only about 30% of the time. On the other hand, those physicians who think that religion impacts patient health very much will tend to ask about religious or spiritual topics in their clinical interactions nearly 75% of the time. This is an indication that those physicians who have connected potential patient health outcomes and religious beliefs are the physicians who will also tend to act on those connections. This is both somewhat intuitive and interesting: somewhat intuitive because cognitive connections pave the way for real world behaviors (Vaisey 2008). But also interesting because cognitive indications for what one *should* do in any given case tends to be domain-specific (Longest, Hitlin, and Vaisey 2013), meaning that values pertaining to something "personal" like religion may not necessarily have clear and direct implications for the domain of employment. While later chapters further analyze this connection, there may be 1) some physicians who have bridged these two domains (religion and their profession) in a way others have not and 2) this bridge may form a different value set leading to different actions in a clinical setting.

Just as we saw with self-reported attendance rates, thinking religion matters for patient health outcomes is not evenly distributed over the different religious/spiritual orientations. As would be expected, NROS physicians make up the smallest proportion of those who think religion influences patient health very much and make up the largest proportion of those who felt it has very little influence on patient health. On the other hand, the majority of those who do think religion and spirituality influence patient health

20

were religious and spiritual physicians, followed by only spiritual physicians. This provides some preliminary evidence that a cognitive connection between religion and health outcomes is related to actually speaking with patients about religious/spiritual issues. Thinking religion/spirituality impacts health outcomes is nearly directly related to speaking with patients about it. RAS and SBNR physicians are proportionally most likely to think this and they are in turn speak most often with patients about religiosity/spirituality. While further work must be done, an indirect relationship through religion-medicine cognitive links appears to connect conversational content and physician religious beliefs.
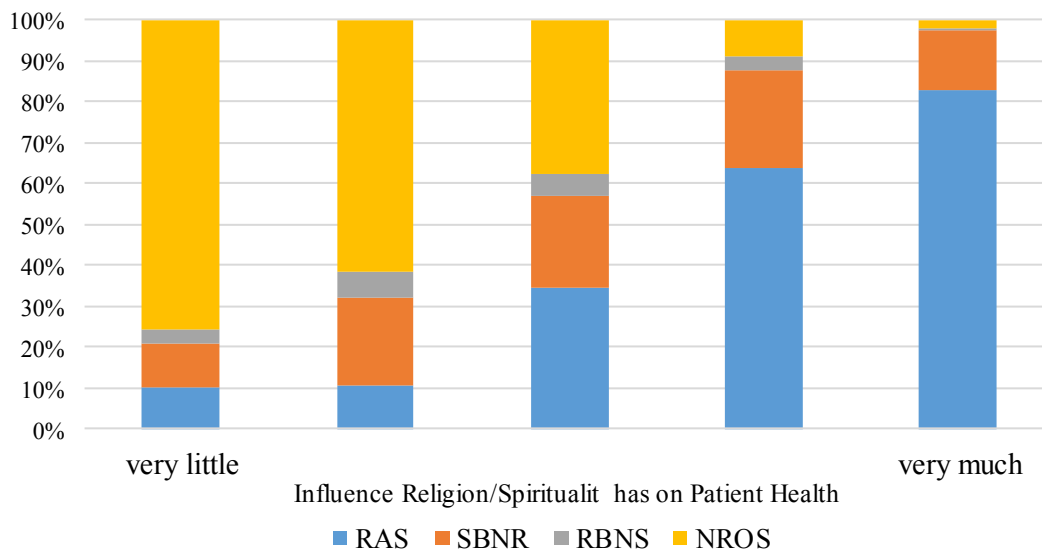
Figure 2.5: *Physician belief that religion and spirituality influences patient health by their R/S orientation*

The story gets a little bit more interesting when we look at the religious/spiritual orientation of different medical specialties (Figure 2.6). It may be assumed that physicians who have chosen primary care as their medical specialization are also more religious/spiritual, but this is not necessarily the case. A greater number of family

practice physicians report they are RAS and SBNR than any other specialty, but this is not the case with general internal medicine and pediatricians. In fact, pediatricians have some of the fewest RAS and SBNR physicians of any medical specialty. On the other hand, given the history of psychology and psychiatry, one would expect psychiatry to have the fewest RAS and SBNR physicians as compared with other specialties. This is also not the case, as they have the second highest proportion when compared to other specialties. It is interesting to note that unlike other specialties, more psychiatrists fall into the SBNR category than the RAS category. This is particularly important when considering physician habitus and cognitive connections between personal beliefs and medical practices which will be further discussed in later chapters.
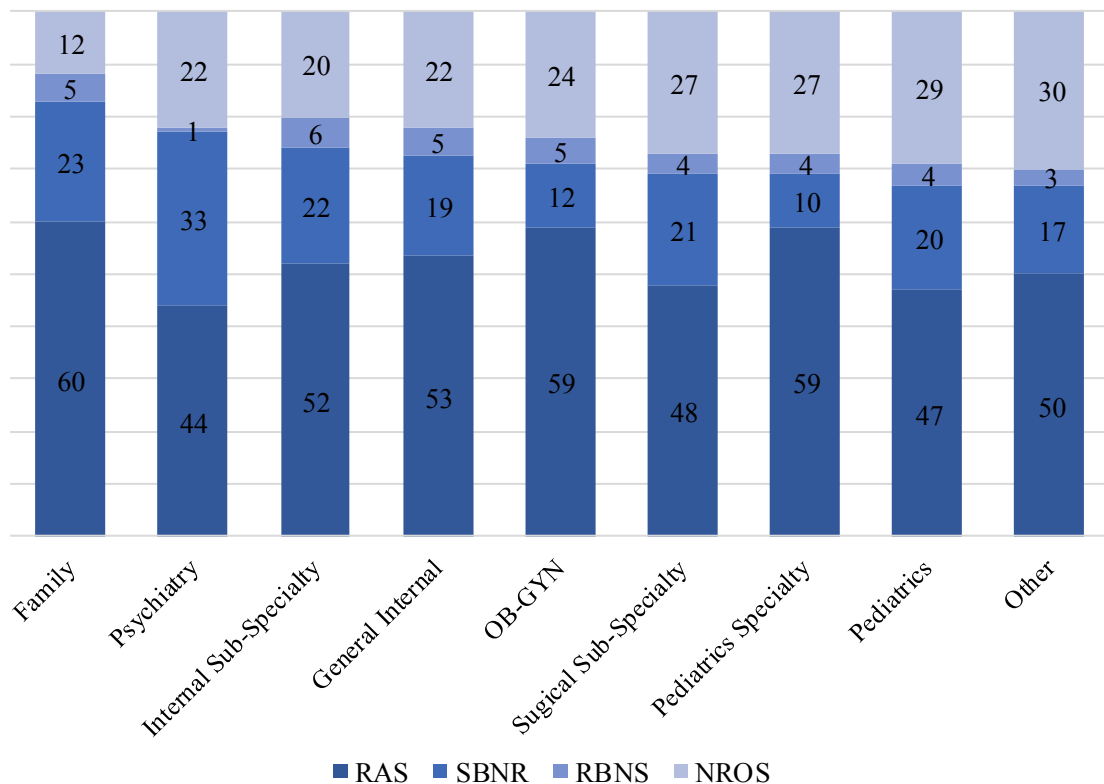
Figure 2.6: *Physician R/S orientation by physician specialty*

Discussion

I have shown here that a physician's propensity to discuss religious or spiritual topics with patients is related to that physician's own religious/spiritual orientation. While this propensity is also correlated with physicians' self-reported attendance, arguably another indicator of self-perceived religious identity (Brenner 2011a), those who attend religious services the most are not necessarily the same physicians who have conversations about religion with patients more frequently. Instead, physicians with either a SBNR or RAS orientation are more likely to speak with patients about these topics. Additionally, these religious/spiritual orientations are also correlated with the belief that religion and spirituality affect patient health outcomes. Beliefs are not always connected to one's professional work, but the worldview implied by some religious/spiritual orientations are more pervasive than others and will tend to be more integrated. This hints at the possibility for a cognitive connection between religion and medicine for these physicians, more closely associating the two and hence resulting clinical actions.

The delivery of health care is necessarily a social process. People seek out professional help when they are unable to make sense of, understand or ameliorate some struggle they are experiencing. Medicine is no different, and physicians are the professionals providing that help. In line with this goal, physicians need to help patients understand what is abnormal about their self and what the progression back to normal looks like (Halpern 2001). Even the diagnostic process is a social process, where the diagnosis of a patient is created more socially than it is scientifically (Berg 1992; McLaughlin 2005). It is for this reason that some work has begun to look at the social

23

characteristics of the physician in relation to their patients. While religion has become an increasingly common covariate for health outcomes, the same is not true for religion in the medical interaction specifically.

Physicians in the United States differ religiously from the general population in interesting ways. There tends to be significantly fewer Protestants, Catholics and religious "nones", but more Jews, Hindus, Muslims and Buddhists (Curlin, Lantos, et al. 2005). Fewer physicians never attend religious services than the general population, they are much more likely to make sense of their life without relying on God and do not attempt to carry their religious beliefs into the rest of their life (Curlin, Lantos, et al. 2005). These different characteristics are related to the physicians' views regarding religion and medical care as well.

Jewish physicians tend to ask their patients about religious and spiritual issues less often as compared with Protestant physicians and both Jewish and religious "nones" are less likely than Protestant physicians to share their own religious ideas and experiences (Curlin et al. 2006; Stern, Rasinski, and Curlin 2011). Jewish and no-affiliation physicians are also less likely to pray with their patients, but Catholic, Jewish and those with an "other" religious affiliation are more likely to encourage their patients' beliefs and practices than are Protestant physicians (Curlin et al. 2006). It is interesting how few differences there are between affiliation categories when asked how much they thought religion and spirituality influence patient health. With religious nones as the comparison category, there was no difference for Protestants and Catholics, but those categorized with an "other" affiliation were more likely to think there is an influence and

Jewish physicians were less likely to think there was an influence (Curlin, Sellergren, Lantos, et al. 2007).

Other recent work relates more directly to the present question of whether or not and how physicians' beliefs influence the content of their clinical interactions. Luckhaupt et al. (2005) show that 46% of the surveyed primary care residents thought they should play a role in their patients' religious and spiritual lives but that this was dependent on both the patient's condition as well as the physician's personal characteristics. Various dimensions of a physician's own beliefs and practices have been linked with speaking to patients about religious topics (Grossoehme et al. 2007; Luckhaupt et al. 2005) and Curlin, Lawrence, Odell, et al. (2007) show that psychiatrists are more likely to encounter religious and spiritual topics with patients and to address those issues despite historic tensions. Pediatric oncologists are more likely than other pediatricians to see religion and spirituality as relevant to their work, despite the fact that they still see this as beyond their "professional jurisdiction" (Cadge et al. 2009). Physicians often wait until their patients are very ill before they bring up religion or spirituality, at which time they will often pass the patient off to the hospital's chaplain (Cadge et al. 2011). Rasinski et al. (2011), however, show that those who have received training are more likely to speak with patients about beliefs, but interestingly enough also show that medical school training does not have an association with a physician's propensity to have these conversations.

A physician may think that religion can or does influence health but not emphasize that influence on actual health outcomes (Curlin, Roach, Gorawara-Bhat, Lantos, and M. H. Chin 2005). While much of the work mentioned above links various

individual characteristics with the content of patient interactions, this has been under-

theorized. Specifically, further work should explore just how religion and medical

interactions are related to one another and not only that there is variation amongst

physicians as to who talks about beliefs with patients. One fruitful path this may take is

to further elucidate how a physician's own religious orientation may form different

cognitive connections with medical work. Recent theoretical work from Vaisey (2008,

2009) on the connection between cognition and one's actions would be helpful, as this

has also been linked to feelings of what one should and should not do and how these

feelings inform one's actions in life (Hitlin and Vaisey 2010a).

CHAPTER THREE

Influence of Physicians' Religious/Spiritual Orientation on Propensity to Include
Religion in Patient Interactions

Medicine is currently one of the most powerful and authoritative professions in

the United States (Starr 1982). Its authority and legitimacy are linked to our cultural faith

in science (Light 2004). Mechanistic views of the body, biological processes, and illness

have become central in the practice of medicine today (Cadge and Hammonds 2012;

Cassell 2005). As such, detached and depersonalized views of the patient are often a

latent outcome of the physician's professional socialization (Hafferty 1988; Halpern

2001; Lief and Fox 1963).

Successful patient treatment requires that patients and their physicians have a

shared sense of meaning about their interaction (Epstein et al. 2005; Frank 1991;

MacIntyre 1977). This study argues that different spiritual beliefs and attitudes toward

religion can become barriers to achieving the ideal physician patient relationship.

Parsons (1951a, 1975) argued that one way to think of illness is to see it as a deviation

from normalcy, the acquisition of a 'sick role.' In turn, the physician ideally helps that

patient shed this sick role and regain normalcy. Interactions with physicians then

become, at least in part, a process of re-integration for patients; a re-integration with their

self, identity and roles. Because many in the United States are religious, many patients

make sense of their reality and retain continuity in their experiences through the lens of

religion (Berger 1990). Regaining a feeling of normalcy and continuity in life may be

challenging if that interpretive lens is not at least one dimension of their experience of

being ill. Hence, religion could be highly relevant and helpful in bringing individual patients back to a 'healthy' status. Shuman and Meador make this point, saying that "because religion is an irreducible part of what it mean for those patients to be healthy human beings, physicians who in various ways facilitate their patients' religiosity are making an indirect contribution to their overall health" (2003:27). Successfully connecting with and helping patients regain psychological autonomy and feelings of normalcy requires the physician to develop an empathetic and emotional connection with the patient (Halpern 2001). Physicians may be disadvantaged in making these connections to the extent that they have not personally connected religious beliefs and medicine. I argue here that a physician's spiritual/religious orientation will be related to their perception of religion's place in the clinic, and thereby also how often they talk about religion or spirituality.

Background

All patients have expectations when visiting their physician. Physicians also have expectations concerning what patients need to know and how they should act. These role expectations are the result of past experiences, stories people tell, as well as norms communicated by physical surroundings and situational elements.[1]

The medical interaction is different from other limited interactions because it addresses highly personal information. Sometimes this may even be information they do not share with those they are very close to. Thus the framing of a medical interaction is

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[1] In any given social interaction, each party has their own understanding of reality and expectations for what will and should happen during the course of their interaction. This is built up by their past interactions and general exposure to similar situations (Giddens 1984). These expectations for the interaction and their own role in it are present whether or not they are conscious of it. They are also under the working assumption that their expectations are roughly the same as others. Shared meaning and expectations produces successful interactions and medical interactions are no different.

such that patients expect to share personal information, but not just any personal information. Physicians ask questions to obtain information they think leads to a diagnosis and the patient will offer information they think is helpful to the doctor. But how does either person, the patient or the doctor, know what information is relevant? We may think this is easier for the physician since they have been trained to look for indicators of different problems and know what information they need to confirm the problem – a kind of mental decision tree. But what if they miss something?   What if there is something relevant for this patient but not other patients, or what if there is something that is potentially relevant to all of their patients but they were not trained to ask the right questions?

These considerations are important for the patient because although they are sharing deeply personal information with the doctor, it is still akin to Goffman's (1959) front stage. They are not really baring all, despite the hospital gown. As such, the patient goes into the interaction knowing every part of her life is not necessarily welcome in conversations with her physician. The relevance of the patient's contributions could be rejected and actively avoided by the physician when it is not congruent with what the physician understands as relevant in any given interaction (Dubbin et al. 2013). Successful patient interaction happens when "the patient's and physician's views interact in a sharing of cultural values… integrating the world of the patient and that of the physician" (Ishikawa, Hashimoto, and Kiuchi 2013:150). The challenge, however, is that patients and physicians make sense of illnesses differently. Patients tend to make sense of their illness in the terms of their everyday life and experiences. Physicians tend to use professional habits and think of patients' illnesses in terms of clinical diagnoses, which is

very different from patient experiences (Toombs 1987). As a result, while the patient

seeks out and is in need of professional help to make sense of their illness (Halpern

2001), patients and physicians may be prone to communication struggles because they

are talking about qualitatively different "realities". This is additionally complicated by

the fact that despite most physician's best efforts to practice patient centered care, this

care is almost inevitably physician-centered as they are the gatekeeper for clinical

relevance (Dubbin et al. 2013).

Many patients are religious and this dimension is not always considered pertinent

in medical contexts. As such, a central piece of many patients' world is left out of

medical interactions, leaving the disadvantaged patient to independently reconstruct that

world at a later time (Marty 1982). Some physicians, however, will be more likely to

overlook religion than others; some are better equipped to see and make this personal-

emotional connection with patients than others depending on their own biographical

background. Some physicians will have their own religious beliefs providing something

to draw upon for patient connections, and some physicians will have more clearly

connected religion and medicine making these connections more natural.

Physician Beliefs and Patient Connections

The profession of medicine has certain values that must be at minimum held in

balance with, if not often trump, a physician's personal values. Parsons (1951b) argued

that physicians should practice an 'affective neutrality,' maintaining an emotional

distance from patients so as to more clearly and analytically think through health

problems. Merton (1957) similarly said that in medical education, the student-physician

learns and is socialized to act in the midst of a tension between the professional value of

emotional detachment from patients while still showing compassionate care towards

them, a point similarly argued by Fox (1997) who emphasized a balance between

detachment and concern. More recent research, however, shows that detachment is more

often the default in professional socialization than is compassion or empathy (Hafferty

1988; Halpern 2001; Lief and Fox 1963; Olesen and Bone 2002; Smith 1991; Woodward

1997).

This is an unfortunate position for medicine to be in today, because empathy and

an emotional connection with the patient may be critical to good health care. Halpern

(2001) argues that emotions are not just interior and personal phenomena, but that

emotional connections are actually key components of any shared social experience.

> Therefore, rather than physicians needing to strive to be detectives who "see into"
> patient's minds, they need to be emotionally attuned to the moods that accompany
> the social experiences of illness and healing in the first place… A doctor who
> attunes appropriately to the style of such moments is, in this regard, more fully
> attentive to what is happening clinically (Halpern 2001:55).

Empathy is not simply the ability to understand what another person is feeling,

but the ability to share in her feelings. The empathizer is not only thinking about what

may be happening to another person, but actually has something happen to them. They

do not merely ascertain the feelings and experiences of another during medical

interactions but form a connection through which they also experience feelings. The

empathizer is able to imagine how something feels rather than just knowing that

something, such as an emotional state of another, is the case (Halpern 2001:85). For this

reason, Halpern defines empathy as, "an essentially experiential understanding of another

person that involves an active, yet not necessarily voluntary, creation of an *interpretive*

context" (Halpern 2001:77). This interpretive context serves not only to create a more

pleasing clinical encounter for the patient, but it can make the difference between fully

and accurately understanding a patient's ailments and not. For example, patients will often make gestures and drop hints before they share an emotional piece of their history with their physician (Halpern 2001; Suchman et al. 1997). If the physician responds in a detached fashion, no disclosure will take place, but if the physician is attuned with the patient then the patient will tend to more fully disclose their history to the physician.

This is important for the present study because, as mentioned, many people understand the world and their health through the lens of religion. This makes it difficult for the physician to aid a religious patient in regaining psychological stability and meaning while avoiding religious beliefs, the main source of meaning in their world. Beyond this point, however, some physicians may be more able or prone to engaging with patients in this way than some of their peers. If engaging emotionally with patients requires the ability to, on some level, connect a part of one's self to the patient's experience, then some physicians likely have the emotional tools to connect with religious patient while others do not; and these tools are more easily accessible for some than others.

Physicians have their own mental schemas and cultural or emotional backgrounds which may or may not include religious beliefs (Dubbin et al. 2013; Mead and Bower 2000). When would a physician tend more towards empathetic and personal connections such as including religious/spiritual views or more towards detachment? Extant research shows that, in general, physicians do tend to see patients more as a sickness to be healed than a person in need of care (Cadge and Hammonds 2012; Cadge 2012; Cassell 2005; Toombs 1990), but how much a physician's personal beliefs and values temper this is still unknown.

As medicine developed as a social institution, especially in the early 1900's, there was a strong push towards a scientific orientation, which also had the tendency to decrease the focus on patient spirituality (Numbers and Sawyer 1982; Starr 1982). More recent research shows physicians will say they avoid religion and spirituality in the clinical setting and focus on the physical systems of the patient, prioritizing emotional detachment to aid critical thinking (Luckhaupt et al. 2005). This emphasis on detachment is interesting as both Merton (1957) and Fox (1997) say this must be tempered with compassion for the patient, and Halpern (2001) rejects detachment as viable, opting instead for empathy. Others go so far as to say, "the beneficent physician who is committed to the patient's best interests must consider how to support patient spirituality…" (Post, Puchalski, and Larson 2000:579). This is because, "apart from her belief, a patient would in some sense be someone else. Her lived body and therefore her treatment… might well need to be different" (Shuman and Meador 2003:29). Barnes et al. even argue that in pediatric work, "[in] every clinical encounter, a child's and family's spirituality and religious life will interact with that of the clinician" (2000:901). Others argue that empathy is always a necessary component of care (Charon 2001a; Larson and Yao 2005), but Whitaker (2013) points out that empathy almost by definition can be painful and that compassion could insulate the physician from burn out induced by empathy. Whitaker's claim that compassion buffers the burnout effects of empathy is reinforced by recent neurobiology (Bernhardt and Singer 2012; Decety 2011; Engen and Singer 2013; Klimecki et al. 2013).

Physicians, like patients, also have cultural backgrounds that impact medical interactions. In addition, they are representatives of the medical establishment,

embodying the professional values that come along with holding the position. Indeed, Berger and Luckmann (1966) argue that role performance is the embodiment of social institutions. Thus a physician can be more or less religious but they also have beliefs and values flowing from their role as a physician. This means that when looking at clinical interactions at least three dimensions are important: the variation in personal beliefs and values, the variation in professional beliefs and values, and the degree to which the two have been integrated with one another. A religious physician who has more deeply integrated their beliefs and profession would likely have the most background to draw on to connect religiously with patients.

Religiosity, Spirituality and Medical Conversations

Initially, the rate of churched members of the American population was less than 15%, but this rate quickly increased through the two Great Awakenings (Finke and Stark 1992) to a point of great optimism in reaching all the "lost" in the early 1900's (Ahlstrom 2004; FitzGerald 2004; Rouse, Neill, and Fey 1970). Modernism shattered this optimistic state with significant religious infighting (Marsden 1980). There was an additional shift through the 1960's, ushering in an increased prevalence of "spirituality," a much more individualistic form of religious expression (Roof 1993; Wuthnow 1998). This rise in spirituality was characterized as a 'seeking' orientation as opposed to the stable, community-centered 'dwelling' orientation of being "religious" (Wuthnow 1998). Modern individuals became their own authority instead of sources outside their self, such as God or the church (Roof 1993).

Spiritual and religious orientations relate to how any given person makes sense of their reality and experiences as the orientations create different stable cognitive

34

expectations (Berger and Luckmann 1966; Sewell 1992; Vaisey 2009). While the "religious" and the "spiritual" dimensions are different from one another, the two remain modestly correlated (Zinnbauer et al. 1997), indicating that while it is possible for one to be either "spiritual" *or* "religious," this is not always the case. As such, there are four different religious/spiritual categories that individuals will tend to fall into: religious and spiritual, spiritual but not religious, religious but not spiritual, and not religious or spiritual (RAS, SBNR, RBNS and NROS respectively) (Jang and Franzen 2013).

The religious dimension connotes a tradition-oriented faith (Pepper et al. 2010; Saucier and Skrzypinska 2006), church-centered beliefs and practices (Wink et al. 2007; Winkler 2008) and social or institutional orientations or pressures (Piedmont 1999; Schlehofer et al. 2008; Zwissler 2007). The spiritual dimension is tied to more subjective belief orientations (Fuller 2001; Saucier and Skrzypinska 2006), personalized experiences (Roof 1993; Zwissler 2007), and unorthodox beliefs and practices as well as negative feelings towards organized religion (Zinnbauer et al. 1997). The four-part typology of Jang and Franzen (2013) is important because the spiritual dimension can be in opposition to traditional and organized religion, but this is not always the case (see also Chatters et al. 2008; Hodge, Andereck, and Montoya 2007a, 2007b; Marler and Hadaway 2002; Roof 1999). The typology allows us to differentiate those "spiritual" responses that are opposed to traditional forms of religion from those who see traditional forms of religion as enhancing or complementing their faith life. Each typological category is a unique combination of the above religious and spiritual dimensions, which in turn has uniquely implications for their worldview – their understanding and automatic processing of the world.

Besides her personal religious beliefs, the physician has also been socialized into a profession with its own values and beliefs. This second set of cultural schemes may or may not be compatible with her religious beliefs, which will be problematic to the degree that those beliefs are the lens through which her world takes on meaning. If her belief system implies relevance for all of life, but one part of her life, such as her profession as a physician, appears to communicate the irrelevance of those beliefs, she will likely feel some degree of cognitive dissonance. She could live with the dissonance, drop the profession, integrate the two or drop her beliefs. Indeed, medical socialization could even lead to the loss of previously held religious beliefs (Catlin et al. 2008:1151). The medical and the religious plausibility structures may be more or less compatible with one another, depending on the person (Berger and Luckmann 1966). There are at least four ways that a physician could make sense of the religious/spiritual and the professional dimensions of his or her self: 1) integrated, 2) non-overlapping, 3) pragmatic and 4) rejection.

Above I said that including religious content within clinical interactions will depend on three things – the religious beliefs physicians hold, the professional beliefs and values they hold and the degree to which these two are integrated. The degree to which they are integrated will depend on their religious orientation and the implied worldview. The deeper the connection the more background the physician has to draw from to have religious interactions with patients, with each orientation implying a different hypothesized mode of action. As the religious dimension is communally based (Zinbauer et al. 1997; Zwissler 2007), religious individuals (RAS and RBNS) will tend to feel their beliefs are universal in nature as they flow from their community and not their self; the

36

norming power of their beliefs is external (Archer and Elder-Vass 2012). The

implications for their worldview also depends on the spiritual dimension of their

orientation. The RBNS physician will see their beliefs as contextualized by religious

locales while the RAS physician will retain the personal investment of the spiritual

dimension thereby increasing the portability of the beliefs beyond strictly religious

contexts. The implication for religious and professional belief integration is that the

RBNS physician will be less likely to see the relevance of their religious beliefs for their

professional work, like a cognitive non-overlapping magisterial (Gould 1999), while the

RAS physician will tend to have a deeper integration of the two, mapping the relevance

of one schema onto the other (Johnson-Hanks et al. 2011; Longest et al. 2013). Through

this integration, the RAS will have developed the most "empathy equipment" (the

biographical background from which to draw when connecting with patients) and include

religious content the most. SBNR physicians' beliefs will tend to be more personalized

and unorthodox (Ammerman 2013; Jang and Franzen 2013) being independent of an

external norming community. As the source of their beliefs is more internal than

external, the cognitive burden to tie their religious beliefs into their professional beliefs

and values will also be lower as the applicability of their beliefs to other people is also

lower.[2] Although SBNR physicians may not have connected their personal beliefs with

their profession, they will still be able to see how patients' beliefs could matter to them

for their health and not be averse to having religious conversations when they come up;

they will include religious content when pertinent or pragmatic. NROS physicians will

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[2] See Lawrence and Curlin (2007) regarding a similar point about physicians' understanding of "conscience".

not have the religious schemas available to integrate with their professional schemas, and will have the least "empathy equipment" readily available.

Data and Methods

The data for this study comes from two different sources. First, data about physician religious/spiritual orientations and beliefs as well as their patient interactions come from the *Religion and Spirituality in Medicine: Physicians' Perspectives* (RSMPP) survey. The RSMPP covers physicians' religious beliefs, patient interactions and views regarding the role of religion in medicine (Curlin et al. 2006; see Curlin, Lantos, et al. 2005; Curlin, Lawrence, Chin, et al. 2007). The survey sample was a stratified random sample of 2,000 physicians from the American Medical Association Physician Masterfile age 65 and younger. The sample was stratified by physician specialty so as to oversample some medical specialties such as geriatrics, pediatric specialties, pulmonary, critical care and psychiatry (Curlin, Lantos, et al. 2005). The survey was a mailed, self-administered questionnaire sent out in 2003. Respondents were mailed up to 3 questionnaires, with the third mailing including $20 so as to increase responses. Of the 2,000 potential respondents, 180 were no longer practicing or had incorrect addresses, leaving 1,820 eligible physicians with 1144 respondents. The response rate for the survey was 63%, according to *AAPOR* response rate definition 4, and did not differ by age, region or whether the physician was certified or not, although men and foreign medical graduates were slightly less likely to respond (Curlin et al. 2006; American Association for Public Opinion Research 2011). Weights to account for this are included and used unless otherwise noted.

This was merged with the 2000 *Religious Congregation and Membership* Study (RCMS), which was designed and completed by the Association of Statisticians of American Religious Bodies and Glenmary Research Center. The RCMS data was merged with the RSMPP according to what county the responding physician was from. This allowed for the inclusion of a control reflecting the religious percent of that county. After all, it would make sense that how many religious people living in any given area should influence how much religion will come up in any given context, including medical interactions. The adjusted percent was used to account for known sampling issues with the RCMS (see Finke and Scheitle 2005).

Analytic Method

Structural equation modeling (SEM) using the lavaan package (version 0.5-16) in *R* was used throughout the analysis (Yves 2012). Modeling each of these as a latent variable allowed me to model the variation, and hence propensity, to include religious/spiritual topics in conversations with patients after having parceled out potential measurement error. In other words, unlike creating an indexed dependent variable, a latent variable does not assume that all observed variables contribute to the latent variable to the same magnitude and with the same error variation.

In the first part of the analysis, while I knew the variables used to create the final bi-factor model were related, exploratory factor analysis was employed to check if there was more than one factor. Two different factors were extracted: one reflecting higher acuity situations and a second reflecting lower acuity situations. As these two factors were highly correlated with one another (>.8), a bi-factor model was specified within lavaan (see Figure 3.1). This allowed for a single latent variable, predicting all of the

manifest variables, while also separating out the variance specific to each of the

secondary latent variables (high acuity and low acuity) that is *not* related to the single

larger latent variable. To do so, the correlation between each of the three latent variables

was set to zero. I used maximum likelihood estimation with robust Huber-White

standard errors and a Yuan-Bentler scaled test statistic for both the confirmatory factor

model as well as the final SEM model (White 1982; Yuan and Bentler 1998). This

produces more accurate and reliable standard errors in cases when there is the presence of

non-normally distributed data in the model (Curran, West, and Finch 1996).

In order to deal with missing data, I used full information maximum likelihood

(FIML) for two reasons, both of which relate to the structure of the survey instrument.

First, the questions allowed physicians to say that the specific interaction instance did not

apply to them (see below for more details on question wording). In other words, not all

physicians deal with patients that are facing end of life issues often or at all, and likewise

not all physicians deal with very minor illnesses often or at all. For this reason there was

missing data present on the interaction questions that were not merely skipped questions,

but part of the survey design. It was essential that these cases were not merely dropped.

Second, other methods, such as multiple imputation, would not be an acceptable

approach because we know this data *should* be missing and as such, should not assign

non-missing values to those respondents. FIML is ideal for this situation because it

retains any available information on all cases and allows each piece of data to essentially

contribute what information it has to offer in the estimation (Baraldi and Enders 2010;

Graham 2009).

I used McDonald's omega (McDonald 1978) instead of Cronbach's alpha to indicate scale reliability because, unlike alpha scores, omega does not assume that each of the measures equally contributes to the latent variable and that item errors are uncorrelated with one another (Yang and Green 2011). However, when tau equivalence is present, as is the assumption for Cronbach's alpha, omega is equal to alpha (Zinbarg et al. 2005). Finally, unlike alpha, omega is based upon the item factor loadings, allowing us to exclude item contributions not actually shared within the latent measures (Schweizer 2011) and is preferable in all but a few circumstances (Revelle and Zinbarg 2009; Zinbarg et al. 2005). Model fit for the full model was assessed using the root mean square error of approximation (RMSEA) and the standardized root mean square residual (SRMR), both of which reflect better model fit as they approach zero, as well as the comparative fit index (CFI) and Tucker-Lewis Index (TLI), which both reflect better model fits as they approach 1.0.

After assessing the measurement, a structural model was added, including the mediation effect. This allowed for the assessment of whether physicians' religious/spiritual orientation was related to whether or not they thought religion and patient health were linked, and whether or not this in turn predicted their propensity to discuss those topics in clinical situations. This tests the mediation effect discussed above and the hypothesis that RAS are both more likely to connect religion and medicine and then to talk about this with patients. When additional variation of the dependent latent variable is explained apart from the mediation path, this would indicate potential support for a pragmatic approach (if the effect is positive) to linking religion and medicine. Finally, a negative relationship between one of the religious/spiritual orientations

potentially indicates either the non-overlapping cognitive domains of religion and medicine or also that the physician rejects a relationship between the two outright.

Dependent Variables

The dependent variable is the general factor from a bi-factor latent variable reflecting a physician's propensity to discuss religious or spiritual issues with their patients (See Figure 3.1). Variance in the observed variables that is not in common with this general factor is further parsed out into two other latent variables reflecting variance in the observed variables that remains unique. These two latent variables are essentially the variance reflecting either that the physician tends to include religious content in their conversations with patients during routine visits or that they include this content when the severity or acuity of the case is higher. These two should be understood as mutually exclusive, as any variance that they had in common is accounted for by the general factor. In order to simplify and organize the discussion about observed variables, I will discuss them in terms of these residual latent variables – lower and higher acuity situations. It should be understood, however, that the key dependent variable is the general factor.

There are three observed variables for the lower acuity situations. The first two ask the physician how often they ask about religious/spiritual issues when a patient "presents with a minor illness or injury" and "comes in for a history and physical". The response options were on a five point scale and ranged from never to always and they were able to select 'does not apply' (as they may be a specialist or some other physician for whom the questions are not pertinent). If a situation was reported to have not applied, that observation was coded as missing. The third observed variable asked how often the

42

physician asks patients about religious/spiritual issues and ranged from never (0) to always (4). The McDonald's omega for this latent variable alone is .842 with standardized factor loadings prior to the bi-factor model ranging from .746 to .86.

The second latent variable is composed of four observed variables reflecting higher acuity patient situations. The questions again begin with asking how often they ask about religious/spiritual issues when a patient "faces a frightening diagnosis or crisis", "faces the end of life", "suffers from anxiety or depression" and "faces an ethical quandary." Again, the response options were on a five point scale and ranged from never to always, with those saying a situation did not apply coded as missing. The McDonald's omega for this latent variable alone is .927 with standardized factor loadings prior to the bi-factor model ranging from .804 to .943.

Once the bi-factor structure is imposed, the factor loadings for these two residual latent variables necessarily drop as much of their variance is held in common with one another as hinted by their high correlation (>.8). This means that what leads a physician to talk with patients about religion and spirituality applies to both high and low acuity situations and not necessarily only one or the other. Accounting for the general factor allows this common variance to be modeled, while the residual variance for the low and high acuity latent variables then reflects that variance in common with *only* low or high acuity situations. The McDonald's omega for this general factor is also strong at .932 and standardized loadings ranging from .656 to .883.

Independent Variables

There are two different sets of key independent variables included in this analysis. First, the typology for RAS, SBNR, RBNS and NROS orientations is included here as a

system of dummies with the RAS physicians as the comparison category. Following

Jang and Franzen (2013), this typology was created from two different questions. Both

asked, "to what extend do you consider yourself…" with the first stating, "a religious

person" and the second stating, "a spiritual person." Both had response options that

ranged from 'very' to 'not at all'. A two by two typology was created by collapsing the

very and moderately categories and then the slightly and not at all categories for both

questions. The four nominal religious/spiritual categories were created from the resulting

two-by-two typology.

The second key independent variable is the mediation effect discussed above.

The question states, "overall, how much influence do you think religion/spirituality have

on patients' health?" The response options were 'very much,' 'much,' 'some,' 'a little,'

and 'very little to none.' The above religious/spiritual identity of the physician was used

to predict this variable, which was then used to predict the latent variable of whether or

not the physician engaged the patient in religious terms at all in a clinical setting.

Additional controls were included in the analysis to hold other potential spurious

relationships constant. Various religion controls were included in the analysis. The

percent of individuals within the physician's county reporting that they were a member of

a religious community was included in the analysis, as was whether or not the physician

had ever had a religious experience that changed their life while at work, how often they

attended religious services, whether they claimed to have no religious affiliation as

compared to any, and whether or not they felt called to be a physician.

Many physicians feel as though there are various barriers in the way of them

connecting with patients religiously in a clinical context. I have included a single count

variable that reflects the number of barriers the physician reported experiencing in their practice of medicine. The options presented to them included: general discomfort with discussing religious matters, insufficient knowledge/training, insufficient time, concern about offending patients, and concern that their colleagues would disapprove. Other socio-structural controls that were included in the analysis included whether or not they worked in an academic setting, whether they worked in a faith-based setting, whether they were a primary care physician, whether they were still a resident and whether they were board certified or not. Additionally, I have controlled for whether or not the physician was white, male and also for how old they were at the time of the survey.

Results

Table 3.1 shows the descriptive statistics and the difference of means between the four religious and spiritual orientations. From the group comparisons, the RAS physicians have higher mean scores of thinking that religion matters for patient health outcomes and the NROS physicians have the lowest mean score. While there is not a significant difference between the SBNR and RBNS physicians and whether or not they think religion matters for health, the magnitude of their differences with the RAS physicians and NROS physicians make it seems as though the SBNR physicians connect religion and health more often. Looking at the mean differences within the observed variables used for the latent measures, the RAS physicians more frequently are more likely than their comparison to have religious conversations followed by SBNR

45

Table 3.1

Descriptive Statistics and Group Mean Differences

Variables	Range	Mean/%	Std. Dev.	SBNR vs. RAS	SBNR vs. RBNS	SBNR vs. NROS	RAS vs. RBSN	RAS vs. NROS	RBNS vs. NROS
SBNR	0,1	20	0.40	-	-	-	-	-	-
RBNS	0,1	4	0.20	-	-	-	-	-	-
NROS	0,1	22	0.41	-	-	-	-	-	-
RAS	0,1	52	0.50	-	-	-	-	-	-
Religion Impacts Health	1 - 5	3.68	0.99	-0.47*	0.35	0.80*	0.82*	1.27*	0.45*
None	0,1	10	0.30	0.20*	0.21*	-0.03	0.01	-0.23*	-0.24*
Religious Area	0 - 110	63.10	16.96	-2.00	-7.08*	-2.18	-5.08	-0.18	4.89
Barriers	0 - 5	1.37	1.11	0.07	-0.39	-0.24	-0.46	-0.31*	0.15
White	0,1	79	0.41	0.06	0.04	0.04	-0.03	0.00	0.00
Male	0,1	74	0.44	-0.07	-0.21*	-0.12*	-0.13	-0.05	0.09
Spiritual Experience	0,1	11	0.32	-0.05	0.02	0.10*	0.07	0.15*	0.07
Attendance	1 - 9	4.97	2.43	-3.13*	-2.29*	0.54*	0.83*	3.67*	2.83*
Work Calling	1 - 4	3.01	0.82	-0.28*	-0.07	0.32*	0.21	0.60*	0.40*
Academic	0,1	32	0.47	-0.03	-0.12	-0.07	-0.10	-0.04	0.06
Faith Based Practice	0,1	12	0.33	-0.00	0.05	0.07	0.05	0.07*	0.02
Resident	0,1	1	0.11	-0.01	-0.01	0.00	-0.01	0.01	0.02
Board Certification	0,1	87	0.34	0.07*	-0.06	0.01	-0.13	-0.06	0.07
Age	28 - 66	50.01	8.34	-0.04	-1.32	-1.20	-1.28	-1.16	0.12
Primary Care	0,1	33	0.47	0.01	-0.02	0.05	-0.03	0.05	0.08
Observed Variables (for LV)									
Ask When…									
Frightening diagnosis	0 - 4	1.72	1.20	-0.16	0.59*	0.87*	0.76*	1.03*	0.27
End of life	0 - 4	2.36	1.30	-0.05	0.44	0.88*	0.49	0.93*	0.44
Anxiety or depression	0 - 4	1.35	1.14	-0.24*	0.35	0.65*	0.59*	0.89*	0.30
Ethical quandary	0 - 4	1.88	1.20	-0.18	0.63*	0.78*	0.81*	0.97*	0.16
Minor illness/injury	0 - 4	0.39	0.66	-0.24*	0.22	0.20*	0.46*	0.44*	-0.02
History and physical	0 - 4	0.63	0.98	-0.10	0.46*	0.45*	0.56*	0.55*	-0.01
How often ask	0 - 4	1.10	1.14	-0.10	0.61*	0.70*	0.71*	0.80*	0.09

Note: The *n* for each variable ranges from 1001 to 1144, including the dependent variables with legitimate skip patterns. FIML was used for missing variables as discussed in text. Tukey post hoc group mean comparisons; * = p <.05

46

physicians. These differences give more reason to believe RAS physicians are a fitting

comparison category for the system of dummy variables used in the final model.

One of the primary predictions above was that RAS physicians would be the most

likely to make a link between their religious beliefs and the work that they do as a

physician. This is reflected in the mediation portion of the model (see Table 3.2). Here

we find that RAS physicians are more likely than all three of the other R/S categories to

think that religion impacts patients' health. This means that RAS physicians have linked

the relevance of beliefs most clearly with the work they do in comparison to the other

three categories. In fact, the physician's R/S orientation accounts for about 25% of the

variance in thinking that religion impacts patient health. This variable, believing that

religion impacts patients' health, is then strongly predictive of the physician's propensity

to actually talk with their patients about religion or spirituality. In fact, of the variables

directly predicting the general factor – a physician's propensity to discuss

religion/spirituality with patients no matter the acuity – thinking that religion impacts

patient health most strongly predicts more frequent religious conversations with patients.

This is an indication that they may have the easiest access to the background, the

"empathy equipment", to connect with patients in the terms of religion and spirituality.

The direct effects of the physician's R/S orientation models the relationship of

their religious and spiritual beliefs and their propensity to talk with patients about

religious or spiritual topics after having controlled for whether or not they think religion

impacts health. All three still have significant effects. SBNR physicians are more likely

than RAS physicians to talk with patients about religion or spirituality outside of the

effect of the religion-health link (that is, a direct path). This implies that, in comparison

with RAS physicians, SBNR physicians are more likely to take a pragmatic approach towards religion and spirituality in the clinical setting. They are able to make religious or spiritual connections with their patients, but these connections may not be primary or consistent connections as they lack the cognitive link between religion and health. The direct effect from both RBNS and NROS physicians is still negative, meaning they are less likely than RAS physicians to talk with their patients about religious or spiritual issues. This indicates that both are prone to either the rejection or redirection modes of action discussed above. Because they tend to not see the value of religion for making sense of the world, they are also less capable of connecting to patients in this way. Beyond these relationships, the more barriers the physician reports the less likely they are to talk about these topics with patients, as may be expected. Some physicians reporting barriers such as lack of time, however, actually talk to patients about religion and spirituality more often than those not reporting the same barrier (Curlin et al. 2006), so barriers may not always directly correlate with inhibited action. The more religious services the physician reports attending the more likely they are to have religious conversations with their patients. Physicians reporting that they had a spiritual experience while working that changed their life are also more likely to talk with patients about religious or spiritual topics. Additionally, physicians that report feeling called to be a doctor are more likely to have religious conversations with patients.

The effect of age is interesting, although significant at the .01 level with a fairly small standardized effect. It is positive, indicating that as a physician gets older, they are slightly more likely to talk with patients about religion and spirituality. This could be
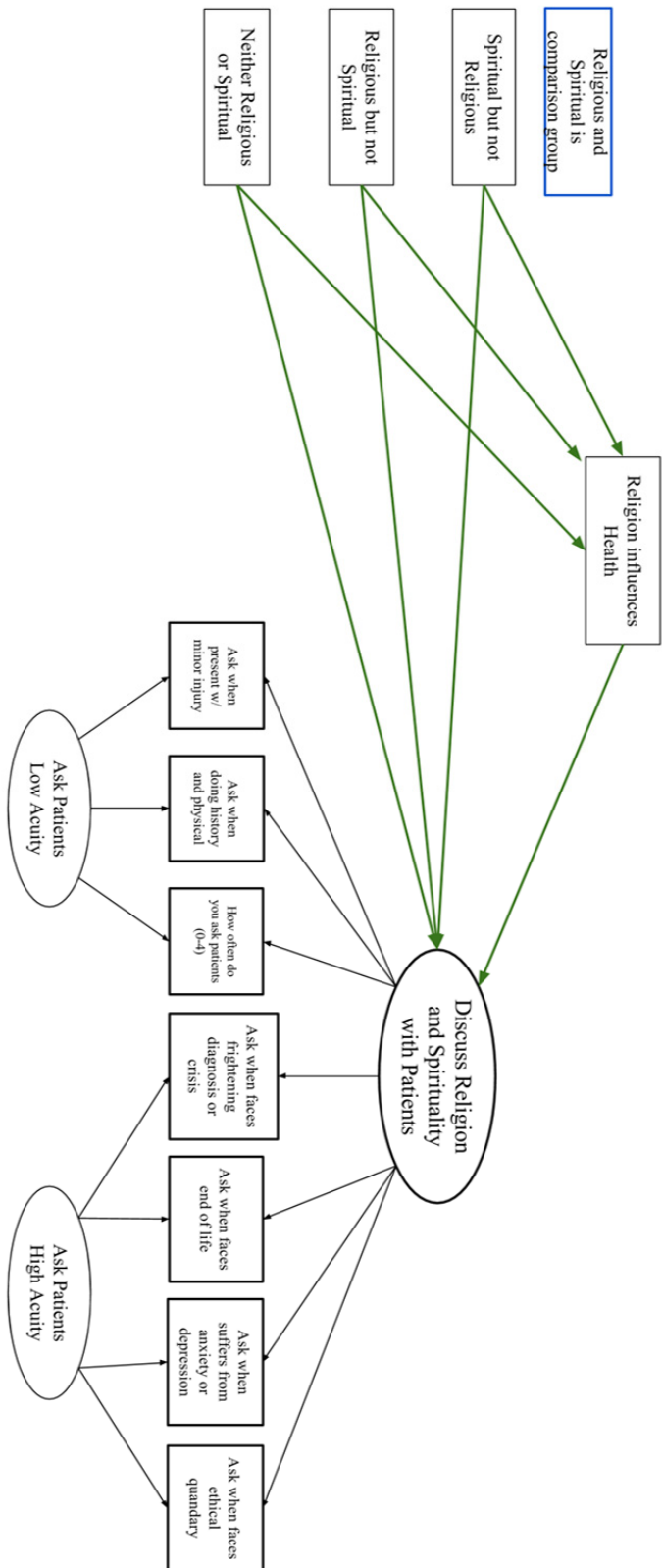
Figure 3.1: *Bifactor SEM model for Physician Propensity to Discuss Religion with Patients*

49

because older age is generally related to religious belief, but it could also be that the further the physician gets from their intensive professional socialization in medical school and residency and the more experiences they have had, the more they see medicine and personal issues such as beliefs as compatible with one another. In other words, it may be the case that the more patient exposures a physician has the more "empathy equipment" they pick up along the way. In all, these exogenous variables account for nearly 29% of the variance in the physician's propensity to talk about religious or spiritual topics with patients.

Discussion

While interest in research linking religion to health outcomes has increased in recent years, almost none of it addresses how religion impacts the medical institution or the provision of care. Others have suggested that forming connections with patients is an important dimension of effective medical care (Dubbin et al. 2013; Epstein et al. 2005; Halpern 2001; Ishikawa et al. 2013; Mead and Bower 2000) and building on this assertion, two things are argued here. First that many potential patients in the United States make sense of their experiences with illness through the lens of their religious beliefs and that as a result, including religious beliefs and values in medical care is also important (Ishikawa et al. 2013; Toombs 1987). Second, physicians are not equally equipped to make those kinds of connections with their patients because of their own spiritual/religious orientations and the resulting cognitive schemes they bring with them into the medical interaction. It was suggested that both the RAS physician and the SBNR physician will tend to include religion in their medical interactions, but that the RAS

50

Table 3.2

How often Physician Speaks with Patients about Religion or Spirituality

Variables	*b*	*B*	St. Error
Mediation			
SBNR[a]	-0.441**	-0.18	0.067
RBNS[a]	-0.781**	-0.156	0.125
NROS[a]	-1.236**	-0.517	0.064
Direct Effects			
Religion Impacts Health	0.295**	0.288	0.035
SBNR[a]	0.160+	0.064	0.086
RBNS[a]	-0.325**	-0.064	0.123
NROS[a]	-0.160+	-0.065	0.094
None	-0.003	-0.001	0.098
Religious Area	-0.001	-0.01	0.002
Barriers	-0.158**	-0.157	0.025
White	-0.017	-0.007	0.075
Male	-0.258**	-0.113	0.069
Spiritual Experience	0.273**	0.086	0.088
Attendance	0.063**	0.152	0.017
Work Calling	0.137**	0.112	0.037
Academic Setting	-0.001	-0.001	0.064
Faith Based Practice	0.006	0.002	0.086
Resident	-0.297	-0.032	0.298
Board Certification	0.067	0.023	0.093
Age	0.006+	0.05	0.004
Primary Care	0.043	0.02	0.061
R^2			
Religion Impacts Health		0.252	
Talk about Religion or Spirituality		0.286	
N		1137	
CFI		0.958	
TLI		0.947	
RMSEA		0.042	
SRMR		0.025	

Source: Religion and Spirituality in Medicine: Physicians' Perspectives

$p < .01$ **; $p < .05$ *; $p < .1$ + (two-tailed tests); [a] RAS is the comparison category.

physician will more clearly link religion and patient health while the SBNR physician will tend to be more pragmatic in their propensity to include religion.

Both RAS as well as SBNR physicians tend to include religious or spiritual topics in their medical interactions. However, the link between their beliefs and their conversations differ. The RAS physician primarily goes about including these topics via a belief that religion and spirituality impact patient health; they have formed a cognitive link between religion and health, integrating their own beliefs and their professional work. The SBNR physician, on the other hand, does not make the cognitive link between religious content and patient health outcomes like RAS physicians do. Despite this fact, they still connect religiously with their patients. This indicates that while the RAS physician may be more proactive in including these topics in their medical interactions because they have formed this connection between the two, SBNR physicians may take a more pragmatic approach to inclusion. They are open to those topics when it seems as though it would be helpful or necessary. Both the RBNS and NROS physician orientations tend to avoid these conversations, indicating that they tend to think of religion and the provision of medical care as non-overlapping domains or they reject that the two are compatible with one another.

The present study should be seen as only the beginnings of work looking at how religion, the institution of medicine and the provision of care are related to one another. While there is apparent interest in the medical community in this topic, there is room for growth within sociology to better understand when and why a given physician will tend to associate some topics with medical practice and not others, religion being only one possible dimension of this. When or why would one physician feel that some actions are

'good' or 'right', and thus turn to them consistently in their patient interactions?[1] In saying this, I do not intend to imply that physicians should do one thing or another, but that *physicians* feel that they should do one thing or another. Indeed, this is how some scholars situate the rise in works on cognitive schemas (Hitlin and Vaisey 2010a): as part of growing interest in sociology of morality (Hitlin and Vaisey 2010b). Indeed, Vaisey (2009) characterizes a significant dimension of individuals' cognitive functioning as unreflective and automatic, which is in line with Berg's (1992) assessment that routinized actions in a medical setting may even overpower biomedical knowledge of illnesses. Religion, for some physicians, may simply not feel like something that is necessary within a medical context, and if its inclusion is related to better patient care and positive assessments of care (Berg et al. 2013; Chatters 2000; Wexler and Corn 2012; Williams et al. 2011) it may be a question of how, or even whether or not, education and socialization can change to accommodate for this.

While some scholars are skeptical as to whether attempts to change the habitus of individual physicians can change systemic problems (Dubbin et al. 2013), there are attempts to more systematically train physicians to keep patient religion and spirituality in mind. Koenig et al. (2010) report that 90% of medical schools have courses on spirituality and health, however, 73% are included within other required courses and only 7% of medical schools have dedicated courses. While this initially seems like a high adoption rate in medical school curriculum, Anandarajah et al. (2010) point out that the Accreditation Council for Graduate Medical Education has only included specific language pertaining to religion or spirituality in relation to psychiatry and palliative

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[1] See for example the University of Chicago's Program on Medicine and Religion, from which this data comes, and their Project on the Good Physician.

medicine. At the same time, both the Joint Commission on Accreditation of Healthcare

Organizations (The Joint Commission 2008) and a quality of life working group from the

World Health Organization (WHOQOL SRPB Group 2006) have either recommended

assessments of spirituality or developed inventories to aid in doing so.

CHAPTER FOUR

Is this Relevant?:
Physician Perceptions, Clinical Relevance and Religious Content in Clinical Interactions

Who decides what is relevant in a conversation with a physician? Is anything the patient wants to talk about or share with their physician fair game? Or is it the physician's role to direct the conversation towards what they see as medically relevant? Most often, it is the latter, and in the process may actually bypass patient-centered care.

Problems arise to when patients want something different from the interaction with their physician. Toombs (1987) argues that patients almost universally understand their illnesses in the terms of their everyday life while physicians tend to think of illnesses in terms of physical indicators with a named diagnosis and a specific treatment. When patients and physicians talk about illness, they tend to be referencing different realities. If the gap between these realities is large enough, a failure in health care can occur (Toombs 1987).

Neither the physician nor the patient changes who they are during clinical conversations. This is important because out of one's identity flows their perception of conversational relevance. While ill patients understand their illness in terms of their everyday life, they have some idea of what information their physician expects them to share. What a patient thinks they should share and what the physician wants them to share, however, is not always the same. Dubbin et al. (2013) find that even when physicians seek to practice patient centered care they still have strong perceptions of what is relevant in any given conversation with patients, and patients do not always have the

ability or background to live up to these expectations. The problem is that what physicians see as relevant may not always be what a patient actually needs to be provided the best care. Patient centered care is defined by the physician's ability to get a feeling for who the patient is as a person, in addition to diagnosing the patient's physical ailment and designing a treatment most suited for success (Mead and Bower 2000). Many patients want their physicians to ask about or at least be aware of their religious beliefs (Bernard et al. 1999; Bushwick and King 1994; Koenig et al. 1991; Wexler and Corn 2012; Williams et al. 2011), but this rarely takes place (Cadge et al. 2011; Koenig et al. 1991; Williams et al. 2011). The physician's propensity to take into account a patient's religious beliefs will tend to vary not just in accordance with the patient's beliefs but also in accordance with the physician's own religious and spiritual orientation. This study is about physicians' religious and spiritual orientation and how they respond when religious topics come up in their clinical interactions. I find that over various measures of clinical action, thinking religion impacts patients' health mediates the relationship between physicians' beliefs and their clinical practices; physician beliefs are tied to beliefs about religion and patient health which is then related to their actions in clinical settings. This mediation effect is reflective of whether or not the physician has connected their beliefs and their professional work.

Background

Patient Centered Care

While medicine has been criticized for its tendency to focus on biological processes of illness at the expense of a holistic patient-focus (Toombs 1990), recent years have seen an increased call for the practice of patient centered care (Kitson et al. 2013;

56

McWhinney 1993; Stewart 1995, 2001). Significant organizations such as the National

Health Service, the US Department of Health and Human Services (Dubbin et al. 2013)

and the World Health Organization (2000) have also pushed for medical practice to be

more centered on the patient.

While there is some confusion as to what patient centered care implies for policy

changes and advances in medical education, there is widespread support for the

philosophy that informs this approach to patient care (Kitson et al. 2013). For some this

means having sympathy and not empathy for patients (Macnaughton 2009) and others

more recently argued that being willing to emphasize subjective connections instead of

objectified connections with patients is key (Carel and Macnaughton 2012). Epstein et

al. (2005) define patient centered care as actions resulting from holding a certain moral

philosophy, generally defined by an interest in care that is in accordance with the

patient's cultural values, needs and preferences. Three core values make up this moral

philosophy (Epstein et al. 2005), two of which are pertinent here. First, patients should

be treated as an individual with experiences and not merely a biological host for some

illness or a living example of a list of clinical indicators (Dubbin et al. 2013; Mead and

Bower 2000). Second, the physician should make an attempt to understand the

perspective of the patient so that the two can come to a shared understanding of the

illness and a fitting plan of treatment (Epstein et al. 2005; Halpern 2001; Toombs 1987).

Just as Kitson et al. (2013) point out, while there is near unanimous agreement in

the philosophical approach undergirding patient centered care, there is not always

agreement on what this means clinically. Similarly, in a qualitative study, Dubbin et al.

(2013) find that it may be challenging for a physician to live up to the lofty goal of

patient centered care. Quite often patients did not have what Dubbin et al. refer to as the cultural health capitol to successfully provide the clinical goods expected by their physician. This means that while physicians may agree they should pursue patient centered care, their own cultural background informs what they thought was relevant and irrelevant for clinical interactions. In other words, it can be a challenge for any physician to really practice patient centered care because his or her perceptions of relevance always directs patient interactions.

Toombs (1987) persuasively made a similar argument from a phenomenological perspective. She argued that everything becomes what it is to us by focusing on one dimension or another of any given object or experience. Following Schutz (1962a, 1962b), she then argues that what anyone focuses on in a given situation will depend on their biographical background, and medical interactions and illness are no different. Because the physician tends to focus on illnesses as a disease process and the patient tends to focus on illness in the terms of her everyday life, there is potentially little overlap in terms of the patient and the physician's horizon of meaning. To put this another way, the two may struggle to connect with one another because although they are conversing about a single illness, that single illness is literally two different realities – the disease process inferred by the physician and the disrupted everyday life of the patient. The same phenomenon is often experienced by physicians who find themselves ill and in another clinician's examination room. As Baron (1985) says, "a great gulf now exists between the way we think about disease as physicians and the way we experience it as patients" (as quoted in Toombs 1987:221).

This difference between the illness confronted by the physician and the illness experienced by the patient is why patient centered care is so important. Only when patient experiences are taken into account in medical interactions can the physician have the most success helping patients make sense of their illness and constructively aid them back towards health (Frank 1991; MacIntyre 1977). As patients make sense of sickness through the context of their biographical background, it is also not surprising that many patients want their religious beliefs to be at least some part of their health care (Koenig et al. 1991; Williams et al. 2011). Just as a physician's own cultural background directs their perceptions of clinical relevance (Dubbin et al. 2013), physician reactions to the presence of religious content in clinical situations will not be the same for physicians with differing religious or spiritual orientations.

Religious/Spiritual Orientations and Medical Interactions

Jang and Franzen (2013) have demonstrated that individual religious/spiritual orientations such as claiming to be 'religious and spiritual', 'spiritual but not religious', 'religious but not spiritual' and 'not religious or spiritual' (hereafter RAS, SBNR, RBNS, and NROS) are important for social processes such as criminal propensity. For many of the same theoretical relationships they outline, these orientations also relate to medical interactions. As pointed out by Jang and Franzen, this typology for one's religious/spiritual orientation is helpful for two reasons. First, religiosity and spirituality correlate with fairly distinct ways of believing or connecting those beliefs with day to day life. Are religious beliefs all-encompassing for reality or are they highly peripheral and easily ignored? Are they best reflected in organizational or communal practices and statements of faith or are they best reflected in an individualized and personal pursuit of

the transcendent? Second, separating self-identified spiritual or religious orientations in this way also allows researchers to differentiate individuals who are spiritual but not antagonistic towards communal or organized religious practices from those who are spiritual but opposed to organized and communal expressions of belief.

Before discussing the unique social implications for each of the typological categories, it is helpful to know what prior research has shown the "religious" and "spiritual" dimensions relate to socially. The religious dimension tends to be related to beliefs and practices that are community and organizationally based, tradition-oriented, and associated with institutional and social pressures (Pepper et al. 2010; Piedmont 1999; Saucier and Skrzypinska 2006; Schlehofer et al. 2008; Wink and Dillon 2003; Wink et al. 2007; Zinnbauer et al. 1997; Zwissler 2007). The spiritual side, on the other hand, generally relates to an individual's subjective beliefs and pursuits, is often highlighted by a propensity for 'spiritual seeking' and personal experiences, non-theistic ideas of a higher power and an interest in unorthodox beliefs, practices and negative feelings towards organized forms of religion (Fuller 2001; Jang and Franzen 2013; Piedmont 1999; Roof 1993; Saucier and Skrzypinska 2006; Schlehofer et al. 2008; Wink and Dillon 2003; Wuthnow 1998; Zinnbauer et al. 1997).

Taking these religious and spiritual dimensions into account, the role that beliefs play in any given individual's life will tend to be unique according to the typological category he or she falls into. SBNR individuals are personally invested in some belief, but the beliefs tend to be primarily individualistic as they shy away from creeds, formal statements of faith and faith communities. RAS individuals, on the other hand, will be personally invested in their beliefs but will also tend to affirm communal statements of

faith. This will imbue their beliefs with a more universal ontological position; it applies to all things and all people whether or not they also believe because the beliefs reflect something that is "real". RBNS individuals will shy away from deeply personal faith connections but instead see the formal creeds or contextualized faith practices as important. They may go to church and retain traditions, but those practices are contextualized within "religious" settings. NROS individuals will, as implied by the denial of both religiousness and spirituality, not see personal investment or communal attachment as important. Each of these religious/spiritual orientations naturally have different perspectives regarding whether or not religion is applicable to the practice of medicine. Religious beliefs can be perceived as relevant or irrelevant. They can also be perceived as more or less problematic for the practice of medicine.

If what gives medicine its power and authority is the sterility of science (Light 2004; Porter 1993; Starr 1982), then just as Toombs (1987) suggests, we would expect a concurrent reduction of the 'personal' in medical interactions – "just the facts." If religion is a strong piece of the physicians' personal life, their personal view of the world could be problematic for or in conflict with their professional socialization as a physician. There are at least four possible cognitive links between religion and medicine for physicians, which imply various modes of clinical action on the part of the physician.

Chatters (2000), following work started by Pargament (1997), outlines four different cognitive links concerning the relationship between religion and medicine: rejectionism, exclusivism, constructivism and pluralism. A physician with a rejectionist link does not believe in God. As a result, they do not think religion is or should be a part of clinical interactions. It does not have a place in treatment plans or have a role in actual

health outcomes. This is clearly the minority orientation, as over 90 percent of

physicians feel it is appropriate to discuss religious and spiritual issues if the patient

brings it up (Curlin et al. 2006) and close to half feel it is appropriate to bring it up even

if the patient does not initiate the conversation (Curlin et al. 2006; Luckhaupt et al. 2005).

The second link is religious exclusivism, where the physician believes in God and also

thinks religion should be a part of medical interactions. Physicians with this orientation

will welcome and respect a patient's beliefs only when and to the extent that they

conform with the physician's own beliefs (Chatters 2000:354). Chatter's third religious-

medical link is religious constructivism. Here the physician does not believe in God and

thereby does not share the patient's beliefs but they do think that religious beliefs are

important in clinical settings. The last religious-medical link is that of religious

pluralism. Here the physician believes in God and thinks religion is relevant for both

treatments and outcomes, but generally respects and affirms the patient's beliefs even

though they may not share them.

Chatters' religious-medical orientations are primarily cognitive in nature,

although they do imply how a physician may interact with patients. There are four modes

of action a physician can enact as a 'solution' to the question of how religious beliefs in

general or her personal beliefs specifically relate to her work as a professional caring for

patients. Physicians can 1) see religion as having a direct relationship with patient health,

2) take a primarily pragmatic approach, 3) see religion and medicine as separate and non-

overlapping dimensions of life or 4) reject a relationship between the two.[1]

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[1] These are related to Cadge and Ecklund's (2009) findings from interviews with pediatric
oncologists. They present four similar physician responses when asked by a patient or patient family to
pray with them: participate in prayer with the patient and the family, accommodate the family but not
participate with them, reframe family requests (eg. Family: "will you pray for ….", Physician: "everyone

The first enacted solution implies a deep connection between the physician's beliefs and how they see those beliefs interacting with and impacting patient care; personal beliefs impact views of how religion and medicine relate to one another, which in turn predicts inclusion in clinical settings. Physicians who see a direct relationship between religion and patient health will often hold religious beliefs that permeate their own worldview. As a result, those beliefs will also have implications for others whether or not those others share the beliefs. This does not require the physician to impose those beliefs upon others, but these physicians are going to be quick to see how others' beliefs are related to their health.

The next two modes of action, pragmatism and separation, could apply to physicians with personal religious beliefs but for some reason have yet to connect those beliefs to their practice of medicine. The first of the two is pragmatic in that the physician has neither connected nor rejected a connection between religion and medicine, but include it in clinical settings when it serves a purpose or when it serves as means to better health (Shuman and Meador 2003). These physicians will not think of religious beliefs as all-encompassing. This pragmatic inclusion is likely patient-driven, which also means it is probably occurring infrequently as the number of patients who bring up religion is less than those who wish it would come up (Williams et al. 2011). Chatters' idea of constructivism fit with this mode of action. The second of these two can be thought of as a kind of cognitive non-overlapping magisteria (Gould 1999). Here the physician will have religious beliefs, but will be of the opinion that religious beliefs belong in religious settings, and the exam room is not such a setting. They will not be

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will pray for …"), and re-direct the request to the family's own pastor or the chaplain. These are related to the suggested four 'solutions' of linking medicine and religion, pragmatism, non-overlapping domains and rejection, respectively.

opposed to religion per se, but they will likely do what they can to redirect or reorient patients when the topic comes up. It is not clear whether any of Chatters' orientations fit with this mode of action. The final enacted solution to the question of how religion and medicine relate to one another is to reject that there is a connection. This is obviously tied to Chatters' rejectionism.

To tie all of this back to the religious/spiritual typological categories, the physician's religious/spiritual orientation will be related to how he or she reacts when religion comes up in the medical setting. RAS physicians are more likely be grounded in a systematic and traditional belief system, be embedded in a religious community, and feel personally interested and invested in their beliefs. Because their faith often is more traditional and orthodox (Pepper et al. 2010; Saucier and Skrzypinska 2006; Wink and Dillon 2003) it also tends be an all-inclusive frame for understanding the world. Religious beliefs permeate their worldview giving it a universal, taken for granted feeling, applying to others' lives as well as their own life (Berger 1990). These beliefs also present a potential problem because medicine is a scientific profession, often overlooking or seeing religious beliefs as irrelevant. In fact, Catlin et al. (2008) find that pediatricians have diminished religiosity as compared to when they were younger, and speculate that professional socialization could be one potential cause for this decrease. This conflict between a deeply belief-informed worldview and their chosen profession will force more reflection than may otherwise be the case, creating a clearer connection between their beliefs and their profession if the belief set is retained. This in combination with their propensity to think beliefs matter for others leads them to see a link between beliefs and patients' health. While they may be unwilling to think of religious beliefs as

prescriptive or as a 'best practice', they will be much more likely to think of religious

beliefs as universal and objective in nature thereby mattering for health in a more clear

fashion (Shuman and Meador 2003). Having more clearly linked religion and health in

their own mind, they will be much less prone to unconsciously reject religion during

medical interactions.

As a result of this cognitive link between religion and the practice of medicine,

they engage their patients when religious topics come up or even initiate the

conversation. Grossoehme et al. (2007) show that very religious and spiritual Christian

pediatricians are more likely to both talk with patients about their own beliefs and

practices as well as pray with them in the clinical setting.

Hypothesis 1: *RAS physicians will connect religion and patient health, and will*

openly engage in religious conversations with their patients.

For the SBNR physician, there is a tendency to be interested and invested in some

form of belief, albeit not easily summed by a clear statement of faith such as a creed or

denominational statement of faith. They are also unlikely to think their own views are

highly relevant to others beyond believing in something beyond their self; something

evidenced by 'Sheilaism' approaches to faith (Bellah et al. 1996). In this sense, spiritual

beliefs may indeed be their interpretive lens or cognitive scheme, but they are also

unlikely to think others should share their belief. This is because as physicians seek to

include what they think to be the best solution in their practice of medicine and an SBNR

physician shies away from endorsing their own beliefs as also best for others, they may

overlook patients' religious beliefs and their relevance to medical outcomes. One's

religious beliefs, they may think, are too idiosyncratic to include in medical practice. At

the same time, because they personally are "spiritual" they may see how beliefs generally would have merit for their patients and be open to discussions even if not initiating them. There is benefit for individual patients even if there is not a direct, concrete and generalizable link between religion and medicine.

The SBNR physician is also unlikely to think there is a conflict between their beliefs and their professional training. Medicine may tend to be scientific and somewhat impersonal, thus increasing the propensity for a physician to marginalize something personal to them and not clearly or directly relevant such as religious beliefs (Porter 1993; Shuman 1999). SBNR physicians, however, may not feel a need to figure out how their own beliefs fit because their beliefs are idiosyncratic and not part of a universal system. Thus if they do include religious topics in their medical interactions, it will not be the result of having considered how religion relates to health and medicine as was the case for the RAS physicians. Inclusion will be more pragmatic in nature; open to inclusion when necessary or helpful but shying away from initiating or emphasizing religion. Religion and spirituality will be included as a means to health (Shuman and Meador 2003).

> Hypothesis 2: *The SBNR physician will tend towards a pragmatic clinical*
> *approach as prompted by apparent patient needs.*

There are fewer RBNS individuals than the other religious/spiritual typologies in the United States (Dougherty and Jang 2008) but even fewer physicians tend to identify as "religious" (Catlin et al. 2008). Those that claim to be religious but reject the "spiritual" label tend to be very tradition-oriented as discussed above. This may primarily mean they hold a place in their life for religious practices but the perceived

relevance or importance of religion may not extend much beyond those practices and their correlated locale. This also means that religion is likely not the primary frame by which they make sense of their reality since it does not undergird all of their life but occupies only one dimension of it.

Just as SBNR individuals may think that spirituality is important for all people even if highly individualized, RBNS people may think that religious practices are important but unwilling or unable to specify those practices for others. This is not necessarily because they are highly individualized like for the SBNR person, but because people "do" religion in a different place than they "do" medicine. Their religious orientation is often more practice-based, practices contextualized in a setting other than the clinic. As such, they are also unlikely to think of religion as relevant for medical interactions or patient health more generally.

Hypothesis 3: *The RBNS physician will tend towards a non-overlapping orientation and will tend to redirect religious conversations to clinical topics.*

The NROS physician would be the most likely to take the religious rejectionist approach and in a clinical setting will be most prone to reject and redirect any religious content. NROS physicians will not use religion as an interpretive lens in their own life. Because religious or spiritual beliefs are not central for making sense of their experiences, they will tend to overlook the role religion may play in their patients' health. While there are some scientifically minded people described in qualitative work as spiritual atheists (Ecklund and Long 2011), it is unclear whether physicians with this view would self-identify as spiritual and their patient interactions would likely be similar to the NROS physicians. NROS physicians could be universalistic in their rejection of

God, in which case they may actively avoid religious content in the clinic, or they could be more or less agnostic in their interactions with others allowing for some marginal inclusion. Whether they universally reject God and religion or allow for marginal inclusion, religion will rarely be a part of their medical practice.

Hypothesis 4: *The NROS physician will reject or redirect religious conversations to clinical topics.*

Data and Methods

The data for this study is from two different sources. First, data about physician religious/spiritual orientations and beliefs as well as their patient interactions come from the *Religion and Spirituality in Medicine: Physicians' Perspectives* (RSMPP) survey. The RSMPP covers physicians' religious beliefs, patient interactions and views regarding the role of religion in medicine (Curlin et al. 2006; see Curlin, Lantos, et al. 2005; Curlin, Lawrence, Chin, et al. 2007). The survey sample was a stratified random sample of 2,000 physicians from the American Medical Association Physician Masterfile age 65 and younger. The sample was stratified by physician specialty so as to oversample some medical specialties such as geriatrics, pediatric specialties, pulmonary, critical care and psychiatry (Curlin, Lantos, et al. 2005). The survey was a mailed, self-administered questionnaire sent out in 2003. Respondents were mailed up to 3 questionnaires, with the third mailing including $20 so as to increase responses. Of the 2,000 potential respondents, 180 were no longer practicing or had incorrect addresses, leaving 1,820 eligible physicians and 1144 final responses. The response rate for the survey was 63%, according to *AAPOR* response rate definition 4, and did not differ by age, region or whether the physician was certified or not, although men and foreign medical graduates

were slightly less likely to respond (Curlin et al. 2006; American Association for Public Opinion Research 2011). Weights to account for this are included and used unless otherwise noted, and all presented analyses account for sample stratification.

In order to control for the religious concentration of the physician's county, I merged the 2000 *Religious Congregation and Membership Study* (RCMS) with the RSMPP. The RCMS was designed and completed by the Association of Statisticians of American Religious Bodies and Glenmary Research Center. The RCMS data was merged with the RSMPP the physician's county. This allowed for the inclusion of a control reflecting the religious percent of that county. As there are known issues with the RCMS sampling, only the adjusted percentage was used (see Finke and Scheitle 2005).

Analytic Method

The lavaan package for *R* was used throughout this analysis because while no latent variables were created and included, all of the following models are mediated path models (Yves 2012). All models were estimated using robust Huber-White standard errors and a Yuan-Bentler scaled test statistic because the dependent variables are not strictly normal and are also more categorical in nature than they are continuous in nature (Curran et al. 1996; White 1982; Yuan and Bentler 1998). Model fit was evaluated using the root mean square error of approximation (RMSEA) and the standardized root mean square residual (SRMR), both of which reflect better model fit as they approach zero, as well as the comparative fit index (CFI) and Tucker-Lewis Index (TLI), which both reflect better model fits as they approach 1.0.

69

Variables

There are five different dependent variables in this analysis, all of which are self-reported physician responses to the appearance of religious or spiritual topics in the clinical setting. All of them begin with the question, "when religious/spiritual issues come up in discussions with patients, how often do you respond in the following ways?" Respondents are offered six response options that range from 'never' to 'always' with the ability to say one of the topics did not apply to them. Each of the different dependent variables is a different possible response: "I listen carefully and empathetically", "I try to change the subject in a tactful way", "I encourage patients in their own religious/spiritual beliefs and practices", "I respectfully share my own religious ideas and experiences" and "I pray with the patient". Each of these dependent variables indicate a propensity towards a linked religion-medical response, pragmatic response, a non-overlapping religion-medical response, or a rejection response depending on whether the relationship is positive or negative.

There are two main independent relationships that are the focus in this study. The first is the religious/spiritual typology discussed above. The present study follows Jang and Franzen's (2013) religious/spiritual typology. RSMPP respondents were asked two questions – one about how religious they are and a second about how spiritual they are. Each question had four response categories indicating that they are either very religious/spiritual, moderately religious/spiritual, slightly religious/spiritual or not religious/spiritual at all. The two affirmative and the two negative responses were collapsed and a two by two typology was created, allowing for the system of dummies reflecting SBNR, RAS, RBNS and NROS.

The second key independent relationship of interest is the mediation effect regarding whether or not physicians see religiosity or spirituality as impacting the health of their patients. The survey question asked respondents "how much influence do you think religion/spirituality has on patients' health?" There were five response options that ranged from 'very much' to 'very little to none'. This variable was used as a mediating factor between the religious/spiritual system of dummies discussed above and the dependent variables.

Various religious control variables were included in all models. I included the percent of the people within the responding physician's county that say they are members at any given religious community or congregation. This was the adjusted percent as calculated by Finke and Scheitle (2005). I have also included a measure as to whether or not they ever had a religious or spiritual experience while practicing medicine that changed their life. The reason for this is that if they had such an experience we would expect that they would also be more likely to think of religion and medicine as partners and not adversaries or strangers. This was a simple dichotomous measure. I have also included how often the respondent reported that they attend religious services, which was a nine point scale that ranged from 'never' to 'several time a week.' Finally, I have also included whether or not the respondent reported no religious affiliation as opposed to any affiliation.

Additional demographic or structural measures are included as well. One of these is whether or not they reported any barriers to including religious or spiritual content in their clinical interactions with patients. This was a count variable made up of the number of barriers reported. The barrier options were 'general discomfort with discussing

religious matters', 'insufficient knowledge/training', 'insufficient time', 'concern about offending patients', and 'concern that my colleagues will disapprove.' Other control variables include whether or not the physician works within an academic setting, a faith based setting, whether or not they are a resident, whether they are board certified and whether or not they practice primary care medicine. Finally, I have also included whether or not they are white, male, live in the south and how old they were at the time of taking the survey.

Results

Table 4.1 shows the descriptive statistics and group mean differences for the religious and spiritual orientations. As discussed in the last chapter, the RAS physician connects religion and health more than any of the other orientations and the NROS physicians have the lowest mean score. Additionally, the RAS physicians have higher mean scores for engage their patients religiously or spiritually than other orientations (looking at the dependent variables) with the SBNR physicians with the next highest mean scores comparatively.

Figure 4.1 shows the general path model for all of the models shown in Table 4.2. The argument in this paper is that the physician's own biographical past is important when discussing what they see as relevant and irrelevant in clinical interactions. The path model allows me to measure which spiritual/religious orientation is most associated with having created a cognitive connection between religious beliefs and their clinical interactions with patients. Once the relationship between the physician's own religious/spiritual orientation and their belief that religion influences patient health is measured, the model then uses this belief to predict how the physician will react in

clinical interactions. In other words, if we find that RAS physicians are most prone to having connected religious beliefs and medical outcomes, I can then predict RAS physician's clinical reactions to religious topics as mediated by that cognitive connection (*H1*). The direct paths from the religious/spiritual orientations to the final outcome reflects the relationships between the religious/spiritual orientations and the outcome once the mediation reflecting the cognitive connection is controlled for. This allows me to show and estimate whether or not the physician tends to pragmatically include religion in the interaction (SBNR physicians as stated in *H2*), since they tend to not actually connect religion and health, or avoid inclusion in some way (RBNS and NROS physicians as stated in *H3* and *H4*).

The first model (Table 4.2) looks at whether or not the physician was willing to share their own religious ideas and experiences with their patients. First, when looking at the mediation effect, we can see that all of the religious/spiritual dummy variables are less likely to think religion has an effect on the patient's health than are RAS physicians. The belief that religion impacts patients' health is then positively related to whether or not the physician is willing to share their own religious experiences and ideas with their patients. This means that RAS physicians are the most likely to see a connection between religion and medicine, and this connection is, in turn, related to their actions in a clinical setting. There are two additional direct effects between the religious/spiritual dummy variables. SBNR physicians are less likely than RAS physicians to be willing to share their own ideas and experiences with patients. The same is true for those who are NROS who are less likely than RAS physicians to share their own ideas and experiences.

Table 4.1

Descriptive Statistics and Group Mean Differences

Variable	Range	Mean/%	Std. Dev.	SBNR vs. RAS	SBNR vs. RBNS	SBNR vs. NROS	RAS vs. RBSN	RAS vs. NROS	RBNS vs. NROS
SBNR	0,1	20	0.40	-	-	-	-	-	-
RBNS	0,1	4	0.20	-	-	-	-	-	-
NROS	0,1	22	0.41	-	-	-	-	-	-
RAS	0,1	52	0.50	-	-	-	-	-	-
Religion Impacts Health	1 - 5	3.68	0.99	-0.47*	0.35	0.80*	0.82*	1.27*	0.45*
None	0,1	10	0.30	0.20*	0.21*	-0.03	0.01	-0.23*	-0.24*
Religious Area	0 - 110	63.10	16.96	-2.00	-7.08*	-2.18	-5.08	-0.18	4.89
Barriers	0 - 5	1.37	1.11	0.07	-0.39	-0.24	-0.46	-0.31*	0.15
White	0,1	79	0.41	0.06	0.04	0.04	-0.03	-0.03	0.00
Male	0,1	74	0.44	-0.07	-0.21*	-0.12*	-0.13	-0.05	0.09
Spiritual Experience	0,1	11	0.32	-0.05	0.02	0.10*	0.07	0.15*	0.07
Attendance	1 - 9	4.97	2.43	-3.13*	-2.29*	0.54*	0.83*	3.67*	2.83*
Work Calling	1 - 4	3.01	0.82	-0.28*	-0.07	0.32*	0.21	0.60*	0.40*
Academic	0,1	32	0.47	-0.03	-0.12	-0.07	-0.10	-0.04	0.06
Faith Based Practice	0,1	12	0.33	-0.00	0.05	0.07	0.05	0.07*	0.02
Resident	0,1	1	0.11	-0.01	-0.01	0.00	-0.01	0.01	0.02
Board Certification	0,1	87	0.34	0.07*	-0.06	0.01	-0.13	-0.06	0.07
Age	28 - 66	50.01	8.34	-0.04	-1.32	-1.20	-1.28	-1.16	0.12
Primary Care	0,1	33	0.47	0.01	-0.02	0.05	-0.03	0.05	0.08
Dependent Variables									
Share beliefs	0 - 4	1.28	1.04	-0.76*	-0.05	0.46*	0.71*	1.21*	0.51*
Listen	0 - 4	3.55	0.66	-0.06	0.05	0.27*	0.11	0.33*	0.22
Change subject	0 - 4	0.88	0.89	0.26*	-0.14	-0.29*	-0.40*	-0.56*	-0.15
Encourage patient beliefs	0 - 4	3.03	0.96	-0.15	0.06	0.45*	0.20	0.59*	0.39
Pray with patient	0 - 4	0.77	0.86	-0.49*	0.04	0.26*	0.54*	0.76*	0.21

Note: The *n* for each variable ranges from 1006 to 1144 and all analysis were weighted and corrected for survey design. Tukey post hoc group mean comparisons; * = $p < .05$

74
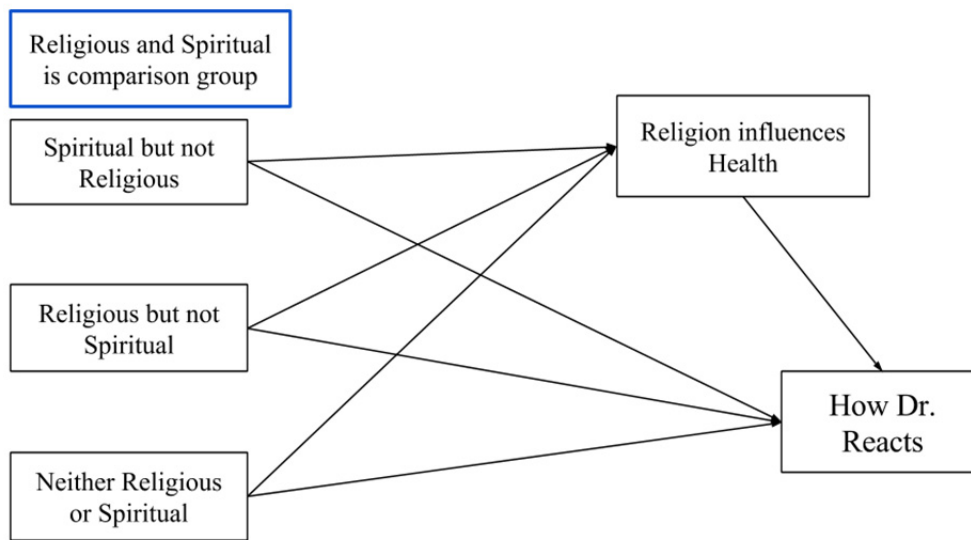
Figure 4.1: *Path Model for How Physician Handles Religion in the Clinical Context*

As may be expected, if the physician had a religious experience while practicing medicine that changed his or her life, they were more willing to share their own religious ideas or experiences with their patients. Similarly, the more a physician attends religious services the more likely they are to share their thoughts and experiences with patients. The number of barriers the respondent reported is inversely related to willingness to talk to patients about their experiences and ideas, as is being white or working in an academic setting. This model accounts for about 35% of the variance in the physician's propensity to share their own religious experiences and ideas with their patients.

Model 2 in Table 4.2 reports the results for how willing the physician is to listen carefully and empathetically to their patients when religious or spiritual issues come up. The mediation effect is again more strongly related to the RAS category than any of the other religious/spiritual dummy variables. Thinking that religion impacts patient health is then positively related to the propensity to listen to a patient when religious or spiritual

issues come up in the clinical setting. This again indicates that RAS physicians are most likely to see a link between religion and patient health, and this belief is then strongly related to a willingness to listen to patients when they bring up religious topics. Of the direct effects between the religious/spiritual dummy system, only the NROS orientation is different than the RAS orientation. After having controlled for the mediating effect of thinking religion impacts health, those who are NROS are less likely than RAS physicians to listen carefully and empathetically to their patients when they bring up religious issues in a clinical setting.

Beyond the mediation and direct relationships, none of the other religion measures are related to whether or not the physician tends to listen to their patients when religion comes up. Working in an academic setting, however, is positively related to being willing to carefully and empathetically listen to patients as they discuss religious issues. Reporting more barriers and being older are related to being less prone to listening to patients when religious issues come up in a clinical setting. These covariates explain just under 11% of the variance in the physician's willingness to listen carefully and empathetically to patients talk about religious issues, meaning that none of these variables are strongly related to whether or not the physician does tend to listen. Unlike other models presented here, it is possible that the reported barriers measure has the strongest standardized beta of all covariates because it is the only one with a structural reason (such as not enough time) for not listening. This means that most any physician would be willing to listen to a patient within reason and they will not necessarily be strongly willing or unwilling due to some other factor such as personal beliefs.

Table 4.2
How Physicians Engage with Patients Regarding Religion

Variables	Share Beliefs (M1)			Listen (M2)			Change Subject (M3)			Encourage Patient (M4)			Pray with Patient (M5)		
	b	B	SE	b	B	SE	b	B	SE	b	B	SE	b	B	SE
Mediation															
SBNR	-0.439**	-0.177	0.078	-0.433**	-0.173	0.079	-0.437**	-0.175	0.079	-0.44**	-0.176	0.079	-0.452**	-0.18	0.079
RBNS	-0.885**	-0.168	0.141	-0.883**	-0.168	0.141	-0.885**	-0.168	0.141	-0.885**	-0.168	0.141	-0.818**	-0.158	0.153
NRS	-1.29**	-0.534	0.076	-1.286**	-0.536	0.075	-1.289**	-0.535	0.075	-1.306**	-0.538	0.077	-1.311**	-0.54	0.076
R/S Orientations															
SBNR	-0.304**	-0.116	0.097	0.024	0.014	0.068	0.111	0.048	0.094	-0.004	-0.002	0.108	-0.176*	-0.081	0.083
RBNS	-0.244	-0.044	0.16	0.041	0.012	0.12	0.205	0.042	0.153	0	0	0.189	-0.126	-0.028	0.135
NROS	-0.468**	-0.183	0.112	-0.185*	-0.115	0.087	0.135	0.074	0.109	-0.302*	-0.127	0.129	-0.159+	-0.076	0.096
Religion Impacts Health	0.273**	0.258	0.038	0.075*	0.112	0.03	-0.236**	-0.255	0.04	0.137**	0.14	0.041	0.191**	0.22	0.032
Spiritual Experience	0.275**	0.083	0.104	0.089	0.04	0.059	0.088	0.03	0.1	0.001	0	0.103	0.360**	0.13	0.104
Attendance	0.086**	0.198	0.018	0.01	0.038	0.013	-0.016	-0.043	0.016	0.006	0.015	0.021	0.055**	0.152	0.016
No Religious Affiliation	-0.104	-0.029	0.096	-0.012	-0.005	0.1	0.238	0.075	0.131	-0.297*	-0.089	0.142	-0.140+	-0.047	0.078
Religious Area	-0.002	-0.026	0.002	-0.002	-0.041	0.001	0.006**	0.101	0.002	-0.003	-0.057	0.002	-0.001	-0.022	0.002
Barriers	-0.07*	-0.075	0.027	-0.078**	-0.131	0.022	0.168**	0.204	0.027	-0.071*	-0.082	0.032	-0.074**	-0.096	0.022
White	-0.252**	-0.097	0.087	0.064	0.039	0.056	-0.122	-0.054	0.082	0.046	0.019	0.087	-0.193*	-0.09	0.081
Male	0.096	0.039	0.07	-0.092+	-0.059	0.048	-0.05	-0.023	0.065	0.026	0.011	0.076	-0.011	-0.005	0.064
Academic Setting	-0.199**	-0.085	0.064	0.156**	0.104	0.049	-0.037	-0.018	0.068	0.021	0.009	0.075	-0.022	-0.012	0.059
Faith Based Practice	0.007	0.002	0.093	-0.064	-0.031	0.077	0.171	0.06	0.102	-0.065	-0.021	0.0115	0.025	0.009	0.084
Resident	0.421	0.043	0.343	0.07	0.011	0.156	-0.009	-0.001	0.309	0.455	0.051	0.271	-0.056	-0.007	0.237
Board Certification	-0.075	-0.024	0.098	0.027	0.013	0.066	-0.104	-0.038	0.098	0.176	0.061	0.099	-0.140+	-0.055	0.084
Age	-0.005	-0.037	0.004	-0.008**	-0.1	0.003	0.018	0.016	0.038	-0.003	-0.002	0.04	-0.054	-0.052	0.036
Primary Care	0.063	0.029	0.063	0.03	0.022	0.045	-0.126*	-0.067	0.061	0.066	0.033	0.07	-0.067	-0.038	0.057
South	-0.042	-0.019	0.068	0.058	0.04	0.047	-0.05	-0.026	0.062	-0.01	-0.005	0.072	0.04	0.022	0.059

Source: Religion and Spirituality in Medicine: Physicians' Perspectives

$p < .01$ **; $p < .05$ *; $p < .1$ + (two-tailed tests)

77

Table 4.2 cont.
How Physicians Engage with Patients Regarding Religion

Variables	Share Beliefs (M1)	Listen (M2)	Change Subject (M3)	Encourage Patient (M4)	Pray with Patient (M5)
R^2					
Share	0.352	-	-	-	-
listen	-	0.106	-	-	-
Change	-	-	0.195	-	-
Encourage	-	-	-	0.092	-
Pray	-	-	-	-	0.226
N	1020	1018	1020	1008	1009
CFI	0.933	0.887	0.898	0.884	0.312
TLI	0.833	0.716	0.745	0.711	0.779
RMSEA	0.055	0.055	0.056	0.054	0.057
SRMR	0.016	0.015	0.016	0.015	0.016

Source: Religion and Spirituality in Medicine: Physicians' Perspectives

$p < .01$ **; $p < .05$ *; $p < .1$ + (two-tailed tests)

The next model (Model 3) depicts whether or not the physician reports that they try to change the subject when religious issues come up in the clinical setting. Unlike all of the other outcomes presented here, this one is interesting because changing the subject when religion comes up in the clinical setting is also a mode of action that betrays the belief that religion does not belong in the context of medicine. Believing that religion impacts the health of patients mediates the effect between the religious/spiritual orientation system of dummies and the outcome, and is negatively related to trying to change the subject when religion comes up in the clinical settings. Model 3 shows that RAS physicians think religion impacts patient health more than others and will subsequently avoid changing the subject away from religion when possible. None of the direct effects between the religious/spiritual dummy variables are related to changing the subject.

Primary care physicians are also less likely to change the subject when religious content comes up in patient conversations. Reporting more barriers to these discussions is, on the other hand, related to being more willing to change the subject when religious topics come up. Interestingly, when the physician lives in a more religious area, they are actually more likely to change the subject. This could be merely because their patients are more likely to bring up religion to begin with, and because of that fact there are also more times when they have felt the need to change the subject. It is also possible that it tends to come up more often and they feel that through those experiences it is not as productive. The covariates within this model are able to account for almost 20% of the variance in whether or not the physician will attempt to tactfully change the subject away from religious topics.

Model 4 shows whether or not the physician encourages patients' own religious or spiritual beliefs and practices. The mediation variable again is most strongly related to the RAS orientation and is positively related to a willingness to encourage the patient in their religious beliefs. This is interesting because out of any of the religious/spiritual orientations as well as this mediation variable specifically, we would expect to see some evidence of exclusivism here but this is not what we find. Those who are RAS and see a link between religion and health outcomes are still willing to encourage patients in their own religious or spiritual beliefs and practices. But then again, the mediation variable was also related to being willing to share one's own ideas and experiences, and this does have the potential to take on an exclusivist tendency, though the two need not be mutually exclusive.

All of the other significant covariates in the model have negative relationships with being willing to encourage the patient in their own beliefs and practices. NROS physicians are less likely to encourage patients' beliefs as compared with RAS physicians, and this is reinforced by the fact that those who claim no religious affiliation are also less prone to encouraging patients in this way. Finally, those who reported more barriers were also less likely to encourage their patients in their beliefs and practices.

The last response to religious content in the clinical setting is whether or not the physician reports that they would pray with their patients (Model 5). Again, those who are RAS are most likely to think that religion impacts health outcomes, and thinking that religion impacts health outcomes is, in turn, positively related to being willing to pray with patients. Of the direct effects, both those who are SBNR and NROS are less likely than are RAS physicians to pray with their patients. Of the other religion measures in the

model, having had a religious or spiritual experience while practicing medicine and attending religious services more often are positively related to being willing to pray with one's patients while having no religious affiliation is negatively related to praying. Of the non-religion measures in the model, having reported more barriers to engaging patients religiously, being white and board certified are negatively related to praying with patients.

In a more general sense, when looking at all models it is interesting to note that working in an academic setting appears to be less related to actively engaging patients, but still being willing to engage in a more "passive" mode of action. What I mean by this is that those who are working in an academic setting are negatively related to sharing their own beliefs and experiences with patients but they are willing to sit and listen to patients talk about their religious beliefs. On the other hand, other physician characteristics are related to more "active" patient engagement. As briefly mentioned above, having had a religious or spiritual experience while doing medical work that changed their life is positively related to active modes of action in the clinical setting such as sharing beliefs and praying with patients. This may be because these experiences help form cognitive connections between religion and medicine. Finally, it is interesting to note that the mediation effect was positively related to all kinds of inclusion, whether that be more "passive" or "active" modes of behavior.

Discussion and Conclusion

I have argued here that how a physician interacts with patients and what they see as pertinent in their clinical interactions will be guided by their own biography and cognitive connections. While almost all physicians support the idea of patient centered

care (Kitson et al. 2013), there can be cultural mismatches between physicians and patients preventing a patient from living up to the physician's expectations regarding what is and is not helpful in medical interactions (Dubbin et al. 2013). To rephrase this, a physician's own beliefs, values and experiences will drive what topics they think they need to discuss with their patients, potentially avoiding all topics outside of this horizon of relevance. I have shown here that a physician's religious/spiritual orientation is indeed related to how they respond to religious topics in clinical settings.

In terms of the specified hypotheses, *H1* was strongly supported by the data. RAS physicians were most likely to believe that religion does matter for the health of their patients, and this belief was then associated with openness to including religious topics in their clinical interactions with patients. RAS physicians had connected religious beliefs and health, paving the way for clinical relevance. As such, the RAS orientation was positively related to sharing their own beliefs and experiences with patients, listening to the patients' beliefs, avoiding topic changes when religion comes up, encouraging the patient in their own beliefs and praying with patients. *H2* was partially supported as SBNR physicians were less likely to have connected religious beliefs and medical practice, meaning they either pragmatically include religious in their patient interactions or avoid it in some way (positive and negative path estimates, respectively). The SBNR orientation was negatively related to the active dimensions of religious inclusion – sharing their own beliefs and praying with patients – but did not differ from the RAS direct effect for other measures. While this cannot be taken as a conclusive finding that they tend to take a pragmatic approach to including religion in their clinical encounters, it was theorize in the discussion of hypotheses that if these topics did come up in their

82

interactions they would primarily be patient-initiated which is what this potentially indicates. They may allow the patient to talk about it while remaining unwilling to bring it up or pray with patients. *H3* did not find support as none of the models were able to reject the null hypothesis. Finally, *H4* was generally supported as NROS physicians were reluctant to share what they thought about religion, listen to patients' beliefs, encourage patients in their religious beliefs or pray with their patients.

The key finding of this paper is that the physician who is most consistently open to including religion in their clinical interactions is the one who sees a relationship between religion and the health outcomes of patients. This connection between religion and health outcomes was also shown to be strongly related to the physician's own beliefs. Specifically, physicians who have a RAS orientation are most prone to seeing a connection between religion and health outcomes, and as a result are also the most consistently likely to be open to including religion in their clinical interactions. This finding makes sense, as claiming that one's cultural background matters for social interactions is a central claim to many sociological theories attempting to explain similar phenomena from different perspectives (Sewell 1992; Swidler 1986; Toombs 1987; Vaisey 2008, 2009).

While the key argument here is that a physician's own biography will drive their perceptions of clinical relevance during interactions with patients, including religious topics, the results presented also show very interesting structural relationships. The outcomes reveal both active and passive engagements. A physician must actively take part in a religious interaction with a patient in order to share their own beliefs and experiences, encourage the patient in their own beliefs and pray with their patients. They

do not need to be as actively involved with religious content in an interaction if they are only listening to their patient or avoiding the subject. Academic settings appear to be primarily related to passive inclusion. Physicians in academic settings tend to not share their own beliefs, but they do tend to listen when their patients bring religion/spirituality up. Reporting a greater number of barriers to including religious topics in clinical interactions is always in opposition to inclusion, both the passive and active forms. Additionally, the strength of the effect of reported barriers is stronger in the passive inclusion models (listening to patients and avoiding the subject) than is the effect of barriers in the active inclusion models. This could be because both of the passive inclusion models are not terribly well predicted by the cultural measures, but are related to structural measures like being in an academic setting and the physician's age. This structural link may be present because most physicians are willing to at least let a patient say what they feel like they need to say, but when this does not happen the reason is not always because the physician does not want to hear about it but because there is something disallowing them to hear it (such as no time). Age is also an interesting case because it is only significant in one model (listening to patients), but has a negative association. While much more work would need to be done, this could be an effect of educational changes through the years regarding the place of religion in medical care (Koenig et al. 2010).

A final structural effect is of interest specifically because of its *lack* of an effect. Not only does it not matter what region of the country the physician is in when looking at whether or not they tend to include religion in their interactions with patients, but it also does not matter how religious the area is in which they practice. Locations where

patients may be most prone to be religious and make sense of their illness in terms of their beliefs at best has no relationship with how often religion is a part of their interactions with physicians, but in some cases actually predicts a decreased frequency of this happening.

This study has brought up various potentially fruitful areas for further work on this topic. One is to further study the different effects of active and passive inclusion of religion in clinical interactions. While the RAS physician was prone to including religious topics in all of their interactions with patients, as mediated by their cognitive connection between religion and health outcomes, the pattern for other physicians was not as clear. SBNR physicians appear to avoid active inclusion of religion in their patient interactions and NROS physicians appear to always avoid inclusion.

CHAPTER FIVE

Structural Implications for Clinical Interactions and the Overlooked Patient

Going to see a doctor is rarely a welcomed experience. It is often uncomfortable, potentially degrading and often is facilitated by a health concern. We need the physician because they are the professional charged with helping us make sense of disparate and potentially baffling physical indicators that something is amiss (Halpern 2001; Starr 1982). This experience tends to be less uncomfortable when the physician understands what we are feeling and treats us as an individual.

Many people in the United States feel that their religiosity is an important aspect of who there are (Froese and Bader 2010; Koenig 2004; Putnam et al. 2010). Recognition of this fact can strengthen the ability of a physician to connect with her patients, helping them make sense of being ill (Curlin, Roach, Gorawara-Bhat, Lantos, and M. H. Chin 2005). But the dynamics of this relationship change with patient populations; namely, some regions of the country are more religious than others. The objective of this study is to determine the extent to which clinical interactions addressing religious concerns are related to the religious characteristics of the patient population.

Recent research shows that there is often a gap between the patients' desire for religion and the provision or inclusion of it in their medical care (King and Crisp 2007; Koenig et al. 1991; Wexler and Corn 2012; Williams et al. 2011). This work often accompanies or inspires increased calls for changes in medical education (Anandarajah and Mitchell 2007; Anandarajah et al. 2010; Koenig et al. 2010; Lucchetti, Lucchetti, and Puchalski 2012; Puchalski and Larson 1998; Rasinski et al. 2011) and the creation of

86

standardized instruments for taking history and physicals (for example Anandarajah and

Hight 2001). Much of this change in medicine grows out of calls for more and better

patient-centered care and assumes that physicians can or do attune with the identity and

personhood of the patients they are seeing and respond in kind. In other words, this

assumes that the inclusion of religion/spirituality flows out of the belief disposition of the

patient. There is, however, two additional, plausible alternate explanations for how or

when religion/spirituality would be included in clinical interactions. Inclusion could flow

primarily from the physician's belief disposition and not from the patients. This means

that the beliefs of the patient matter less than the characteristics of the physician they are

interacting with. One final explanation is that religion is either discussed or avoid due to

the larger cultural context of both the physician and patient, with concurrence being

related to greater inclusion. Put simply, community expectations and not solely

physicians' preferences may be determining what gets said in the examination room.

Background

Culture and Clinical Content

Recent years have seen an increased focus on the idea that medical care should

move away from paternalistic medical interactions (Emanuel and Emanuel 1992) towards

care more actively focused on patient inclusion and participation (Armstrong 2014). In

the late 1970's, Engel (1977) sketched out his idea of effective medical care that focused

not only on biological issues, but also saw pertinent psychological and sociological issues

as important for good medical care. While the form and title of this approach to medical

care has been formulated in different ways, the values tied to the clinical actions have

wide support (Kitson et al. 2013). These values can be roughly summed up in three parts:

"1) considering patients' needs, wants, perspective and individual experiences; 2) offering patients opportunities to provide input into and participate in their care; and 3) enhancing partnership and understanding in the patient-physician relationship" (Epstein et al. 2005:1517). Some argue that engendering values such as these is an important part for the education and socialization of physicians (Charon 2001a, 2001b; Engel 1982), but others argue that we must first clear up the overly pragmatic metaphysical underpinning of this viewpoint (Bishop 2008) and others still are skeptical, at least in part, that it is possible to teach values such as these (Dubbin et al. 2013; Mead and Bower 2000).

What does not appear to be in dispute, however, is that treating the patient as a person and not merely a broken machine is important. Research on when and why the relationship between patients and physicians breaks down has primarily focused on racial concordance with the apparent implication that differing values or perspectives either help or hamper clinical interactions. For example, black patients tend to have more frequent negative medical experiences with non-black physicians, especially physicians with implicit but not explicit racial biases (Penner et al. 2010). Stepanikova and Cook (2009) report that minority patients tend to have a more negative view of medical care and are much more likely to not adhere to the physician's recommendations if they sense a bias, which is even present in non-verbal communication (Stepanikova et al. 2012). Stepanikova et al. (2006) show that much of this could be tied to lower levels of action-specific trust in the physician (see also Boulware et al. 2003; Halbert et al. 2006; Jacobs et al. 2006). Patients seeing a physician who is the same race as them tend to be happier with the care that they receive (LaVeist and Nuru-Jeter 2002) even independent of

"patient-centered communication" (Cooper et al. 2003), although this does not always appear to be the case (Lo and Bahar 2013).

The purpose in reviewing some recent work on concordance in the clinic is to show that while much of this work has focused specifically on racial issues, non-concordance between physicians and patients can be problematic in clinical settings and health outcomes. This is important for the present study because many Americans are religious and there is good reason to think that many of them desire religious beliefs to be a part of their medical interactions should the need arise (Bernard et al. 1999; Bushwick and King 1994; Chatters 2000; Koenig et al. 1991; Williams et al. 2011). Dubbin et al. (2013) use habitus and theories of cultural capital to develop their idea of cultural health capital. According to this idea, patients need a certain amount of the right kind of cultural health capital in order to connect with the physician. The physician may be very interested in patient centered care, but if the patient does not have enough of the appropriate capital to connect with the physician, a connection is unlikely to happen. With this in mind, I would expect that conversations with religious content are most likely to happen when a religious patient meets with a religious physician.

While this suggests an interaction effect whereby religious/spiritual conversations are most likely to happen when both the patient and physician are religious, this need not be the case. For example, Lo and Bahar (2013) show that some minorities prefer to see a physician who acknowledges their "lifeworld" or personal identity over a physician who is of the same ethnic background. In the present context, this means that patients with strong religious beliefs would welcome open religious discussion even when their physicians don't necessarily share their specific faith. This suggests that matching

physician and patient cultural backgrounds is less important than a physician who can to effectively communicate and empathize with the patient. This is especially true as Stevenson and Scamler (2005) argue that concordance requires effective communication but that this can be a challenge in modern medical contexts because depersonalized medical systems have come to dominate patients' personal identities within those medical contexts. As Habermas (1987) argued, good communication requires the inclusion or focus on lifeworlds or personal identities despite, or especially when the lifeworlds of those communicating are not shared. The implication is that to effectively interact with a religious patient a physician need not be religious, but they do need to be attentive to who the patient is. If the ability to empathize is present in at least some physicians and somewhat equally geographically distributed, then an interaction effect need not be present. The more religious a county's population, the more frequent religious conversations are to occur within that county.

> *H1: Religious discussions in clinical settings are more likely in more religious counties.*

> *H2: Religious discussions in clinical settings will be most likely when a more religious physician practices in a more religious county.*

Social Structure and Medical Interactions

A third and competing hypothesis, however, is that structural constraints matter more than cultural relationships in clinical interactions. That is, both the physician and the patient have a role to play given the specific form of their interaction, with rules guided by each participant's perceptions of appropriate behavior given that setting. Lo and Bahar (2013) show that patients will, in some cases, suppress their own identity in

order to conform to what they think the physician wants from them. They argue that for clinical interactions, this means the patient will tend to bury their personal identity in favor of dimensions of their self that conform to the "biomedical" model of illness – the primary symptoms they are experiencing. Likewise, fostering more personal connections with patients tends to decrease in physicians-to-be throughout their professional socialization (Newton et al. 2008) as they learn to detach from patients and focus more on objective indicators as a means of dealing with feelings of uncertainty while diagnosing patients (Fox 1957, 1997). Both the patient and the physician are facing structural pressures that have a tendency to suppress personal and "less objective" dimensions of illness.

How a person will act in any given social situation flows from an accumulation and standardization of past experiences (Giddens 1984) that over time build up certain cognitive schemas filling any context with interpretable meaning (Vaisey 2009). This contextualized meaning informs the individual as to what role they ought to be playing at any given time. If a role is akin to a part that an actor plays on a stage (Goffman 1959), then social structure and institutions provide the script the actor is following. Indeed, Berger and Luckmann (1966) think of social roles as internalized institutions. This means that social structures carry with them implicit norms guiding actions associated with their realm of influence, and roles are any given person's perception of the relevant norms for action that fall under the pertinent structure's social context. At its core, a person's identity may best be thought of as embodied and enacted social structures (Lizardo and Collett 2013).

But as Elder-Vass (2008:289) points out, it is not necessarily the individual possession or belief in a set or norms that standardizes the behaviors of individuals associated with some given structure, but the collective support of those norms.[1] This means that the power of social institutions is tied not necessarily to individual beliefs in a given norm, but upon a social tie with clusters of others also associated with and in support of the norm. Individuals who are a part of any given network come to recognize that they face a certain "normative network" (Archer and Elder-Vass 2012:102) whereby negative sanctions are possible if they do not also affirm and act according to group norms. This means that all social structures are not what they are apart from the network and its accompanying relationships with which any given set of norms become somewhat standardized (Archer and Elder-Vass 2012; Elder-Vass 2008). The medical profession has expectations for what it means to be a physician. As physicians go through their professional socialization process, they will learn the actions that comprise the physician role. Medical students are primarily socialized into a biomedical model of illness whereby the strongest emphasis is placed on biological processes and indicators (Hojat et al. 2004, 2009; Newton et al. 2008; Puchalski and Larson 1998), and tend care for patients in accord with this view (Barnes et al. 2000; Cameron et al. 2013; Levinson, Gorawara-Bhat, and Lamb 2000; Porter 1993; Shuman 1999; Thornquist 1994). While the value of caring for persons and not only biological processes is fairly universal (Kitson et al. 2013), the actions implied by this value is not and this dimension of medical socialization and practice is frequently secondary (Pedersen 2010; Thornquist 1994).

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[1] This recognition that social structures are only possible upon the basis of social relationships can also be found in John Levi Martin's book on the topic (2009). In Schwalbe's (1991:291) discussion of social structure and moral development, he defines social structure as "persisting patterns of action and interaction involving large numbers of people."

All people are, however, part of more than one social network. A physician is part of that professional network and its associated norm expectations. But they are also going to be a part of networks outside of this professional one. If identities are internalized roles associated with different social structures' norm-clusters and the social networks at their base, then this also means that people always carry more identities with them than are necessary for their interactions with others (Lizardo and Collett 2013). For the most part, these other networks will likely not inform a physician's professional work because the networks' roles and related norm-clusters are not pertinent to the context and work going on within the clinic. Social actors always have to contextually adjudicate whether or not their various identities are pertinent or appropriate.[2] This is why a patient would be prone to suppressing their identity when interacting with their physician – they are picking up contextual cues regarding medicine's objectivity, shaping their perception of appropriate action given the context. The same process applies to the physician only a much stronger and clearer norm-cluster undergirds their perception of a physician's role and associated actions.

This brings us to a very interesting point. The effect of the institution of medicine on the actions of the patient is likely weaker for the patient than for the physician because the strength of association to the social network supplying the base for medicine's institutional existence is weaker for the patient than for the physician.[3] The physician will have a fairly strong association to the medical profession, and as such, will tend to act according to their perception of what physicians ought to do more consistently.

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[2] This "adjudication" is likely unconscious and the process of socialization.

[3] This is, of course, barring a discussion of additional constraints on patient behavior such as their perception of medicine's authority which also likely impacts their behavior during medical interactions. Starr's (1982) argument for differentiating cultural and social authority in medicine is a good example.

93

While views of illness and medical education are beginning to change, whether it be institutional inertia or a reluctance to shift foundational claims on authority, the dominant model for understanding illness remains biomedical (Bishop 2008; Charon 2001a, 2001b; Engel 1977). This model tends to be reductionistic, treating sick people as biological systems in need of fixing (Engel 1977), often objectifying patients instead of interacting with them as persons (Bishop 2008). The structural constraints experienced by the physician, in the form of internalized institutional norms via network association, will shift according to their perception of what a physician's role is. For this to happen, the physician would need to be tied into additional social institutions or structures that have competing or complementary norm-clusters. As we are all associated with numerous social groups and their associated norm-clusters, our identities coalesce as a sort of matrix with any given specific dimension activated by context. A physician's perceptions of what their role as physician entails depends on their network and structural relationships with its resulting "matrix" of roles and identities.

How much extra-medical structures or institutions influence the physician's perception of their role as a physician will depend upon at least two things. It will first depend upon the strength of that network association. It will also depend on the institution's claim on relevance. The physician may be deeply involved with the arts, for example, but this dimension of the physician's identity likely has very little impact on their actions as a physician apart from possibly providing fodder for conversation with some patients. Being deeply religious, on the other hand, would likely influence the physician's behavior as religion often makes far reaching claims on relevance. The strength of the physician's network ties to the "norm circle" (Archer and Elder-Vass

2012) of religion will influence the degree to which it will shift their perception of other roles in their life, such as being a physician. Thus, their "matrix" of roles and identities will be weighted by perceptions of relevance, weighted by the power of importance each has in their life. This means that a religious network is going to have a much stronger impact on perceptions for someone who is deeply religious than it would for another who attends a religious service once or twice a year, for example. The implications of this cognitive association between religion and the practice of medicine was discussed and demonstrated in previous chapters. For the purposes of this chapter, however, this means that whether or not a physician discusses religious or spiritual topics with patients will not depend on whether or not the patient or patient population is more or less religious, but will depend primarily on the physician's perception of what it means to be a physician. This question of relevance could also be thought of in terms of "deep" and "shallow" schematic implications of different structural ties (Johnson-Hanks et al. 2011). Religion is much more likely than many other structural ties to lead to deep schemas. Physicians are strongly influenced by the largely biomedical norms and expectations of the medical community, but they may also be influenced by the norms and expectations of their religious community. The strength and form that the latter takes will also shift the structural constraints imposed on the physician's clinical interactions.

Martin (2009) notably critiques some past formulations of social structure, such as Parsons', as essentially reducing social structure to the presence or absence of different cultural values for groups of people. Elder-Vass (2008) also highlights the importance avoiding the loss of whole social structures by reducing them to merely the people or values of the people composing the structure. The view of social structure being

95

presented here should not be understood as at base merely cultural because the localized

form of the physician's professional structure (the composition of their close

relationships with other physicians) will likely either restrict or free their actions to some

degree. For example, if there are very few physicians in their practice then the boundary

of the physician role is likely slightly more fuzzy than would be the case in a larger

practice with more expectations to juggle. Similarly, the expectations may be

qualitatively different in an academic setting versus a non-academic setting. This may be

an explanation for the "active" and "passive" engagement discussed in Chapter 4. An

additional example can be found in knowledge and deployment of research based

medicine. Research based medicine is considered the gold standard for informed clinical

intervention, but is also a tool used to decrease struggles with uncertainty (Fox 1997;

Menchik and Meltzer 2010). Recent work, however, has shown that the practice of

research based medicine is structurally constrained by localized relationships (Menchik

and Meltzer 2010). Not only is the practice of looking to research relationally dependent,

but the research physicians know about is the research that those around them know

about, a "problem" exasperated in academic and more prestigious settings. The degree to

which a physician's structural constraints on perceptions of what a physician's role is

have shifted, and whether or not religion has a place will be tied to the form of their local

professional and non-professional relationships and the weighted importance of each.

For the purposes of the present study, however, it is enough to note that the physician's

structural relationships and their resulting views of proper physician behavior will direct

their clinical interactions with little regard for patient-physician cultural concordance.

H3: The physician's propensity to include religious content in their clinical interactions will depend on their own religious beliefs and practices.

Data and Methods

While it is true that data matching patients with physicians would be preferable, it is also plausible that as the percent claiming to be religious increases in any given population so too will the likelihood that any given physician within that area will see a greater number of religious people than will a physician in a low-percent religious location. As such, knowing population rates is not an unacceptable approximation for patient populations in lieu of alternative data. If the beliefs, values and perspectives of a patient population matter, then we should see an effect on a large scale.

The physician data for this study is from the *Religion and Spirituality in Medicine: Physicians' Perspectives* (RSMPP) survey. The RSMPP is a national, self-administered survey of US physicians covering topics such as physician religious beliefs, their interactions with patients and what place religion may have in medical care (Curlin, Lawrence, and Lantos 2007; see Curlin et al. 2006). The sample was drawn from the American Medical Association Physician Masterfile in 2003. Of the 2,000 initially selected respondents, 1,820 were eligible according to the selection criteria with 1144 respondents. There was a final response rate of 63% by AAPOR response rate definition 4 (American Association for Public Opinion Research 2011).

This data was merged with two additional datasets to provide the geographic information used to provide contextual information. Specifically, I used a measure reflecting the percent of the physician's county who are members at a place of worship as found in the 2000 *Religious Congregation and Membership Study* (RCMS). This data as

97

collected by the Association of Statisticians of American Religious Bodies and the Glenmary Research Center has some known sampling problems, so I have used the adjusted percent that has calculated a correction (see Finke and Scheitle 2005). I have also added two measures from the 2000 US Census for county-level controls – the percent with more than a high school education in the county and the county's Gini coefficient. The Gini coefficient reflects the county's inequality and varies from zero if there is perfect equality to one if there is perfect inequality. These were included because it is possible for a physician to avoid talking about anything personal with a patient who is very different from their self. This could be detected on a macro scale if there is either high rates of inequality and/or lower levels of education as the physician would be more likely to differ from their patient population in those contexts.

Analytic Method and Variables Included

All included models are logistic regressions because the endogenous variables are categorical and violate the proportional odds assumption of cumulative logistic models. I first ran the models without the interaction term as implied by *H1*, and then added the interaction term as implied by *H2*. To reduce multicolinearity in the interaction models, both variables used in the interaction were centered at their mean. There are four county-level measures used to approximate whether or not differences in a county's population on a large scale are related to different interactions with physicians within the same county. First, there are two measures that help approximate how likely it is that any given physician treats patients unlike their self.[4] One measure is the percent of the

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[4] For the purposes here, I am assuming that a county's patient population is evenly distributed across the physicians within that county. In other words, the working assumption is that the sampled physician from county X does not have a meaningfully different patient population than physician Y from

county's population with an education greater than a high school degree. The other is the county's Gini coefficient. The coefficient is on a scale from zero, meaning full equality, to one, meaning complete inequality. Again, this is another approximation for the likelihood that the patient is culturally similar to the physician or not. For the religious composition of the physician's county, I have included the adjusted percent retaining a congregational membership (Finke and Scheitle 2005). Additionally it is not terribly uncommon for residents to cross county lines to attend religious services (hence a range of greater than 100 in Table 5.1). As such, using GeoDa 1.4.0, I have also included a measure that is the weighted mean of the focal county's adjacent counties' religious concentration (Anselin 1988; Crowder and South 2008; Morenoff, Sampson, and Raudenbush 2001). Included is the spatial lag term, which allows for the assessment and control for how much the endogenous variable is determined by the religious concentration of neighboring counties (Stroope et al. 2014). A non-random geographic patterning of religious concentration is indeed present in the United States, as indicated by a significant local Moran's I statistic (Anselin 1995, 2005) for contiguous autocorrelation and G statistic (Getis and Ord 1992; Ord and Getis 1995) for pockets of autocorrelation.

The same religious-orientation typology and a measure reflecting whether the physician sees religion and medicine as being compatible from previous chapters are used here primarily as controls. RSMPP Respondents were asked two questions – one about how religious they are and a second about how spiritual they are. Each question had four

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the same county who is not in the sample. It is entirely possible for patients of different classes to sort their self amongst different physicians in any given location, such as using a federally qualified provider, but the selection of each physician into the sample should not be biased and so this working assumption is not untenable.

response categories indicating that they are either very religious/spiritual, moderately religious/spiritual, slightly religious/spiritual or not religious/spiritual at all. The two affirmative and the two negative responses were collapsed and a two by two typology was created, allowing for the system of dummies reflecting "religious and spiritual," "spiritual but not religious," "religious but not spiritual," and "not religious or spiritual" (RAS, SBNR, RBNS and NROS).[5] The measure regarding whether or not the physician sees religiosity or spirituality as impacting the health of their patients is a single measure. The survey asked respondents "how much influence do you think religion/spirituality has on patients' health?" There were five response options that ranged from 'very much' to 'very little to none'.

Two additional religious controls include how often the physician attends religious services and a dichotomous measure reflecting whether they claim a religious affiliation (such as Catholic, Protestant, Jewish, etc.) or not. Demographic controls include dummy measures for whether or not the physician is white, whether or not they are male and a continuous measure for their age. Finally, due to differing degrees of relational longevity and development that a patient may have with their physician, a dichotomous measure for whether or not the physician is a primary care physician or not is included.

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[5] It should be noted that controlling for the physician's religious/spiritual orientation in the same model as the religious percent of their county is potentially problematic because it is possible that physicians within more religious counties are also more religious. The group mean tests shown in Table 5.1, however, shows that the only difference between the mean religious county scores for the religious/spiritual orientations is that SBNR physicians have a lower mean religious area score than RBNS physicians. This indicates that SBNR physicians are less likely to be found in religious counties as compared to RBNS physicians. Another way of putting this is to say that there is not likely to be a worrisome amount of shared variance between physician religious/spiritual orientation and county religiosity.

Six dependent variables are used to show a wide variety of possible interactions with patients in order to better assess whether or not the patient population is a factor in whether or not religious or spiritual issues come up in clinical conversations. All of the following are dichotomous measures, with the first two being a combination of two questions. The first reflects the physician's propensity to share his or her own beliefs with patients and the second is their propensity to pray with their patients. For whether or not they share their beliefs, the survey asked the respondent "when, if ever, is it appropriate for a physician to talk about his or her own religious beliefs or experiences with a patient?" with possible responses being, "never," "only when the patient asks," and "whenever the physician senses it would be appropriate." The second question about sharing beliefs has a lead asking them how they respond when religious/spiritual issues come up with patients. The question used says, "I respectfully share my own religious ideas and experiences" with possible response options ranging from "never" to "always" with "not apply" marked as missing.

For whether or not the physician prays with their patients, the first question asks, "when, if ever, is it appropriate for a physician to pray with a patient" with response options of "never," "only when the patient asks," and "whenever the physician senses it would be appropriate." The second question about praying has the same lead and response options as the second question about sharing above, with the question stating, "I pray with the patient". As the two survey questions used within each dummy measure were not measured on the same scale, all four were first standardized (mean=0, standard deviation=1). Once standardized, I made the lower two quartiles equal to zero (physician does not do it) and the upper two quartiles equal to one (physician does do it). Finally, if

the respondent fell into the negative category for either of the two measures, they were sorted into a final, combined negative category (equal to 0) reflecting that they do not share their beliefs or pray with patients, respectively.

The following endogenous variables have the same lead regarding how they respond when religious/spiritual topics come up with patients with response options ranging from "never" to "always" with the "not apply" responses coded as missing. The dummy measures were split so that each category had roughly 50% - 75% of the respondents. The first is about whether or not they listen to the patient, with the question stating, "I listen carefully and empathetically." The dummy measure compares those who "always" do this (1) compared with all others. Next, respondents were asked whether they "try to change the subject in a tactful way", with the measure reflecting that they at least "sometimes" do this (1) compared with all others. Finally, they were asked whether they "encourage patients in their own religious/spiritual beliefs and practices", with the measure reflecting that they at least "often" do this (1) compared with all others.

The last two measures deal with how often the physician reports that patients bring up issues of religiosity/spirituality and how often they ask about these issues. First, regarding how often patients bring it up, respondents were asked, "in your experience, how often have your patients mentioned religious/spiritual issues like God, prayer, meditation, the Bible, etc." The response options again ranged from "never" to "always", with "not apply" coded as missing. Those who responded that their patients "often" or "always" mentioned these topics were coded as 1. Finally, respondents were asked whether they "ever inquire about patients' religious/spiritual issues". The response

option was yes (1) or no (0), with "does not apply – I don't see patients" coded as missing.

Results

Table 5.1 shows descriptive statistics and the group mean comparisons for the religious/spiritual orientations. From the group mean comparisons we see very few differences between means scores for county religiosity between the different orientations, indicating that physicians with different religious/spiritual orientations are somewhat equally distributed throughout counties and RAS physicians are not congregating within religious counties, for example. Relating more to the present discussion regarding social structural ties and shifting role perceptions, RAS physicians perceive fewer barriers to discussing religion with patients as compared with NROS physicians. Religious physicians (RAS and RBNS) attend religious services more than other physicians, thereby embedding them more within those social structures, although more deeply for RAS physicians. There are no mean differences between the religious/spiritual orientations and working at an academic institution or claiming primary care as a specialty.

Table 5.2 shows the results of the logistic regressions. As the results are highly consistent between the various models, I will highlight trends and interesting points between the models. In support of *H3*, the physician's own religious orientation and religious practices are significant. In every model, thinking that religiosity and spirituality matters for patient health outcomes is positively related to including

Table 5.1

Descriptive Statistics and Group Mean Differences

Variables	Range	Mean/%	Std. Dev.	SBNR vs. RAS	SBNR vs. RBNS	SBNR vs. NROS	RAS vs. RBSN	RAS vs. NROS	RBNS vs. NROS
SBNR	0,1	20	0.40	-	-	-	-	-	-
RBNS	0,1	4	0.20	-	-	-	-	-	-
NROS	0,1	22	0.41	-	-	-	-	-	-
RAS	0,1	52	0.50	-	-	-	-	-	-
Religion Impacts Health	1 - 5	3.68	0.99	-0.47*	0.35	0.80*	0.82*	1.27*	0.45*
None	0,1	10	0.30	0.20*	0.21*	-0.03	0.01	-0.23*	-0.24*
Religious Area	0 - 110	63.10	16.96	-2.00	-7.08*	-2.18	-5.08	-0.18	4.89
Barriers	0 - 5	1.37	1.11	0.07	-0.39	-0.24	-0.46	-0.31*	0.15
White	0,1	79	0.41	0.06	0.04	0.04	-0.03	-0.03	0.00
Male	0,1	74	0.44	-0.07	-0.21*	-0.12*	-0.13	-0.05	0.09
Spiritual Experience	0,1	11	0.32	-0.05	0.02	0.10*	0.07	0.15*	0.07
Attendance	1 - 9	4.97	2.43	-3.13*	-2.29*	0.54*	0.83*	3.67*	2.83*
Work Calling	1 - 4	3.01	0.82	-0.28*	-0.07	0.32*	0.21	0.60*	0.40*
Academic	0,1	32	0.47	-0.03	-0.12	-0.07	-0.10	-0.04	0.06
Faith Based Practice	0,1	12	0.33	-0.00	0.05	0.07	0.05	0.07*	0.02
Resident	0,1	1	0.11	-0.01	-0.01	0.00	-0.01	0.01	0.02
Board Certification	0,1	87	0.34	0.07*	-0.06	0.01	-0.13	-0.06	0.07
Age	28 - 66	50.01	8.34	-0.04	-1.32	-1.20	-1.28	-1.16	0.12
Primary Care	0,1	33	0.47	0.01	-0.02	0.05	-0.03	0.05	0.08
Dependent Variables									
Share beliefs	0,1	55	0.50	-0.26*	-0.02	0.16*	0.23*	0.41*	0.18
Listen	0,1	63	0.48	-0.03	0.02	0.15*	0.05	0.18*	0.13
Change subject	0,1	22	0.41	0.13*	-0.07	-0.14*	-0.20*	-0.27*	-0.07
Encourage patient beliefs	0,1	76	0.43	-0.06	0.02	0.16*	0.08	0.22*	0.14
Pray with patient	0,1	35	0.48	-0.18*	-0.03	0.08	0.15	0.26*	0.11

Note: The n for each variable ranges from 1006 to 1144 and all analysis were weighted and corrected for survey design. Tukey post hoc group mean comparisons; * = $p < .05$

104

religion in the clinical conversation in some form. This includes being negatively related to changing the subject away from religious/spiritual topics. SBNR physicians generally do not differ from RAS physicians here except being less likely to share their own beliefs, which again makes sense as the SBNR religious orientation often eschews universalistic understandings of beliefs. Physicians who are RAS in their orientation are not always significantly different from the other religious orientations, but when there are differences, they are always more inclined to include religion in their clinical encounters. In line with findings from previous chapters, this indicates that the cognitive connections a physician has made between religion and medicine, or lack thereof, are related to their actions within the clinic. For the purposes of the present study, this is an expected result in terms of *H3* because it is an indication that the structural constraints on some physicians in the sample have shifted. As social structure depends on network connections as discussed above, it is further expected that greater rates of congregational involvement will be related to more inclusion. This is what the present models show when attendance is significant.

It was also suggested that the local form a physician's structural connection to the profession of medicine will impact their perception of role performance as well. I found some preliminary indications that this is the case. For example, working in an academic setting is related to what was called active and passive participation in Chapter Four. That is, they are unlikely to share their own beliefs with patients but they are likely to listen to their patients talk about their faith. If the physician works in a faith based practice, then they are unlikely to avoid or change the subject when it comes to religious/spiritual discussions.

Table 5.2
Logistic regresstion of physician interactions with patients and patient population characteristics

	Share own beliefs						Pray with patient					
	M1			M2			M1			M2		
Variables	OR	SE	*B*	OR	SE	*B*	OR	SE	*B*	OR	SE	*B*
Physician Measures												
RBNS[a]	0.672	0.399	-0.019	0.671	0.400	-0.019	1.010	0.375	0.000	0.984	0.377	-0.001
NROS[a]	0.486**	0.253	-0.076	0.486**	0.253	-0.076	1.097	0.272	0.010	1.085	0.273	0.009
SBNR[a]	0.563*	0.233	-0.057	0.563*	0.232	-0.057	0.909	0.243	-0.009	0.903	0.244	-0.010
R/S influences health	1.720***	0.098	0.135	1.720***	0.098	0.135	1.677***	0.099	0.129	1.678***	0.100	0.129
No Religion	0.791	0.291	-0.017	0.792	0.291	-0.017	0.703	0.342	-0.026	0.713	0.343	-0.025
Congregational attendance	1.122**	0.045	0.070	1.122**	0.045	0.070	1.196***	0.045	0.110	1.196***	0.045	0.109
White	0.991	0.193	-0.001	0.991	0.193	-0.001	0.892	0.186	-0.012	0.894	0.186	-0.012
Male	1.172	0.177	0.017	1.172	0.177	0.017	1.020	0.179	0.002	1.021	0.179	0.002
Age	0.988	0.009	-0.025	0.988	0.009	-0.025	0.985	0.010	-0.032	0.985	0.010	-0.032
Primary care	1.010	0.160	0.001	1.010	0.160	0.001	1.037	0.159	0.004	1.039	0.159	0.005
Academic Setting	0.723+	0.172	-0.037	0.723+	0.172	-0.037	0.802	0.177	-0.025	0.800	0.177	-0.025
Faith based practice	0.744	0.217	-0.024	0.744	0.217	-0.024	1.154	0.227	0.012	1.159	0.227	0.012
County Measures												
Religious percent	0.997	0.007	-0.012	0.997	0.007	-0.012	1.010	0.007	0.041	1.010	0.007	0.043
R/S influence * Relig. %	-	-	-	1.000	0.005	-0.001	-	-	-	0.997	0.005	-0.051
Religious Spatial Lag	1.001	0.008	0.004	1.001	0.008	0.004	0.990	0.008	-0.037	0.990	0.008	-0.037
Gini	19.559	3.095	0.022	19.559	3.095	0.022	5.975	2.969	0.013	6.091	2.972	0.013
Greater than HS	0.987+	0.008	-0.034	0.987+	0.008	-0.034	0.986	0.009	-0.034	0.987	0.009	-0.034
R^2	0.167			0.167			0.1282			0.1286		
N				1085						1085		

Source: Religion and Spirituality in Medcine: Physicians' Perspectives, 2000 US Census, 2000 Religious Congregation and Membership Study
$p < .001$ ***; $p < .01$ **; $p < .05$ *; $p < .1$ + (two-tailed test); a = RAS is comparison category

Table 5.2 *cont.*

Logistic regresstion of physician interactions with patients and patient population characteristics

Variables	Listen to patient						Change subject					
	M1			M2			M1			M2		
	OR	SE	*B*	OR	SE	*B*	OR	SE	*B*	OR	SE	*B*
Physician Measures												
RBNS[a]	0.942	0.413	-0.003	0.945	0.414	-0.003	2.813*	0.412	0.049	2.658*	0.418	0.047
NROS[a]	0.594*	0.248	-0.054	0.595*	0.248	-0.054	1.666+	0.282	0.053	1.616+	0.283	0.049
SBNR[a]	0.976	0.229	-0.002	0.978	0.228	-0.002	1.568	0.276	0.045	1.523	0.277	0.042
R/S influences health	1.313**	0.090	0.068	1.313**	0.090	0.068	0.565***	0.106	-0.142	0.560***	0.106	-0.144
No Religion	0.856	0.272	-0.011	0.854	0.273	-0.012	1.281	0.304	0.018	1.336	0.306	0.021
Congregational attendance	0.982	0.043	-0.011	0.981	0.043	-0.011	0.919	0.052	-0.051	0.918	0.052	-0.052
White	1.278	0.182	0.025	1.277	0.182	0.025	0.459***	0.212	-0.079	0.459***	0.213	-0.079
Male	0.789	0.179	-0.025	0.789	0.179	-0.025	0.696+	0.202	-0.039	0.692+	0.203	-0.039
Age	0.980*	0.009	-0.043	0.980*	0.009	-0.043	1.007	0.011	0.015	1.008	0.011	0.016
Primary care	0.942	0.157	-0.007	0.941	0.157	-0.007	0.714+	0.189	-0.041	0.721+	0.190	-0.040
Academic Setting	1.402*	0.170	0.038	1.403*	0.170	0.038	1.155	0.191	0.016	1.149	0.193	0.016
Faith based practice	0.988	0.236	-0.001	0.987	0.236	-0.001	1.825*	0.277	0.049	1.855*	0.281	0.050
County Measures												
Religious percent	0.995	0.007	-0.020	0.995	0.007	-0.020	1.016+	0.008	0.064	1.013	0.009	0.053
R/S influence * Relig. %	-	-	-	1.000	0.005	0.007	-	-	-	0.991+	0.006	-0.141
Religious Spatial Lag	1.000	0.007	0.002	1.000	0.007	0.002	0.997	0.009	-0.009	0.997	0.010	-0.011
Gini	0.912	2.958	-0.001	0.912	2.960	-0.001	0.110	3.358	-0.016	0.110	3.396	-0.016
Greater than HS	0.976**	0.008	-0.061	0.976**	0.008	-0.061	0.996	0.009	-0.011	0.996	0.009	-0.010
R^2	0.059			0.059			0.151			0.155		
N		1041						1043				

Source: Religion and Spirituality in Medcine: Physicians' Perspectives, 2000 US Census, 2000 Religious Congregation and Membership Study

$p < .001$ ***; $p < .01$ **; $p < .05$ *; $p < .1$ + (two-tailed test); a = RAS is comparison category

Table 5.2 *cont.*

Logistic regresstion of physician interactions with patients and patient population characteristics

	Encourage patient beliefs						Ask about patients' R/S					
	M1			M2			M1			M2		
Variables	OR	SE	*B*	OR	SE	*B*	OR	SE	*B*	OR	SE	*B*
Physician Measures												
RBNS[a]	0.754	0.435	-0.014	0.789	0.438	-0.011	0.457+	0.408	-0.038	0.462+	0.409	-0.038
NROS[a]	0.421**	0.268	-0.089	0.428**	0.268	-0.087	0.604*	0.253	-0.052	0.607*	0.254	-0.052
SBNR[a]	0.761	0.261	-0.027	0.774	0.262	-0.025	1.251	0.236	0.022	1.255	0.237	0.023
R/S influences health	1.277**	0.094	0.061	1.282**	0.095	0.062	1.535***	0.088	0.107	1.537***	0.088	0.107
No Religion	0.563*	0.285	-0.042	0.544*	0.287	-0.045	1.173	0.281	0.012	1.166	0.282	0.011
Congregational attendance	0.979	0.050	-0.013	0.979	0.049	-0.013	1.134**	0.044	0.077	1.134**	0.044	0.077
White	1.147	0.202	0.014	1.144	0.202	0.014	1.469*	0.190	0.039	1.469*	0.190	0.039
Male	1.165	0.192	0.016	1.166	0.193	0.016	0.739+	0.174	-0.032	0.739+	0.174	-0.032
Age	1.011	0.010	0.024	1.011	0.010	0.024	1.016+	0.009	0.032	1.016+	0.009	0.032
Primary care	1.078	0.177	0.009	1.073	0.177	0.009	1.505**	0.154	0.050	1.504**	0.154	0.050
Academic Setting	1.164	0.185	0.017	1.175	0.187	0.018	0.963	0.167	-0.004	0.965	0.167	-0.004
Faith based practice	1.010	0.263	0.001	0.998	0.265	0.000	0.856	0.220	-0.013	0.854	0.221	-0.013
County Measures												
Religious percent	0.995	0.007	-0.022	0.996	0.007	-0.018	0.994	0.007	-0.026	0.994	0.007	-0.026
R/S influence * Relig. %	-	-	-	1.006	0.005	0.094	-	-	-	1.001	0.005	0.022
Religious Spatial Lag	0.995	0.008	-0.019	0.995	0.008	-0.018	1.002	0.007	0.005	1.002	0.007	0.005
Gini	0.346	3.276	-0.008	0.348	3.279	-0.008	0.517	2.813	-0.005	0.507	2.815	-0.005
Greater than HS	1.008	0.008	0.021	1.008	0.008	0.021	0.992	0.007	-0.022	0.991	0.007	-0.022
R^2	0.065			0.066			0.120			0.120		
N	1031						1048					

Source: Religion and Spirituality in Medcine: Physicians' Perspectives, 2000 US Census, 2000 Religious Congregation and Membership Study

$p < .001$ ***; $p < .01$ **; $p < .05$ *; $p < .1$ + (two-tailed test); a = RAS is comparison category

Of more interest here, however, is the effect that more religious counties have on the inclusion of religion in medical interactions for physicians within those counties. The religious concentration of the county is not significant in any of the models except for one: changing the subject. In other words, more religious patient populations within a county is not related to more religious content in conversations but it is related to the *avoidance* of that content in clinical conversations. This is direct opposition with the expectations of *H1* and *H2*, although compatible with *H3*. It may be possible, in part, that there is just a lack of cultural concurrence between the physician and the patient and they just avoid all topics not directly biomedical. This is unlikely, however, because in the two models where greater education rates are significant or marginally significant, there is still the avoidance of religious topics. On the other hand, this could be a reflection of the correlation between greater rates of education and lower rates of religiosity. This explanation does not help with the finding that physicians in more educated locations listen patiently to patients talk about religion when it comes up as it would imply it just comes up less often to start with.

To also check if there was indeed a religious concurrence effect going on beneath the surface, as indicated by *H2*, Model 2 for all dependents shows the interaction between the physician's beliefs regarding the mix of medicine and religious beliefs and the religious concentration of the county. None of these interactions was significant, except again in the case of changing the subject. The interaction indicates that within religious counties it is primarily those physicians who do not think religion and spirituality are pertinent for patient health that change the subject. So while this is not an indication that

physicians who do think religion/spirituality matter for patient health *include* religion more in religious counties, they at least are not actively *avoiding* it.

I have added a post hoc bivariate analysis to see what physician characteristics county religiosity is related to, if anything, so as to getter a better sense of these contextual effects or lack thereof. Figure 5.1 shows significant Pearson's correlations between physician characteristics and county percent religious affiliation, with the more structural relationships starting at the top of the y-axis. More religious counties are associated with physicians who care primarily for uninsured patient populations, work in academic settings or in a faith based practice. On one hand it makes sense that physicians in more religious counties are more likely to work in a faith based practice, but on the other hand it is interesting that this apparently does not translate to more religious or spiritual conversations with patients as discussed above.

Looking to the physicians' self-reported interactions further down the y-axis of Figure 5.1, we see that those physicians in more religious counties report that their patients talk about religion more than other locations. But physicians in these more religious locations report that they tend to change the subject more often when these topics come up. This could be because it becomes such a common part of their conversations with patients they come to see it as unproductive or frequently off topic. Beyond the fact that more religious counties are correlated with greater frequency of the physician changing the subject, all of the remaining religious/spiritual interactions with patients reported by the respondents are negatively related with more religious counties. Specifically, physicians in more religious counties are less likely to think it is acceptable to pray with patients, ask them about religious beliefs when the patient gets a bad
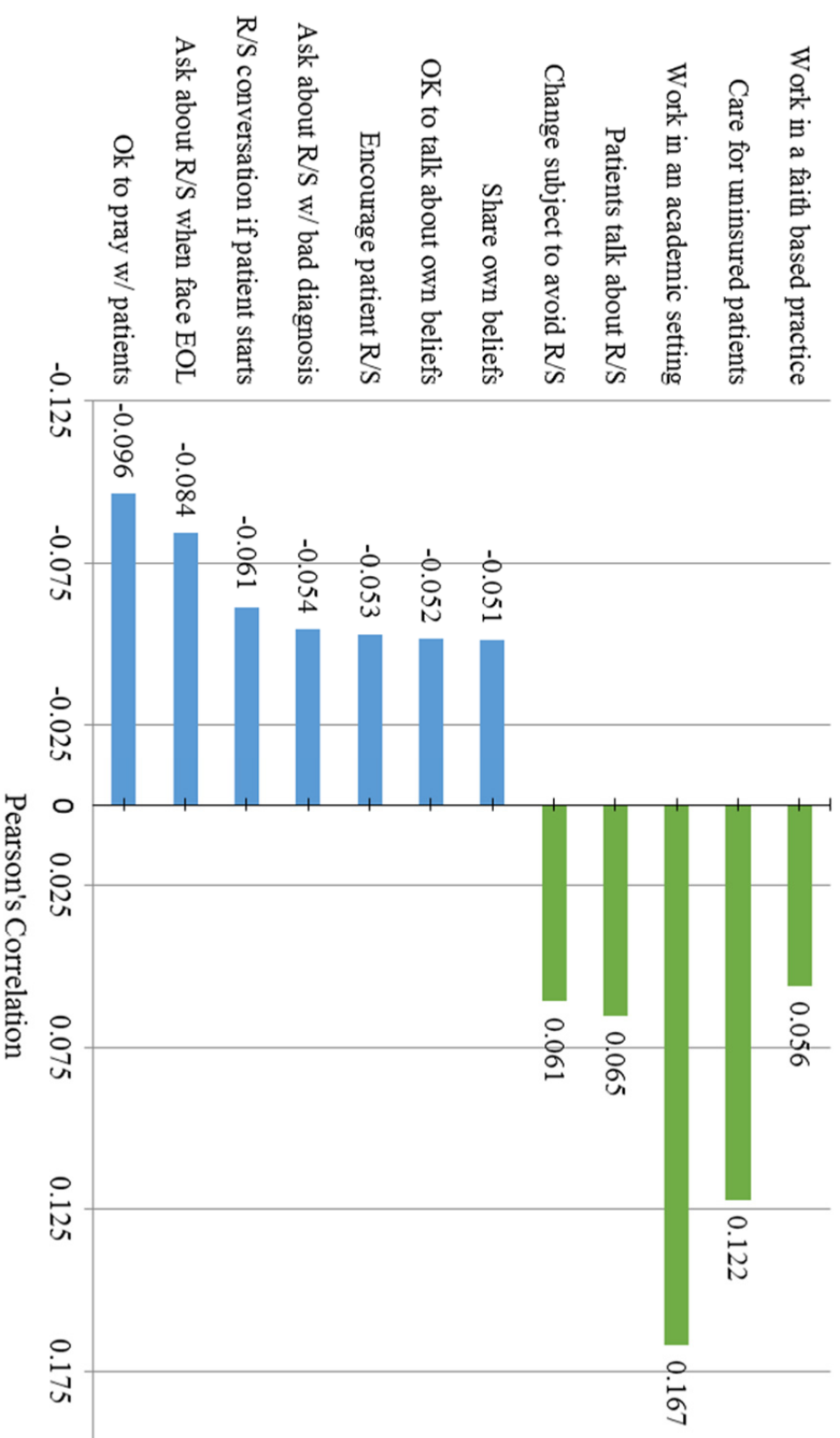
Figure 5.1: *Physician characteristics correlated with the religiosity of the physicin's county.*

diagnosis or when they face end of life situations, think it is appropriate to talk about their own religious beliefs even if the patient starts the conversation, or encourage patients in their religious/spiritual beliefs.

Discussion and Conclusion

Two competing hypotheses were proposed for whether or not the religiosity of patient populations would be related to the inclusion of religious/spiritual topics in clinical conversations. The first proposed that counties with more religious populations would be related to greater frequency of religious/spiritual conversations as reported by physicians. The competing hypothesis proposed that structural constraints on the physician's role performance would outweigh the county context/cultural dispositions of that physician's patient population. These structural constraints on the physician and their perception of a physician's role shift according to the strength and relevance of their network associations, so that even though the county's religious concentration does not matter the physician's does. Support was found for the second hypothesis: physician characteristics are, at least in this case, more important than the characteristics of the geographic locations in which they work. The beliefs of the patient population did not influence clinical conversations, but the beliefs of the physician did which was the expectation from *H3*.

It is not my intention here to disregard prior research showing that concordance is important and impacts physician interactions. Rather, my intention is to propose that this social relationship is more complicated than maybe has been presented in the past. In other words, while concordance may happen in some cases, this may not be the primary mode of interaction for the physician and the patient. The primary mode of interaction

112

between the two may actually be dominated by or driven by the structural relationship that exists between the two; their perception of what role they ought to be playing. There is a fairly complex matrix of structural relationships and constraints that strongly influence interactions between physicians and patients. The biomedical model of modern healthcare implies roles for both the patient and the physician, and both of them largely follow those rules as opposed to their own. The physician has taken on a role defined by their profession, but their perception of that role will shift according to external structural relationships perceived as relevant and dominant enough to induce such a shift. What defines these extra-professional structural ties as strong enough and relevant, however, is something further work can and should define.

These findings echo related discussions about how social actors come to see their role and its associated actions as good or best as compared to other potential forms of that role; there is more than one way to be a "good" doctor but only one form is enacted. It was argued here that the physician's perception of what is appropriate in the clinic, ideas for what it means to be a good physician, have strong structural relationships that influence what they see as the role of a physician. Hitlin and Vaisey (2013) point out that much work within the sociology of morality shows social structures to be linked to perceptions of what one should do in a given situation (see also Rawls 1987, 2010; Schwalbe 1991), and it would be fruitful for further work to focus on how the mix or even conflict of multiple structural ties impact a physician's perception of what they should do in a given context. As shown here, medicine is one area that would greatly benefit from this research. Indeed, elsewhere Curlin (2008) has referred to physicians as "practical philosophers" because of the often clear link between their personal moral

113

views and the implication these have on their professional work. Lawrence and Curlin (2007) even argue that religious and non-religious physicians have different ideas of what a "conscience" is and how one's conscience matters not only for their own medical work, but for how they think other physician's should act. In this sense, there is always a moral dimension present in the work a physician does, whether religious or not.

Power imbalances are almost always present when considering patient-physician interactions (Starr 1982), which makes sense to some degree as patients by definition are seeking something they do not have on their own – professional help. This, however, also has implications for clinical interactions and what it means to be a "good" physician. Schwalbe (1991) argues that perceptions of what one should do in any given situation, how to be "moral", are always related to one's structural and thereby network associations. Building on Mead's ideas of the self and the necessity for taking on the perception of others in order to be moral, whether specific or generalized others, he argues that any given person's ability to successfully do so will be shaped by their social structural location. This is important in terms of power for two reasons. First, power imbalances can lead patients to marginalize their own expectations of medical interactions. Patients may think that physicians should care for them in a certain way, but power imbalances can disallow this because "…a relative lack of [power] in a situation where values and interests are in conflict is likely to undermine an individual's sense of being able to put the results of any moral thought into action" (Schwalbe 1991:295). This undermined sense of being able to influence interactions with physicians will lead to a patient who acts how they think their physician wants them to act. This means that while cultural health capital may help patients and physicians connect (Dubbin et al. 2013), it

may be helpful to more explicitly take into account the impact of power apart from cultural differences. Indeed, this point may help explain why racial concordance is not enough in some situations (Lo and Bahar 2013).

One may object by saying that physicians very often do value their patients as persons and apply the value set described as patient-centered care in their care for patients. This brings me to the second reason that power imbalances and their implications for the "good" physician are important in clinical settings. Power imbalances undermine the physician's ability to take on patients' perspectives because their interests do not require the amount of work necessary to do so (Schwalbe 1991:295). Patients need to work to discern what the physician is communicating to them because their health requires it, but the perspective-taking burden is much lower for the physician. As such, the physician may not have conflicting values, but various pressures of clinical settings tend to perpetuate the habitual enaction of biomedical medicine that dominates the professional medical structure and socialization. This is why the discussion of how one's structural ties shift perceptions of what it means to be a physician is important. That shift and associated cognitive connections will lead to different clinical habits and perceptions of what a physician should do, helping explain why physicians reporting greater time pressures are still more likely to include religion in clinical interactions (Curlin et al. 2006). Power imbalances decreases even the physician's ability to notice the effect of the imbalances in his or her work (Schwalbe 1991), but as context forces decreased adherence to habitual actions, as may be the case with increased medical severity, personal connections and perspective taking increases (Callero 1991). This may be why severity is consistently related to inclusion of religion –

taking on the perspective of the patient and their needs increases in that context (Bernard et al. 1999; Bushwick and King 1994; Koenig et al. 1991; Ramondetta et al. 2011; Williams et al. 2011).

One potential avenue for further research would be to see how these structural relationships influence role perception over time. Specifically, how would the formation or dissolution of different network associations influence a physician's perception of professional role performance? Once a physician has made a connection between beliefs and their work as a physician it is possible that sustained interaction with the religious network is no longer necessary to support that role perception. They may no longer feel the weight of a normative community thereby decreasing the frequency of inclusion to some degree, but the perceived relevance may not change, buffering the expected corresponding decrease in inclusion.

It was proposed in passing that the specific structural form of a physician's relationship with other physicians would also matter. That is, are they in a practice on their own or are they in a large group with frequent contact with others? Do they work in a faith based practice or in an academic center? Do they only see other physicians while at work or do they also frequently attend conferences or interact "virtually" via an active research and publication agenda? Any or all of these additional structural forms could have different implications for the formation and change of the physician's perception of what it means to be a physician. In the present models, at least two different forms of the physician's local structural connections to the profession of medicine are related to their clinical interactions. In different ways working in either an academic setting or in a faith based setting influence the conversations that physicians have with their patients.

116

One limitation of this study is that I was not able to actually connect specific patients with their corresponding physician. This would have been ideal so as to more accurately portray the relationship between the patients' beliefs and their interactions with physicians. As discussed above, however, the present data are not a bad approximation for large scale, population-based effects, but it would be better have individual-level measures.

CHAPTER SIX

Conclusion

This dissertation focused on why some physicians are more willing to talk about religious or spiritual topics with their patients than others. Prior research has shown that it is generally the more religious physicians who are more likely to discuss these topics with their patients, but the focus here was on why this may be the case. I proposed that some physicians will be more likely to include these topics because they have formed the cognitive schemas within their own mind that link religion and medicine, making the inclusion of these topics more apparently fitting than may otherwise have been the case. In doing so, I built upon prior work showing that people's religious/spiritual orientation has important implications for how they make sense of experiences and reality.

Religious beliefs are important for many individuals within the United States, and this remains true in clinical settings. This is because illness can have deep implications for the sick person's identity, and these implications can be more significant the more central religious beliefs are to their identity and the beliefs are not a part of their medical care. Parsons (1951a, 1975) posited that sick individuals take on a different identity than their non-sick self, as two people could both have a cold, for example, but only one of the two decides they need to stay home from work and alter what is "normal" in their life. The one who alters their life, who accepts they have changed at least at that point in time, has taken on what Parsons referred to as the "sick role," a hopefully temporary shift in their identity and perception of roles. One of the jobs of the physician is to help sick

persons make sense of their disparate and potentially confusing experiences with being

ill, bringing them back to a state or normalcy (Berg 1992; Halpern 2001; Starr 1982);

back to being their self. The question is, however, what this means if their normal self

brings meaning and continuity to life through religious beliefs but these beliefs are not a

part of their reconstructed state of normal. Ironically, in trying to be a good physician,

the physician may overlook the patient.

In Chapter 5, I found that structural constraints imposed upon the physician,

influencing their perception of what they ought to be doing in the clinical setting, are

potentially more important than the characteristics of the patient population the physician

is caring for. Specifically, the percent of the population in the physician's area who claim

a religious affiliation is not related to how frequently these conversations take place in the

clinic. Clearly professional socialization is important for physicians while in their

professional context, but the physician's perception of their role as a doctor will shift

according to their association with different social structures and the networks they are

built upon.

Implications and Future Research

Trust

It was implied in earlier chapters that a physician's openness to including

religious or spiritual topics in their conversations with patients could serve as fostering a

connection with those patients. In fact, religious content may be uniquely situated to help

some patients connect with and trust their physician, which in turn is related more

concretely to health outcomes. Specifically, Stepanikova et al. (2006) point out that trust

is necessary to sustain functional relationships between physicians and their patients as

well as serving to foster problem solving and cooperation. To this end, they end by

saying the next step in research focusing on racial disparities in medicine is to identify

concrete actions or behaviors that can foster trust within minority populations. Inclusion

of beliefs and values could be one such behavior because some minority populations,

such as African Americans, stand out in their increased religiosity as compared to other

Americans (Putnam et al. 2010). Inclusion of religious or spiritual conversations are

unique in that beliefs are often highly personal, and focusing on specifically personal

dimensions of patients is potentially more important than something like racial or ethnic

concordance (Lo and Bahar 2013).

Physicians are interested in fostering trusting patient relationships because it has a

concrete impact on their patients' health outcomes. Past research has shown that patients

are more likely to both accept what their doctor says and the treatment prescribed when

they have higher levels of trust in their physician (Altice, Mostashari, and Friedland

2001; Thom et al. 2002), but that they are also more likely to stick with the planned

treatment (Ommen et al. 2011; Piette et al. 2005; Schneider et al. 2004; Trachtenberg,

Dugan, and Hall 2005). Often the correlates of greater trust in a physician are greater

amounts of time spent with the patient (Balkrishnan et al. 2003; Fiscella et al. 2004), an

expressed interest in the patient's experience of the illness (Fiscella et al. 2004; Ommen

et al. 2008, 2011) or with better physician-patient communication (Ommen et al. 2011).

Because trust is related to better and more personal communication with patients, future

work should focus on how genuine personal conversations with patients are related to

levels of trust and whether this trust is, in turn, related to health outcomes. A potential

target population for this work could be those who have experienced heart failure because

being readmitted to the hospital with complications post-discharge has been shown to be sensitive to adherence with prescribed treatment, which is sensitive to levels of trust in one's physician (Burnier 2006; DiMatteo et al. 2002; Leventhal et al. 2005; McDermott, Schmitt, and Wallner 1997; Michalsen, Konig, and Thimme 1998; Rich et al. 1995).

Structurally Embedded Routines

Chapter Five focused on how a physician's perception of their role as a physician is tied to their being a part of different social structures and their associated "norm circles" (Archer and Elder-Vass 2012). I suggested that the localized form of the physician's ties to the profession of medicine would be an additional factor in shaping their perception of what physicians ought to do as physicians. This is a point that echoes earlier work on the creation of medical diagnoses by Berg (1992). Berg argued that one way a physician deals with uncertainty in clinical situations is to form certain clinical routines that they consistently follow, and these routines can solidify within organizations so that some set of automatic clinical routines are what physicians in a specific medical organizational settings do. This fits nicely with the cognitive schema theoretical framework used in much of the present work with the added structural dimension of these schemas coming, over time, to be shared throughout any given organization.

In other words, it is possible that the shift in perceived role performance as discussed here could also be possible on a larger scale within organizations. Since role perceptions are structurally tied, based in network associations, it is possible for a physician to shift their perception of role performance not because of an association with a religious network but for their local professional network to shift and for this to then influence their perception of their role as well. A similar point was made by Schwalbe

(1991:293) in his discussion of how self-perceptions, such as being honest, are dependent on the culture or subcultures with which one is associated. A physician's self-perception as a good physician will depend on how their local structure defines the "good physician". In line with this, it would be fruitful for future research to focus on how different professional structural ties influence perceptions of the good physician. Are they a member of some association, such as the Christian Medical and Dental Association? Are they focused on bench research and publication, clinical research, in a sole practice or some other setting? Mapping out how some of these structural ties influence perceptions of the role of a physician would be very interesting.

Role of Religion in Life

There is an interesting implication for the meaning and place of religion in a believer's life more generally. The propensity to include religious or spiritual topics in clinical conversations increases quite a bit as the severity of the medical issue increases, especially in end of life care. The question that this brings up, however, is what does this mean for our understanding of the place religious beliefs hold in daily life? Is religion pertinent for life and not merely death? It is possible that as the acuity of the medial problem increases, the need to make sense of the situation increases and religious beliefs are one common way that people attach meaning to their world and experiences. This is often the case for parents when their children become ill (Barnes et al. 2000). It is possible that in more severe cases the physician is able to sense this. Callero (1991:46) suggests that we only break out of our structural and habitually driven roles and think about our actions in more problematic situations. This would indicate that religious beliefs are important for life just as much as they are for death, but that they function in a

122

more sub-cognitive habitual fashion unless the context becomes overly problematic. How, why and when are religious beliefs brought to the fore front of our mind?

A related line of reasoning can be found in the theories of sensemaking (Maitlis and Sonenshein 2010; Weick 1988, 1993). Here the idea is that our expectations dominate our experiences so strongly that we are unable to take notice of deviations from our expectations all the way up to a breaking point where we are forced to discard expectations and deal with reality as it is. The same thing could happen clinically as interactions with patients become highly habitual, but as severity and acuity increases, the emotions and existential struggles become too much to treat habitually and must be dealt with more directly. Meaning must be reconstructed and religious beliefs are one common way to create and maintain meaning (Wuthnow 1987). The research question is how does habit and broken expectations interact with a physician's attempt to help patients make sense of their experiences with illness? When and why does a physician feel the need to assist patients in this necessary experience of coping with illness? Are some physicians better emotionally equipped to do so and why is this the case?

Religion and Medicine: Important differences

In our daily lives we have an assumption about religion's connection with our different shared social spaces. We tend to think of some social spaces as religious while some others are thought to be devoid of religion, and we act accordingly (Smith et al. 2013). Medicine is one of those social spaces where we tend to apply this false dichotomy, and this can introduce additional and unnecessary struggles for some. On the other hand, however, there is more religion and religious beliefs present in medicine than we may think. For this reason, medicine would be a good test case for the dispersion of

religious beliefs through society or even a good extension of recent lived religion theories (Ammerman 2007).

Relatedly, medicine tends to have a different ethnic and cultural composition as compared to the general population in the United States. There are more of some minority populations in the medical field, and as such, there is also more religious diversity than found in the wider population (see Chapter 2). This poses some interesting research questions building on the present work. If there are more minority religious affiliations within the medical field then this means it may not be uncommon for a non-Christian physician to interact with a Christian patient. Is it harder for the physician to include religious or spiritual content in the clinical conversations, or is it easier for them because they are used to holding different views and so the awkwardness that may be present for some others is not as strongly present for them? On the other hand, while inclusion of these topics may be beneficial for the patient, it may be perceived as harmful by the physician for their self. Inclusion may ironically reconstruct meaning for the patient while concurrently deconstructing meaning for the physician. Indeed, Cadge (2012) tells the story of one hospital employee who was frustrated with patients and patient families' requests to pray with them because this was their place of employment and they ought to have some rights as well.

Conclusion

This work has demonstrated that a physicians' religious beliefs and values at times interact with their perceptions of their work as a physician, and that this can lead to different interactions with their patients. It further showed that there are many interesting structural constraints on their actions within the clinic. Up to this point, much research

regarding religion and medicine has focused primarily on different health outcomes as they are related to religious beliefs and practices, but the present work shows that a second fruitful avenue for this work is to focus more explicitly on religion and more institutional perspectives of medicine. How does religion influence medical organizations, organizational routines, physician actions and interactions with patients and even medical decision making. Going forward it would be beneficial to better understand how physicians understand when and how religious topics ought to be brought up and whether there are times when this should not happen.

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131

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