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Influence of Physicians' Beliefs on Propensity to Include Religion/Spirituality in Patient Interactions

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ABSTRACT

This study examines physicians' beliefs, their perceptions of whether religion impacts health outcomes, and their propensity to discuss religion/spirituality with patients. It is not uncommon for patients to want religious/spiritual conversations, but the occurrence is infrequent. This study adds to knowledge regarding which physicians include these topics. Using a nationally-representative sample of physicians and a mediated bi-factor structural equation model, the author finds that 'religious and spiritual' physicians connect religion and patient health more than other religious/spiritual orientations. As a result 'religious and spiritual' physicians include religion/spirituality most often (indirect path). After this variation is accounted for, 'spiritual but not religious' physicians still include this content but the 'religious but not spiritual' and 'neither religious nor spiritual' physicians tend to avoid talking about religiosity/spirituality with patients.

Author Keywords: *Patient interactions; physician beliefs; role perceptions*

Tables: 2

Figures: 1

Influence of Physicians' Beliefs on Propensity to Include Religion/Spirituality in Patient Interactions

Introduction

Medicine is one of the most powerful and authoritative professions in the United States (Starr 1982), with its authority and legitimacy linked to our cultural faith in science (Light 2004). An associated mechanistic view of the body, biological processes, and illness is strongly in evidence in the practice of medicine today (Cadge and Hammonds 2012; Cassell 2005). As such, increased depersonalized views of the patient are often a latent outcome of the physician's professional socialization (Hafferty 1988; Halpern 2001; Lief and Fox 1963). While an emphasis on patient-centered care is growing (Kitson et al. 2013), inclusion of patient religiosity/spirituality has lagged behind (Balboni and Peteet 2017).

Many in the United States are religious (over 80%¹). Sociology has long focused on religion's ability to bring meaning and coherence to one's life (Weber 1993), and this is a focal area within the overlap of medicine and religion (Curlin, Roach, et al. 2005; Park 2007). Recent reviews of research on patients and their desire for religion to be a dimension of medical care highlights the fact that this is not uncommon (Best, Butow, and Olver 2015a). Inclusion can help patients regain a sense of normalcy and health (Koenig 2004; Mueller, Plevak, and Rummins 2001; Padela and Curlin 2013), which could in part be because the religious dimension of many patients is a key piece of their self (Shuman and Meador 2003). This carries implications for patient-centered care and creating a shared sense of meaning within the medical interaction (Epstein et al. 2005; MacIntyre 1977).

¹ Smith and Buster (2015) place U.S. religious affiliation at 82% with 9% of the population claiming either atheism or agnosticism. 88.4% believe in God or a higher power (2007 Baylor Religion Survey). Author's calculations via TheARDA.com.

The desire for religious/spiritual conversations with physicians often depends on the situation (Balboni et al. 2007; Bernard, Quill, and Tulsky 1999; Best, Butow, and Olver 2013; Ellis et al. 2013; King and Bushwick 1994; MacLean et al. 2003; Williams et al. 2011). The struggle, however, is that inclusion is infrequent (Best, Butow, and Olver 2016b; Koenig 2004). A gap in the literature exists in understanding this potentially unmet dimension of patient care. While Franzen (2016) shows various physician-characteristics that are connected with different kinds of religious/spiritual inclusion, we need a better sense of inclusion frequency. This study attempts to fill this gap. Specifically, I argue that physicians' religious/spiritual orientation influences both perceived connections between religion and health outcomes as well as inclusion frequency.

Background

All patients have a sense of behavioral expectations when visiting their physician. Physicians also have expectations of patients, but also their self. These behavioral expectations are the result of past experiences or exposures and people unconsciously assume these expectations are shared by others in an interaction, and interactions tend to be more successful and smooth to the extent that they are shared (Giddens 1984).

The medical interaction is different from other limited interactions because it addresses highly personal information. Physicians ask questions seeking information leading to a diagnosis and the patient will offer information they think is helpful. But how do physicians know what information is relevant? On the one hand, they have been trained to look for indicators of different problems and know what information is necessary – a kind of mental decision tree. But on the other hand, what if they miss something? What if there is something

relevant for some patients but not others, or if something is potentially relevant to all patients but physicians are not trained to ask the questions?

It is possible that patients could attempt to direct physicians towards topics that they see as relevant and are of importance to them. After all, patient-centeredness 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). But the relevance of the patient’s contributions could be rejected and actively avoided when it is incongruent with the physician’s understanding of clinical relevance (Dubbin, Chang, and Shim 2013).

Patient religiosity/spirituality may be one such area. For example, a notable minority of hospitalized patients (30%) had spiritual struggles directly tied to hospitalization while 80% wanted a spiritual interaction with their physician (Ellis et al. 2013). McCord et al. (2004) show that 83% of family practice patients wanted physicians to ask about spiritual beliefs to better understand their life, encourage realistic hope, give fitting medical advice, and shift treatments if necessary. Patients may not want these conversations for the purpose of spiritual guidance but so physicians can contextualize discussions about fears (Best et al. 2013). Inclusion, as highlighted above, does not always happen and some physicians will be more likely to think religion is relevant for patient recovery and medical practice than others (Berg et al. 2013; Seccareccia and Brown 2009). Physicians may be aware, at least on some level, of this gap between what patients want and what they do. In a national sample, only about 1% of physicians say they spend too much time on religiosity/spirituality, with 38% saying they spend too little time with it (Curlin et al. 2006).

The challenge, however, is that patients and physicians make sense of illnesses differently. Patients tend to make sense of their illness in terms of their everyday life and experiences. Physicians tend to use professional templates or habits, thinking of patients' illnesses in terms of clinical diagnoses, which is a process very different from patient experiences (Toombs 1987). As a result, while the patient seeks out and is in need of a professional to help make sense of their illness (Halpern 2001), patients and physicians may be prone to communication struggles because they are talking about qualitatively different "realities."

Socialization of Physicians and Perceptions of Religious Relevance

The profession of medicine has certain values that are held in balance with, if not trump, a physician's personal values. Medicine's rise and development as a social institution emphasized a scientific orientation, which has had the tendency to decrease focus on patient spirituality (Numbers and Sawyer 1982; Starr 1982). This continues today as physicians often can avoid religion/spirituality in clinical settings, focusing on physical systems, prioritizing emotional detachment to aid critical thinking (Balboni and Peteet 2017; Barnes et al. 2000; Waitzkin 1993). This detachment, in turn, comes to be the default emotional norm in professional socialization (Hafferty 1988; Halpern 2001; Lief and Fox 1963) that may inadvertently see patients as illnesses to be fixed instead of persons needing care (Marcum 2017; Toombs 1990).

Inclusion of religiosity/spirituality requires a focus on the person of the patient as opposed to detachment. Post et al. (2000:579) argue that, "the beneficent physician who is committed to the patient's best interests must consider how to support patient spirituality." 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. (2000:901) 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.” So, in addition to the professional tendency towards detachment, physicians have their own mental schemas and cultural backgrounds that alter care provision (Mead and Bower 2000). These varied backgrounds may or may not include religion, and how much a physician's personal beliefs and values temper this tendency to overlook these personal dimensions of patients is still unknown. However, a religious physician who has more deeply integrated their beliefs and profession would be most likely see how the one (religion) is relevant for the other (medical care) (Franzen 2016; Luckhaupt et al. 2005).

Religiosity, Spirituality and Medical Conversations

Just as religious affiliations change over time in the United States (Finke and Stark 1992; Pew Research Center 2015), so too do religious/spiritual orientations. Along with other social shifts during the 1960's, observers noted an increased prevalence of “spirituality” – a much more individualistic form of religious expression (Roof 1993; Wuthnow 1998). Spiritual and religious orientations relate to any given person's unique worldview and how they make sense of their reality and experiences as the orientations create different expectations for their moral lives (McClure 2017). The religious dimension tends to connote a tradition-oriented faith (Pepper, Jackson, and Uzzell 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, Omoto, and Adelman 2008; Zwissler 2007). The spiritual dimension is tied to more subjective belief orientations (Fuller 2001; Hill et al. 2000; 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 “religious” and “spiritual” dimensions are moderately correlated with one another (Zinnbauer et al. 1997), indicating that while one can be either “spiritual” *or* “religious,” it is not uncommon to claim both. As such, there are four different religious/spiritual categories that individuals 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). This four-part typology is important because the spiritual dimension can – but does not necessitate – result in opposition to traditional and organized religion, a difference that must be parsed out (see also Chatters et al. 2008; Hodge, Andereck, and Montoya 2007; Marler and Hadaway 2002; Roof 1999). This typology allows us to differentiate “spiritual” responses that are opposed to traditional forms of religion from those which affirm traditional forms of religion as enhancing or complementing faith life (Jang and Franzen 2013). Each typological category is a unique combination of the above religious and spiritual dimensions, which in turn has unique implications for one’s worldview.

Besides personal religious beliefs, the physician has also been socialized into a profession with its own values and beliefs as discussed above. If a physician’s belief system holds that religion/spirituality is relevant for all of life but a professional code communicates the irrelevance of those beliefs, they could experience some degree of dissonance. In some cases medical socialization seems linked to the rejection of previously held religious beliefs (Catlin et al. 2008:1151), but the beliefs could also help cope with medical education as well (Balboni et al. 2015). The point is that professional beliefs and personal beliefs combine to form mental maps for behavior. These maps often flow from conflicting schemas (Johnson-Hanks et al.

2011; Uecker, Pearce, and Andercheck 2015), but just how compatible and even integrated professional and personal beliefs are will tend to follow physicians' religious orientations and implied worldview.

Religious but Not Spiritual Physicians

As the religious dimension of the typology is communal in nature (Zinnbauer et al. 1997; Zwissler 2007), beliefs tend to be received as opposed to personally curated. This generally would bring with it a sensation of more universally applicable beliefs, but RBNS individuals tend to also have a decreased subjective internalization or personal investment that can come with the "spiritual" dimension. As such, the RBNS physician will likely see their beliefs as contextually-dependent, tied to organized religion (Franzen 2016). This will likely decrease the physician's religious belief/professional work integration resulting in an overall decreased frequency of religious/spiritual conversations.

Religious and Spiritual Physicians

The RAS physician also has the externally-sourced and communally connected belief system that will present itself as more universally applicable. They also retains the personal investment of the "spiritual" dimension, thereby increasing the portability of the beliefs beyond strictly religious domains, mapping the relevance of one schema (the religious/spiritual) onto the other (the professional) (Johnson-Hanks et al. 2011; Longest, Hitlin, and Vaisey 2013). It even appears as though some congregation may facilitate this more effectively than others, with increased religious-bridging capital with increased attendance (Park et al. 2014). This perceived overlap of relevance will likely increase the frequency, and potentially the depth, of religious/spiritual conversations RAS physicians have with patients.

Spiritual but Not Religious Physicians

SBNR physicians' beliefs will be more personalized and unorthodox (Ammerman 2013; Schneiders 2003). As the source of their beliefs is more internal than external there is a greater association with an openness to change (Longest et al. 2013; Saroglou and Munoz-Garcia 2008), a worldview flexibility that may diminish the assumption that their beliefs are applicable for everyone.² This decreased universality combined with the increased personal importance of the "spiritual" orientation implies that, while the SBNR physician may experience a decreased explicit integration of personal and professional beliefs they may not avoid these conversations. Indeed, there is a greater concentration of SBNR psychiatrists compared to other medical specialties (Franzen 2015) and psychiatrists tend to be largely open to religious/spiritual conversations even if they tend to be more functional in nature – relevant for specific patients, but not necessarily the practice of medicine more broadly) (Curlin et al. 2007).

Neither Religious nor Spiritual

Religious schemas will be much more sparsely present for NROS physicians, thereby also not having and the attendant need for personal-professional integration. As a result, NROS physicians would be least likely to see the relevance of religion (Franzen 2015) and tend to avoid conversations about religiosity/spirituality when interacting with patients.

Hypothesis 1: RAS physicians will have connected religion to patient health more than other orientations.

Hypothesis 2: Those physicians who have connected the relevance of religion to patient health will talk to patients most often about religion or spirituality.

² See (Lawrence and Curlin 2007) regarding a similar point about physicians' understanding of "conscience" but in reference to religious affiliation.

Hypothesis 3: In comparison to RAS physicians, the direct path from SBNR physicians to frequency of conversations will be positive while the direct paths from RBNS and NROS physicians to frequency of conversations will be negative.

Data and Methods

Data for this study come from the *Religion and Spirituality in Medicine: Physicians' Perspectives* (RSMPP) survey. The RSMPP covers physicians' religious beliefs, patient interactions, and physicians' views regarding the role of religion in medicine (see Curlin, Lantos, et al. 2005; Curlin et al. 2006). The survey sample was a random sample of 2,000 physicians from the American Medical Association Physician Masterfile age 65 and younger. The survey was a mailed, self-administered questionnaire fielded in 2003. Respondents were mailed up to 3 questionnaires, with the third mailing including \$20 incentive. Of the 2,000 potential respondents, there were 1,820 eligible physicians with 1144 completions. The response rate for the survey was 63% (AAPOR definition 4) (American Association for Public Opinion Research 2011).

These data were merged with the 2000 *Religious Congregation and Membership Study* (RCMS), collected by the Association of Statisticians of American Religious Bodies and Glenmary Research Center. The RCMS data provides county-level religious membership concentration and was merged with the RSMPP according to the responding physician's county. The prevalence of religious or non-religious people living in any given area could theoretically influence how much religion comes up within medical interactions. The adjusted percent was used to account for known RCMS sampling issues (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 the outcome as a latent variable (LV) allowed for modeling the underlying propensity for religious/spiritual inclusion after having parceled out potential measurement error. In other words, unlike creating an indexed dependent variable, a LV does not assume that all observed variables contribute to the LV to the same magnitude and with the same error variation.

While the manifest variables were related theoretically, exploratory factor analysis helped assess the presence of more than one factor. Two factors were extracted: one reflecting higher acuity situations and a second reflecting lower acuity. As these factors were highly correlated ($>.8$), a bi-factor model was specified within lavaan (see Figure 1). This allowed for a single LV, predicting all manifest variables, while also separating out variance specific to each secondary LV (high acuity and low acuity) *not* related to the single larger LV. As such, the relationship between all LVs was set to zero. A maximum likelihood estimation with robust Huber-White standard errors was used, as was a Yuan-Bentler scaled test statistic (White 1982; Yuan and Bentler 1998). This produced more accurate and reliable standard errors in cases with non-normally distributed data in the model (Curran, West, and Finch 1996).

Full information maximum likelihood (FIML) was used to deal with missing data for two reasons, both related to survey instrument's structure. First, physicians could say specific interactions did not apply to them (see below). Not all physicians deal with patients facing end of life issues or, conversely, very minor illnesses. As such, missing data are present by design and not merely the result of skipped questions. It was essential these cases were not merely dropped. Second, other methods such as multiple imputation were not acceptable because this data *should* be missing and should not have non-missing values imputed. FIML is ideal for this

situation because it retains any available information and allows each piece of data to contribute the information it has to offer in the estimation (Baraldi and Enders 2010; Graham 2009).

McDonald's omega (McDonald 1978) was used instead of Cronbach's alpha to indicate scale reliability. Unlike alpha scores, omega does not assume 1) each measure equally contributes to the LV and that 2) item errors are uncorrelated (Yang and Green 2011). However, when alpha's assumed tau equivalence is present, omega is equal to alpha (Zinbarg et al. 2005). Finally, unlike alpha, omega is based upon item factor loadings, excluding item contributions not shared within the LVs (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 reflecting better model fit as they approach zero, as well as the comparative fit index (CFI) and Tucker-Lewis Index (TLI), reflecting better model fits as they approach one.

After assessing the measurement model, a structural model including the mediation effect was added. This allowed for the assessment of whether physicians' religious/spiritual orientation was related to their views regarding religion and patient health, and whether this then influenced the discussion of religion/spirituality in clinical situations. The various paths and their directionality test the three hypotheses above (see Figure 1).

[Insert Figure 1 about here]

Dependent Variables

The dependent variable is the general factor from a bi-factor LV reflecting a physician's propensity to discuss religious/spiritual issues with patients (See Figure 1). Variance in the observed variables not in common with this general factor is accounted for by two other LVs

reflecting variance unique to the observed variables reflecting either religious content in routine visits or when the severity/acuity is higher. These two should be understood as mutually exclusive as shared variance is accounted for by the general factor. In order to simplify and organize the manifest variable discussion, they are described in terms of these residual LVs – lower and higher acuity situations. It should be understood, however, that the key dependent variable is the general factor.

Three manifest variables describe lower acuity situations (see Table 1). Two ask how often physicians ask about religious/spiritual issues when a patient “presents with a minor illness or injury” and “comes in for a history and physical”. The five-point responses ranged from never to always with “does not apply” available (as the question may not be pertinent for the physician and coded as missing). The third observed variable asked how often they ask patients about religious/spiritual issues, ranging from never (0) to always (4). The omega was .842 with standardized loadings prior to bi-factor imposition ranging from .746 to .86.

The higher acuity LV is composed of four observed variables. The questions asked 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 five-point scale ranged from never to always, with non-applicable situations coded as missing. The omega was .927 with standardized factor loadings prior to the bi-factor imposition ranging from .804 to .943.

Once the bi-factor structure is imposed, the residual LV factor loadings necessarily drop as the two are highly correlated ($>.8$). This means that what leads a physician to talk with patients about religion/spirituality is often *not situation-specific*. This common variance is what

the general factor models. The omega for this general factor was .932 with standardized loadings ranging from .656 to .883.

Independent Variables

There are two different key independent variables. First, the religious/spiritual typology (RAS, SBNR, RBNS and NROS) is included as a system of dummies with RAS physicians as the comparison category. Following prior work (Franzen 2016; Jang and Franzen 2013), this typology was created from two questions. “To what extent do you consider yourself a religious person” and “...a spiritual person”. Both response options ranged from ‘very’ to ‘not at all’. A two by two typology was created by collapsing the very and moderately categories and the slightly and not at all categories on 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 range from ‘very much’ to ‘very little to none.’

Additional religious controls include the percent of individuals within the physician’s county reporting congregational membership, whether or not the physician ever had a religious experience that changed their life while at work, how often they attended religious services, whether they claim any religious affiliation, and whether or not they felt called to be a physician.

Many physicians report barriers to religious/spiritual inclusion. The present analysis includes a single count variable reflecting the number of barriers reported by the physician. This list included: general discomfort with discussing religious matters, insufficient knowledge/training, insufficient time, concern about offending patients, and concern that

colleagues would disapprove. Other socio-structural controls included in the analysis included whether they work in an academic or faith-based setting, whether they are a primary care physician, still a resident, whether board certified or not, the physician's race and age.

[Insert Table 1 about here]

Results

Table 1 shows the descriptive statistics and difference of means between the four religious/spiritual orientations. From the group comparisons, the RAS physicians have higher mean scores of thinking religion matters for health outcomes and the NROS physicians have the lowest mean score. While there is not a significant difference between SBNR and RBNS physicians and whether religion matters for health, the magnitude of their differences with RAS and NROS physicians implies that SBNR physicians may connect religion and health more often. Mean differences within the latent measures' observed variables show that RAS physicians have religious conversations most frequently, followed by SBNR physicians. These differences and the theoretical reasons outlined above provided evidence that RAS physicians are a fitting comparison category in the SEM model.

Table 2 shows the results of the mediated bifactor model. First looking at the direct effects on the thinking religion influences patient health (the mediation measure), we see that RAS physicians are more likely than all other religious/spiritual categories to think that religion impacts patients' health, in support of *H1*. Respondents who are male, are residents or are board certified are less likely to think that religion impacts patients' health. On the other hand, respondents who feel called to be a physician, attend religious services more often or have had a spiritual experience while working were all more likely to think that religion impacts patients'

health. Overall, just under 32% of the variance in thinking religion impacts health is explained in this model. We can reject the null hypothesis of no mediation effect as bootstrapped confidence intervals for the indirect path's unstandardized betas (ab where $c = c' + (ab)$) do not include zero (Baron and Kenny 1986; Hayes 2013).

[Insert Table 2 about here]

The direct effects on how often physicians discuss religion/spirituality with patients show effects net indirect associations. First, thinking religion impacts patients' health is strongly predictive. In fact, of the direct effects predicting conversational frequency, thinking that religion impacts patient health has the strongest association ($\beta = 0.28$), in support of *H2*. The direct effects of the religious/spiritual orientations partially support *H3*. Specifically, SBNR physicians are more likely than RAS physicians to talk with patients about religion/spirituality ($p < 0.1$) and both RBNS and NROS physicians are less likely than RAS physicians to talk about religion/spirituality ($p < 0.01$ and 0.1 , respectively).

Beyond these relationships, both male respondents and increased barriers are associated with decreased conversational frequency with patients. Greater religious service attendance, reporting a life-changing spiritual experience while working, feeling called to be a doctor predicts, and older physician age are all associated with more religious/spiritual conversations with patients. All of the direct paths predicting how frequently physicians speak with patients about religious/spiritual topics explain about 30.5% of the variance.

Discussion and Conclusion

Research linking religion to health outcomes has made significant progress (see Koenig 2012) and interest in the beliefs of medical providers is increasing amongst practitioners. A gap

remains, however, as to how physicians' beliefs are related to perceptions of good medical care and how this, in turn, influences their interactions with patients. It was suggested here that physicians' personal beliefs and values interact with their professional beliefs and values in unique ways that tend to correspond with their own religious/spiritual orientation. Specifically, it was hypothesized (*H1*) that RAS physicians will have more thoroughly connected their religious/spiritual beliefs with their profession, thinking that religion impacts the health of their patients. This connection theoretically most clearly implies the relevance of religion/spirituality for medical work and thus (*H2*) leads to more frequent religious/spiritual conversations with patients. Finally, once this connection between conversational frequency and thinking religion impacts patient health is accounted for, (*H3*) the direct path between SBNR physicians and conversational frequency will be positive while the RBNS and NROS direct paths would be negative.

Hypothesis 1 and 2 were supported. RAS physicians were most likely to think that religion influences patient health and this belief was strongly associated with how often the physician talks to patients about religious/spiritual topics. Hypothesis 3 regarding non-mediated variance was tentatively supported.³ Respondents reporting a SBNR orientation were more likely than RAS physicians to talk to patients about religion/spirituality, while both RBNS and NROS physicians were less likely than RAS physicians to talk to patients about religious/spiritual topics (all direct paths).

I have highlighted that many patients are religious and that patients often desire religious/spiritual conversations or inclusion implying that this is often positive or beneficial. It

³ The direct path from SBNR physicians and NROS physicians was significant at $p = 0.1$ (two tailed test). The hypothesis, however, is directional.

is clearly possible for these kinds of interactions to also be damaging for patient well-being. Thus far little research focuses on this potential darker side of religious/spiritual conversations within medicine, but some of what we do know may somewhat belie fears of widespread damage. Hebert et al. (2001), for example, show that patients see these conversations as being more productive in the context of either an established relationship or an interaction with a doctor possessing strong interpersonal skills, a point repeated by Ellis and Campbell (2004). Ellis and Campbell (2005) later show that some patients think concordant beliefs may facilitate interactions, but they argue that belief discordance may be similar to other facets of discordance between physicians and patients – discordance can be somewhat overcome by taking a patient-centered, diplomatic approach to interactions. Additionally, a team-based approach may be most productive (Koenig 2014), and inclusion of chaplains may be key as they could ensure care goes beyond biomedical interpretations (Carey and Cohen 2009). Finally, it helps to better understand the purpose and need of spiritual/religious conversations as Best et al. (2013) show that patients often seek something more along the lines of fear-contextualization than spiritual guidance from their physician.

There are a few notable limitations to this present study. First, the data used here are cross-sectional in nature. While the methods used here impose a causal association, this cannot be determined even if the implied causal arrangement is the most plausible. Second, it would be better if we had more direct measures. Specifically, the argument here also implies something about the socialization of professionals – how pieces of their self are connected to a profession that carries with it beliefs and values as well. Measures that more directly account for this would be a helpful addition in future research.

The hope is that present study can spur further 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 associate some topics with medical practice and not others, religion being only one possible dimension of this. When or why would one physician feel some actions are ‘good’ or ‘right’, and thus turn to them consistently in their patient interactions? In saying this I do not intend to imply that physicians should do one thing or another, but that *physicians* feel 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 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. This is especially true in light of present strong structural barriers, such as highly compressed time and resources available both in the education and socialization of physicians but also in patient care once practicing medicine.

While some scholars are skeptical as to whether attempts to change the habitus of individual physicians can change systemic problems (Dubbin et al. 2013), training physicians to keep patient religion/spirituality in mind is increasingly common. Indeed, Koenig (2014)

recently outlined a future attempt to formally include team-based religious/spiritual care in the routine of patient care. 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 only has language pertaining to religion in relation to psychiatry and palliative 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, not to mention the Spiritual Intervention Coding scheme within ICD-10 from WHO (Carey and Cohen 2015).

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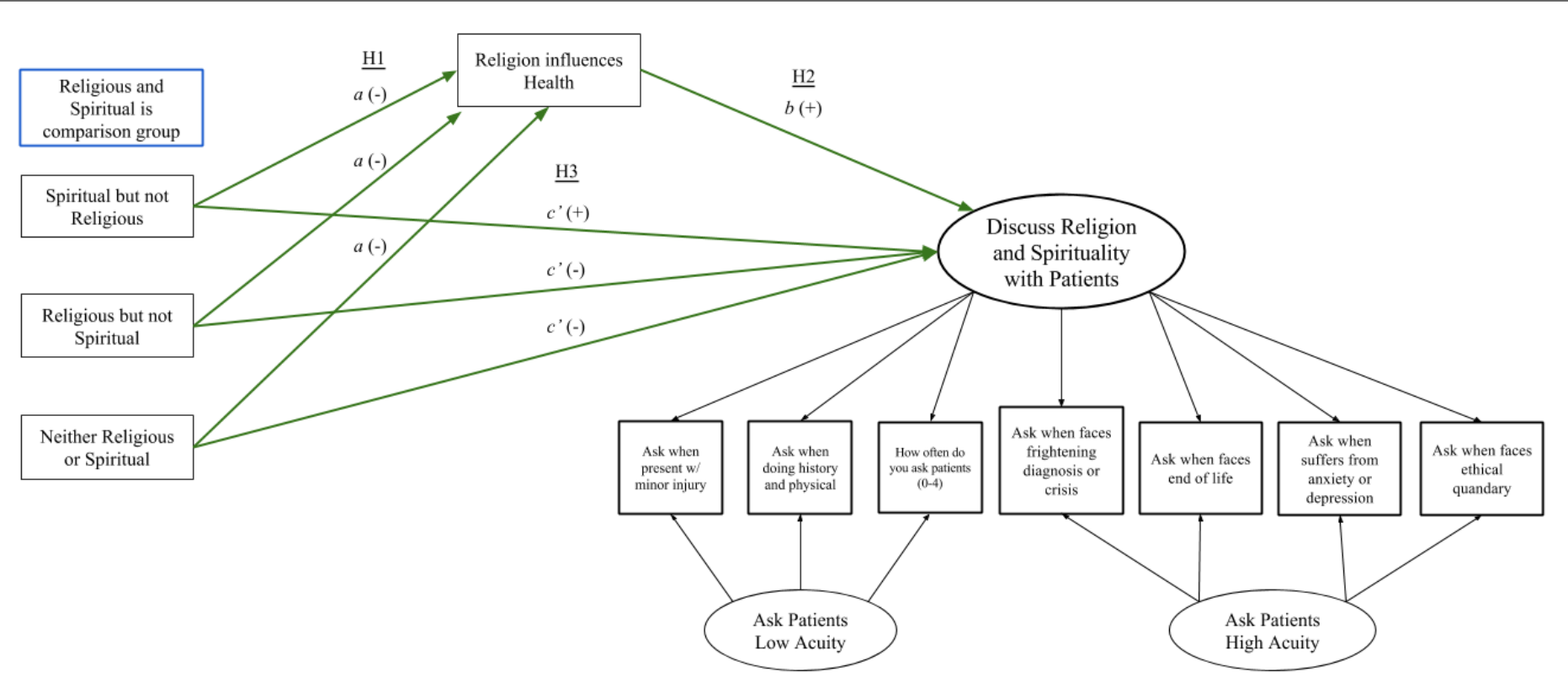
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Figure 1: Bifactor SEM model for Physician Propensity to Discuss Religion with Patients



Note: Indirect and total paths are labeled following Baron and Kenny (1986), where the total effect (c) is $c = c' + (ab)$

Table 1: Descriptive Statistics and Group Mean Differences

	Range	Mean/(%)	Std. Dev.	SBNR vs.	SBNR vs.	SBNR vs.	RAS vs.	RAS	RBNS
				RAS	RBNS	NROS	RBNS	vs. NROS	vs. NROS
SBNR	0, 1	(20)		-	-	-	-	-	-
RBNS	0, 1	(4)		-	-	-	-	-	-
NROS	0, 1	(22)		-	-	-	-	-	-
RAS	0, 1	(52)		-	-	-	-	-	-
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)		0.20*	0.21*	-0.03	0.01	-0.23*	-0.24*
Religious Area	0 - 110	(63)	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)		0.06	0.04	0.04	-0.03	-0.03	0.00
Male	0, 1	(74)		-0.07	-0.21*	-0.12*	-0.13	-0.05	0.09
Spiritual Experience	0, 1	(11)		-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)		-0.03	-0.12	-0.07	-0.10	-0.04	0.06
Faith Based Practice	0, 1	(12)		-0.00	0.05	0.07	0.05	0.07*	0.02
Resident	0, 1	(1)		-0.01	-0.01	0.00	-0.01	0.01	0.02
Board Certification	0, 1	(87)		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)		0.01	-0.02	0.05	-0.03	0.05	0.08
<i>Observed Variables (for LV)</i>									
<i>Ask When...</i>									
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 : Abbreviations: SBNR - 'spiritual but not religious,; RBNS - 'religious but not spiritual;' NROS - 'not religious or spiritual;' RAS - 'religious and spiritual.' 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; * = $p < .05$

Table 2: How often Physician Speaks with Patients about Religion or Spirituality

	Direct Effects on Relig. Impacts Health			Direct Effects on Conversation Frequency		
	<i>b</i>	β	St. Error	<i>b</i>	β	St. Error
No Religious Affiliation	-0.06	-0.02	0.09	0.02	0.01	0.10
Spiritual Experience	0.32 **	0.10	0.07	0.28 **	0.09	0.09
Attendance	0.06 **	0.15	0.02	0.06 **	0.15	0.02
Work Calling	0.14 **	0.11	0.04	0.14 **	0.11	0.04
Academic Setting	-0.08	-0.04	0.05	0.01	0.01	0.06
Faith Based Practice	0.05	0.02	0.08	0.02	0.01	0.09
White	-0.04	-0.02	0.06	-0.02	-0.01	0.07
Male	-0.16 **	-0.07	0.06	-0.25 **	-0.11	0.07
Resident	-0.72 **	-0.08	0.22	-0.31	-0.03	0.30
Board Certification	-0.24 **	-0.08	0.08	0.06	0.02	0.09
Age	0.00	-0.03	0.00	0.01 +	0.05	0.00
Primary Care	0.08	0.04	0.05	0.05	0.02	0.06
Religious Area	-	-	-	0.00	-0.02	0.00
Barriers	-	-	-	-0.16 **	-0.17	0.03
Religion Impacts Health	-	-	-	0.29 **	0.28	0.04
Religious/Spiritual Orientations						
SBNR ^a	-0.19 *	-0.08	0.08	0.14 +	0.06	0.09
RBNS ^a	-0.62 **	-0.12	0.13	-0.32 **	-0.06	0.12
NROS ^a	-0.85 **	-0.35	0.09	-0.16 +	-0.07	0.09
<i>R</i> ²						
Religion Impacts Health			0.32			
Talk Frequency			0.31			
CFI			0.97			
TLI			0.96			
RMSEA (95% CIs)			0.04 (0.03 - 0.04)			
SRMR			0.02			

Source : Religion and Spirituality in Medicine: Physicians' Perspectives; *n* = 1137; *p* < .01 **; *p* < .05 *; *p* < .1 + (two-tailed tests); a RAS is the comparison category. Abbreviations: SBNR - 'spiritual but not religious.; RBNS - 'religious but not spiritual;' NROS - 'not religious or spiritual;' RAS - 'religious and spiritual.'