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# A Systems-Theory Analysis of the Relationship between Communication, Beliefs/Practices, Religiosity, Spirituality and Expected Future Religious Practices of College Students

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## ABSTRACT

This study uses systems theory to explore relationships between individual, micro, meso, and macro factors and expected future religious practices of students studying at a Seventh-day Adventist university. The study operationalizes system theory in context of both public relations and spirituality. The primary purpose is to understand relationship between each level of systems theory and students' expectations about future religious practices. Key recommendations include the need to increase use of digital communication tools, the value of distinguishing between understanding and belief/action at the micro level, and the importance of supporting spiritual development outside the context of organized religion.

## Introduction

This study uses systems theory to explore the relationship between individual, micro, meso, and macro factors and expected future religious practices of students studying at a Seventh-day Adventist (SDA) university. The study operationalizes system theory in the context of both public relations (Hiscock, 2019) and spirituality (Rousseau, 2014). The primary purpose of the study is to understand the relationship between each level of systems theory and students' expectations about future religious practices.

While based in the Protestant tradition, the SDA Church has unique doctrines and lifestyle practices (Bailey et al., 2018; Brantley, 2020). The Church has also developed a broad range of communication tools that provide both information about and mechanisms to support adherence to those beliefs and practices. These range from personal study guides to a worldwide system of broadcast networks (Wogu, 2019). These unique

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characteristics of the Church not only provide a specific context for exploring public relations and spirituality systems but also provide a framework for examining other contexts.

The researchers conducted a survey among students enrolled at an SDA university. These young people are immersed in SDA culture and communication (Palmer-Chase, 2020). As emerging adults (Arnett, 2000), they are also at a life stage when they are making their own choices about spiritual and religious beliefs and practices (Chen & Tang, 2013; Halafoff et al., 2020; Smith, 2009). Earlier studies have examined adherence to SDA beliefs among high-school students (Brantley, 2020) and a global sample of church members (Bailey et al., 2018). This study builds on that work by focusing more specifically on emerging adults.

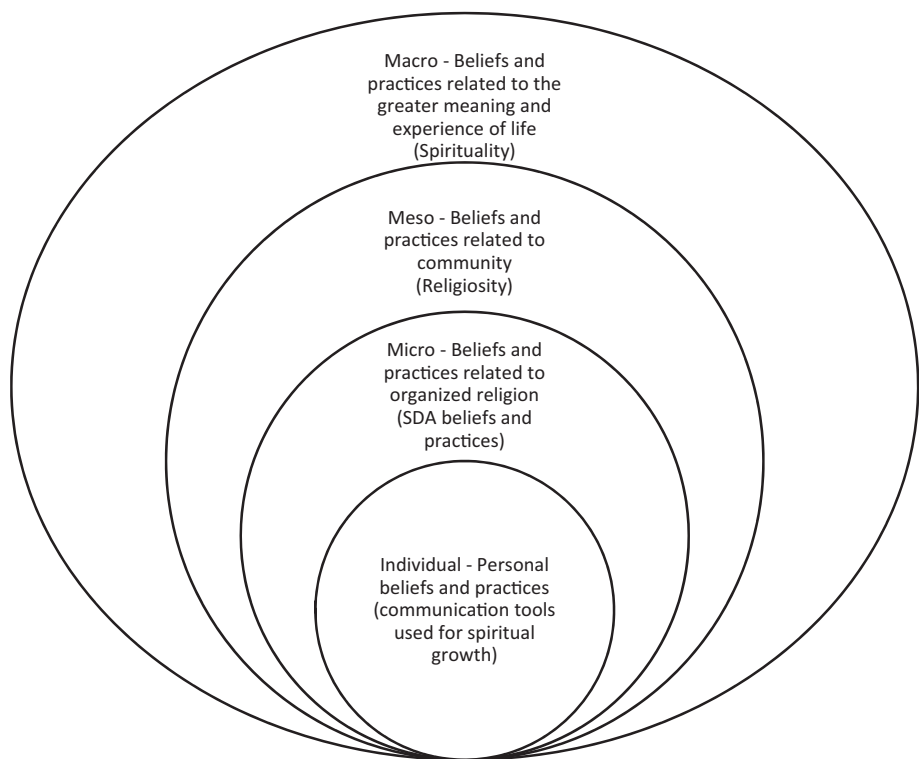
## Literature review

### *Systems theory*

Hiscock (2019) identified the work of Grunig and Hunt (1984) as one of the earliest examples of applying systems theory to public relations. Hiscock (2019) noted that the term systems theory is a very broad umbrella for multiple concepts. He pointed to the early work of Katz and Kahn (1966) as being important for establishing the belief that organizations operate as open systems characterized by input-output exchanges with the external environment. Hiscock (2019) reviewed key texts from the public relations literature and concluded that systems theory has use in explaining strategic and ethical relationships between organizations, publics, and the environments in which they operate. He envisioned the system as a series of concentric entities beginning with individuals at the center, surrounded by organizations at the micro level, then the communities in which those organizations operate at the meso level, and the public/digital sphere at the macro level.

Systems theory has also been applied to the study of the concepts of religiosity and spirituality. In particular, Rousseau (2014) proposed a systems model of spirituality that begins with the individual ontology of spirituality and includes subjective spirituality, spiritual competence, spiritual growth/evolution, and objective spirituality. But rather than seeing these elements as concentric entities, he sees them as complex interlocking concepts that help to explain what he defines as the “life-orienting” nature of spirituality. Like Hiscock (2019), Rousseau (2014) sees a system that involves personal factors, institutions, and a yearning to connect with community and the universe.

Figure 1 presents a systems model that is heavily based on Hiscock’s (2019) conceptualization. But it also adds concepts from Rousseau (2014)



**Figure 1.** Systems approach to communication modalities for spiritual growth (adapted from Hiscock, 2019 and Rousseau, 2014).

and includes parenthetical indications of how each element of the model will be measured in the current study.

In the context of public relations, the examination of systems is often linked to improving relationships between organizations and key publics (Hiscock, 2019). In the context of religious organizations, this often translates into identifying mechanisms for effectively attracting and retaining members affiliated with that religious organization. Earlier studies of SDA church members (Bailey et al., 2018; Brantley, 2020) developed measures of expected future religious practices to assess relationships between the church and its members. Those measures were adapted for this study. Table 1 shows the items that were used and indicates how each aligns with levels of the system.

**Public relations and religion**

As Grunig and Hunt (1984) developed their normative systems model of public relations, they also pointed to the role of religious persuasion as one of the earliest forms of public relations. Some communication practitioners that operate within organizations dedicated to religion are reluctant to

**Table 1.** Summary of expected future religious practices.

Item	Mean	SD	System level	Abbreviation
I will have a personal relationship with Jesus	4.36	1.00	Individual	Personal
I will believe in church doctrines	3.88	1.12	Micro	Doctrine
I will abstain from certain lifestyle practices as recommended by the church	3.56	1.22	Micro	Lifestyle
I will regularly worship with others	4.14	1.08	Meso	Worship
I will be a member of the Seventh-day Adventist church	4.12	1.25	Meso	Member
I will continue to seek spiritual development	4.45	.90	Macro	Spiritual

embrace the term “public relations” (Cannon, 2015), thus making a systematic review of the literature challenging and beyond the scope of this study. However, some selected studies show the importance of public relations as an activity for faith-based organizations.

Wiesenberg (2020) traced the evolution of church-based communication from face-to-face to mass mediated forms in both the Catholic and Protestant traditions. In the digital age, he reported that larger churches had embraced new technologies while smaller churches often concentrated on face-to-face-communication.

Spaulding and Formentin (2017) provided a case history of how Christian Scientists have used multiple public relations strategies and tactics to build their brand, including celebrity endorsement and image management. But the founder of that movement specifically eschewed media relations and crisis communication practices.

Lamme (2014) examined the history of how public relations was used to advance the causes of evangelism, temperance, and business in America. Evangelism and temperance are both important aspects of the SDA tradition. Many of the techniques Lamme (2014) described (e.g., temperance rallies, use of religious literature for proselytizing) have been practiced throughout the history of the SDA Church.

Several researchers have provided case studies specific to the SDA context such as public relations challenges in geographical areas (Kasenga & Hurtig, 2014; Nyameino, 2016; Wobete et al., 2019; Wogu, 2019), communication strategies and tactics related to institutions such as schools and hospitals (Koenig et al., 2017; Laryea, 1992; Pinterich, 1968), and challenges with specific publics such as women and African American church members (Baker, 1993; Kim, 2020).

### ***Seventh-day Adventists and communication media***

The SDA church has a long tradition of attention to communication media. One of the church founders, Ellen G. White, was a prolific author. Church-run publishing presses publish her work as well as many other church-related publications (Butler, 2018; Levterov, 2016). In the electronic era, the

church also developed vast networks for radio and television broadcast (Butler, 2018; Vernon, 2011). Some case studies examine ways the church has begun using digital media (Tudor & Herțeliu, 2016).

The SDA Church has a tradition of recommending that members limit use of “secular” media. Ellis (2019) examined the case of video communication and traced the history of strong prohibition against attendance at movie theaters. She noted that contemporary church policy is no longer as strict as it once was. However, there is still a tradition of placing limits on media consumption—particularly among church members who retain a belief in applying historic interpretations to the writings of Ellen G. White and other early church leaders (Williams, 2007).

In the 1970s, Roger Dudley conducted a series of survey research projects among students in SDA high schools (AKA academies) in which he explored, among other things, adherence to Church guidelines about use of secular media such as movies and popular music (Brantley, 2020). Dudley’s studies, as well as a more recent study conducted by researchers at the Church’s headquarters (Bailey et al., 2018), also explored how church members use “positive” communication tools for spiritual growth. The current study builds on this earlier work by including both “positive” and “negative” communication tools identified in those studies. Scholarly work on contemporary public relations tactics (Wicks, 2000) was used to flesh out a list of communication tools that includes both mediated and interpersonal communication tactics. The literature suggests that these communication tools can be used to support the personal level of the systems model and lead to the first research question:

- RQ 1—What is the relationship between expected future religious practices and
- a. Use of interpersonal communication sources for spiritual growth
  - b. Use of mediated communication sources for spiritual growth

### ***Seventh-day Adventist beliefs and lifestyles***

Many aspects of Adventist beliefs are consistent with mainstream Christianity. But others are not widely shared by other Christian denominations. Earlier research has examined unique SDA beliefs and lifestyle practices, including the prophetic gifts of Ellen G. White (Levterov, 2016), dietary practices (Nath, 2010), sexuality (Cort et al., 2019), and entertainment (Ellis, 2019). Researchers have also explored how these beliefs and practices can play a role in the development of extremism (Williams, 2007). These unique SDA beliefs and lifestyle practices align with the micro level of the proposed system model because they define the unique aspects of the SDA organized religion.

Earlier research on high school students (Brantley, 2020) and church members worldwide (Bailey et al., 2018) included measures for how strongly Adventists support unique SDA beliefs. Building on those studies, this research identifies seven unique beliefs (“Official beliefs of the Seventh-day Adventist Church,” 2021).

Earlier studies (Bailey et al., 2018; Brantley, 2020) study identified 12 lifestyle practices that have traditionally been associated with the SDA church. The current study asked participants to indicate how strongly they agree that it is important to abstain from practices related to health (e.g., use of alcohol, tobacco), entertainment (e.g., dancing, attending movies), sexuality (e.g., sex outside of marriage, same sex romantic relationships), and adornment (e.g., immodest clothing, wearing jewelry). At the micro level, we propose the following research question:

RQ 2—What is the relationship between expected future religious practices and

- a. Agreement with unique SDA beliefs
- b. Agreement with SDA lifestyle practices

### ***Religiosity and spirituality***

Religion and religiosity have historically been associated with spirituality and have not generally been studied or treated separately until recently (Rousseau, 2014). However, a decline of religious interest and affiliation has not been matched by a decline in interest in the spiritual, leading to a growing effort to understand and study these concepts as distinct and separate from one another (Rousseau, 2014). Still, no singular, agreed upon definition for religion or spirituality has emerged; rather, researchers have recognized different but often overlapping dimensions for each (Kobza & Salter, 2016).

In general, religion is associated with that which is external, conceptual, and behavior oriented—that which is taught/learned/practiced, such as church attendance, dogma and truth claims, and religious rituals (Kobza & Salter, 2016; Schnell, 2012). Spirituality is often equated with the experiential, the experience of God, while the rituals and creeds of religion are replaced by personal approaches to and perceptions of the divine. Authority when it comes to the things of God is not derived from a church body but by way of an individual’s experience. In short, the concept of religion or religiosity references that which is institutionalized and formalized while the concept of spirituality references that which is experiential, individualized, and subjective.

Schnell (2012) pointed out that two different views of spirituality seem to exist: as being a part of religion and being separate, distinct from, and unrelated to religion. Within religion, spirituality seems to be an accepted

and expected part, but outside of religion, the two may be regarded as being quite distinct and “even opposing concepts” (Schnell, 2012, p. 34). Hence, two world views can be seen to emerge: the religious-and-spiritual and the spiritual but not religious (Rousseau, 2014; Schnell, 2012). DaSilva et al. (2020) also introduced the concept of non-spiritual religiosity.

This study measured religiosity using items developed by Genia (1993) to refine the Allport and Ross (1967) religiosity measure. Genia (1993) identified a single religiosity scale that could be used for measuring how the individual engages with the religious community. This scale has been successfully used in multiple contexts including examination of sexual risk-taking during the transition to college (Zaleski & Schiaffino, 2000), relationships between religiosity and personality (MacDonald, 2000), quality of life for cancer patients (Mytko & Knight, 1999), and relationships between crime and religiosity (Reisig, Wolfe, & Pratt, 2012). The underlying Allport and Ross (1967) scale was also used in an earlier study of SDA university students (Ramirez, Ashley, & Cort, 2014). The third research question focused on religiosity at the meso level of the proposed system model:

RQ 3—What is the relationship between expected future religious practices and religiosity?

The measures of spirituality developed by Gomez and Fisher (2003, 2005) were used in the current study. This scale has been successfully used in studies such as the development of spirituality during childhood (Moore et al., 2016), adolescent mental health (Michaelson et al., 2019), psychological well-being (Rowold, 2011), and the well-being of caregivers (Fisher & Brumley, 2008). These spirituality measures focus on the experiential aspects of the macro level of the proposed model and lead to the final research question:

RQ 4—What is the relationship between future religious practices and spirituality?

## Method

Institutional Review Board approval was obtained for this study. Researchers used a questionnaire with items as detailed in [Appendix A](#).

Participants were recruited three ways. First, heads of the largest schools and departments at the university were asked to promote the study and provided with a brief recruitment email to send to all their students (see [Appendix B](#)). Second, professors with large classes in some of the schools and departments were asked to talk to their students about the study and encourage them to participate; they were also provided the brief recruitment email. Finally, students were directly invited to participate via



an announcement placed in a university-sponsored weekly e-newsletter to the entire student body.

To increase likelihood of participation, 20 gift certificates of \$25 each were offered. Students could optionally provide their email address for entry into a drawing for the prizes.

Bivariate correlation was used to examine relationships between the outcome variables (measures of expected future religious practices) and each of the concepts examined in the research questions (communication sources, unique SDA beliefs/practices, religiosity, and spirituality). Most of the concepts are based on multiple items which were correlated individually. However, both the religiosity (Genia, 1993) and spirituality (Gomez & Fisher, 2003, 2005) items had been previously validated as measurement scales. Therefore, we computed scales for these measures. Cronbach's alpha for the religiosity scale was .809 and reliability could not be significantly improved by removing any items. Cronbach's alpha for the spirituality scale was .934, and the reliability of the scale could not be significantly improved by removing any items.

## Findings

A total of 303 responses to the survey were received, but 15 were disqualified either because of them being duplicate submissions or because more than half of the survey questions were left unanswered.

In all, 288 survey responses were used. This represents slightly less than 10% of the population at the institution where the study was conducted. The majority (68.4%) of respondents were female. Respondents were spread across the four years of undergraduate education with a slightly higher percent of seniors (28.5%). First-year students had the lowest representation (19.7%). Second-year students (22.5) and juniors (25.0%) were well represented and 3.9% of the respondents were graduate students. The largest racial group identified as White (54.2%), 22.9% identified as Asian, 21.9% as Hispanic/Latino, 7.3% as Black/African American, and 4.9% as multi-racial. An additional 4.5% selected "other" race, 1.4% identified as Hawaiian/Pacific Islander, and 1.0% identified as American Indian/Alaska Native.

In terms of personal and family history with the church, 83.7% indicated that they consider themselves to be Seventh-day Adventists while 86.1% were baptized members. Parents and other members of respondents' nuclear families were highly likely to be church members (92.7%) and 81.3% reported that they were at least "third generation" Adventists because at least one grandparent was a church member. More than a third

**Table 2.** Interpersonal communication.

Item	Mean	SD	Personal	Doctrine	Lifestyle	Worship	Member	Spiritual
Friends or peers	4.43	1.54	.319**	.270**	.270**	.392**	.214**	.380**
Family	4.31	1.74	.438**	.434**	.420**	.424**	.312**	.323**
Pastors or spiritual leaders	3.26	1.78	.228**	.258**	.292**	.271**	.200**	.209**
Teachers	2.75	1.63	.194**	.254**	.228**	.219**	.140*	.176**
Study groups	2.67	1.73	.177**	.203**	.194**	.233**	.205**	.116*
School staff	2.53	1.52	.156**	.201**	.176**	.257**	.137*	.118*
Social media influencers	2.02	1.42	.089	.088	.090	.096	.085	.064

\*\* $p < .01$ , \* $p < .05$ .

**Table 3.** Mediated communication.

Item	Mean	SD	Personal	Doctrine	Lifestyle	Worship	Member	Spiritual
Bible	5.06	1.69	.512**	.442**	.422**	.478**	.337**	.478**
Books	4.04	1.83	.371**	.275**	.344**	.367**	.247**	.395**
Apps	3.87	1.86	.378**	.205**	.268**	.345**	.177**	.346**
Ellen G. White's writings	3.21	1.97	.282**	.506**	.527**	.342**	.435**	.283**
Educational materials	3.15	1.72	.224**	.311**	.345**	.242**	.135*	.205**
Social media	3.08	1.75	.162**	.179**	.144*	.220**	.179**	.158**
Streaming video	2.96	1.76	.221**	.198**	.230**	.201**	.102	.160**
Websites	2.93	1.66	.127*	.202**	.198**	.197**	.100	.150*
Podcasts	2.72	1.81	.114	.082	.157**	.205**	.092	.162**
Movies	2.63	1.42	.207**	.193**	.158**	.112	.185**	.127*
Blogs	2.23	1.48	-.018	.069	.121*	.086	.013	-.021
Radio	2.22	1.71	.087	.153**	.136*	.075	-.018	.093
Television	2.22	1.50	.073	.120*	.099	.066	.104	.001
Magazines	1.75	1.21	.010	.145*	.173**	.022	.085	-.041
Newspapers	1.52	1.03	-.051	.124*	.181**	.009	.071	-.029
Video games	1.33	.91	-.141*	.054	.031	-.181**	-.043	-.151*

\*\* $p < .01$ , \* $p < .05$ .

(38.5%) reported that four generations or more of their families had been church members.

About three quarters (78.4%) of respondents came from homes in which their parents were married and for 77.8% of participants, at least one parent had earned a post-secondary degree. About a quarter (23.9%) of participants chose not to provide family income data. About a quarter (25.6%) reported incomes less than \$50,000, 26.0% reported incomes between \$50,000 and \$99,999, and 24.5% reported incomes of \$100,000 or more.

### Communication sources

RQ 1 asked: What is the relationship between expected future religious practices and a) use of interpersonal communication sources for spiritual growth and b) use of mediated communication sources for spiritual growth. Results of correlations between communication sources and expected future religious practices are reported in [Tables 2 and 3](#).

The most frequently used interpersonal communication sources are friends/peers and family members. Use of most interpersonal communication sources are positively and significantly correlated with expected future

religious practices. The exception is for social media influencers which were very infrequently used to support spiritual growth and which did not correlate significantly with any of the expected future religious practices.

The most frequently used mediated communication sources were the Bible, books, and apps. The writings of Ellen G. White and other educational materials were also relatively frequently used. Social media as a mediated communication source was also relatively frequently used. This contrasts with the low use of social media influencers.

All items that score a 3 or higher (on a 7-point scale) showed positive and significant correlations with expected future religious practices. Many digital media tools (e.g., streaming video, websites, podcasts, and blogs) scored below 3 and showed fewer correlations with expected future religious practices. Correlations were more likely to be found with micro-level factors (doctrine and lifestyle) than for other expected future behaviors. Most “traditional” media (e.g., radio, television, magazines, and newspapers) received relatively little use and showed very little correlation with expected future religious practices. Finally, video games were not only the least-used medium for seeking spiritual growth, but also video games were the only communication tool to show significant negative correlation with expected future behaviors.

### ***SDA beliefs and lifestyle***

RQ 2 asked: What is the relationship between expected future religious practices and a) agreement with unique SDA beliefs and b) agreement with SDA lifestyle practices. Results of correlations between beliefs and lifestyles are reported in [Tables 4](#) and [5](#).

The belief statements with which students most strongly agree are the imminent second coming of Christ, the state of the dead, and the importance of both the seventh-day Sabbath and a literal seven-day creation. Each of these beliefs are somewhat outside of mainstream Protestantism, but all are beliefs that are held by other denominations. By contrast, the three beliefs to which students are least likely to agree are all unique to SDA teaching: the investigative judgment, the SDA Church as a specially called remnant, and the prophetic gifts of Ellen G. White. All these beliefs correlate positively and significantly with all the measures of expected future religious practices. Some of the strongest correlations are with expected future church membership.

Participants were most likely to agree with the importance of refraining from use of tobacco, eating foods that are defined as “unclean” (e.g., pork, shellfish, etc.), and having sex outside of marriage. These and other practices that scored a 3.0 or above were positively and significantly correlated

**Table 4.** Agreement with SDA beliefs.

Item	Mean	SD	Personal	Doctrine	Lifestyle	Worship	Member	Spiritual
The second coming of Christ is imminent and it will be literal, personal, visible, and worldwide	4.60	.88	.615**	.442**	.407**	.471**	.458**	.458**
When people die their bodily remains decay and they have no consciousness or activity until the resurrection	4.59	.92	.307**	.289**	.181**	.234**	.585**	.228**
The fourth commandment of God's unchangeable law requires the observance of the seventh-day Sabbath as the day of rest, worship, and ministry	4.48	.950	.535**	.464**	.385**	.464**	.616**	.425**
God created the world in six days of 24-h each in the relatively recent past	4.48	0.98	.442**	.479**	.347**	.407**	.466**	.328**
The investigative judgment began in 1844 and Christ is acting as our advocate in the heavenly sanctuary right now	3.94	1.27	.353**	.491**	.393**	.396**	.600**	.296**
The Seventh-day Adventist church is specially called as a remnant to keep the commandments of God and the faith of Jesus	3.83	1.33	.370**	.598**	.474**	.391**	.682**	.245**
The spirit of prophecy was manifested in the ministry of Ellen G. White	3.83	1.31	.315**	.544**	.448**	.359**	.582**	.284**

\*\**p* < .01.

**Table 5.** Importance of abstaining from lifestyle practices.

Item	Mean	SD	Personal	Doctrine	Lifestyle	Worship	Member	Spiritual
Using tobacco	4.02	1.45	.252**	.260**	.343**	.294**	.162**	.324**
Eating unclean foods	3.90	1.32	.291**	.352**	.438**	.386**	.438**	.351**
Having sex outside of marriage	3.74	1.36	.382**	.436**	.592**	.404**	.294**	.415**
Using alcoholic beverages	3.60	1.43	.330**	.410**	.538**	.419**	.379**	.324**
Having a romantic relationship with a person of same sex	3.51	1.56	.297**	.449**	.498**	.365**	.341**	.274**
Dressing immodestly	3.20	1.21	.224**	.339**	.510**	.275**	.260**	.320**
Eating any animal products	2.28	1.34	.100	.203**	.319**	.107	.159**	.088
Listening to popular non-religious music	2.10	1.15	.147*	.305**	.430**	.215**	.218**	.169**
Drinking caffeinated beverages	2.08	1.24	.115	.318**	.458**	.155**	.251**	.116
Wearing jewelry (other than a wedding ring)	2.06	1.30	.143*	.340**	.517**	.227**	.289**	.166**
Dancing	1.96	1.19	.090	.353**	.475**	.155**	.260**	.131*
Going to movies	1.79	1.17	.056	.311**	.410**	.107	.221**	.052

\*\* $p < .01$ .

**Table 6.** Religiosity and spirituality.

Item	Mean	SD	Personal	Doctrine	Lifestyle	Worship	Member	Spiritual
Religiosity	3.47	.59	.567**	.609**	.581**	.573**	.534**	.534**
Spirituality	3.75	.73	.399**	.324**	.307**	.426**	.408**	.408**

\*\* $p < .01$

with all expected future religious practices. The lowest levels of agreement were for avoiding movie attendance, dancing, and wearing jewelry. For these and some of the other low-scoring items, correlations with expected future behaviors were weaker. The strongest correlations overall were with expected future agreement with doctrines and lifestyle practices. Lower correlations were found between many of these lifestyle taboos and expected future personal relationships with Jesus and seeking spiritual development.

### **Religiosity and spirituality**

RQ 3 asked: What is the relationship between expected future religious practices and religiosity? RQ 4 asked: What is the relationship between expected future religious practices and spirituality? Results of correlations between the scales for religiosity and spirituality and future religious practices are reported in [Table 6](#).

Generally, students reported higher scores for spirituality than for religiosity. All correlations shown in [Table 6](#) are positive and significant. The strongest correlations are between religiosity and expected future belief in doctrines and lifestyle practices. By contrast, spirituality correlates most strongly with intent to continue worshipping with others.

### **Discussion**

The Seventh-day Adventist church operates one of the largest religion-based school systems in the world with almost 10,000 schools (118 of which are post-secondary institutions) and more than two million students. A key goal of these schools is to support religious training and spiritual development (“Seventh-day Adventist Church Education Department,” 2021). The responses from college students who participated in this study suggest that the SDA education system is largely achieving its goal of supporting emerging adults (Arnett, 2000) as they are making their own choices about spiritual and religious beliefs and practices (Chen & Tang, 2013; Halafoff et al., 2020; Smith, 2009). As shown in [Table 1](#), the average score on most expected future religious practices is about 4 on a 5-point scale. The highest score is for the intent to continue to seek spiritual development. The lowest scores are for expected continued adherence to

doctrines and lifestyle practices; however, even for those items the mean is well above the mid-point of the scale.

The goal of framing this study in the context of systems theory is to provide a broader context of how other organizations can apply best practices in public relations and religious communication. The systems model proposed in [Figure 1](#) provided utility for examining both current beliefs and practices and expected future practices. By combining the work of Hiscock (2019) and Rousseau (2014), it allows for integration of public relations and religious communication practices.

### ***Individual level***

At the individual level of the systems model, study participants reported making use of a broad range of interpersonal and mediated communication vehicles. They report that the Bible is the source they turn to most frequently for spiritual growth followed closely by friends/peers. It is interesting to note that social media influencers, who are often seen as providing a kind of “parasocial” personal interaction (Daugherty et al., 2017), were very infrequently used for supporting spiritual growth. This use of social media influencers was not correlated with any of the anticipated future practices. Though not core to the current research questions, participants were also asked about their use of communication tools that is not related to spiritual growth. Scores for use social media influencers were higher for information/entertainment uses (3.45) than for spiritual growth (2.02). This suggests an opportunity for religious communication practitioners. Social media influencers who often stimulate parasocial interaction can seem to be “like” the friends and peers who are so influential in young people’s lives.

A further examination of mediated communication also points to additional opportunities for social and digital communication tools. Social media and apps both were rated in the moderate use level (slightly more than once a month). Apps are one of the top-three mediated sources and in conversation with students it is clear that sometimes “Bible reading” really refers to using their “Bible app.” Other digital tools such as streaming video, websites, podcasts, and blogs all score as being more frequently used than more traditional media such as radio, television, and magazines. The SDA church is heavily invested in producing content via traditional media but has not made the same investments in digital and social media (Činčala, 2020; Reddy, 2019). Again, in this study, examination of use of these digital tools for non-spiritual growth purposes reveals that all are used more frequently for information/entertainment than for spiritual growth (average difference of 1.4 points on a 7-point scale). Religious

communication professionals need to consider how to use these digital tools more effectively in the realm of religion and spirituality.

Video games represent a unique form of digital communication. These students report that they rarely use video games and that any correlations with spiritual growth are negative. Scholarly examination of religion and video games has suggested that in the 21st century, video games play a similar role in illuminating the role of religion in life that movies played in the 20th century (Campbell & Grieve, 2014). As reported in the literature review, in the 20th century the SDA church discouraged movie viewing. These students do not seem to find movies as taboo (rating of 2.63) as video games (rating of 1.33). Of all the lifestyle practices reported in Table 5, going to movies is the one that is least likely to be avoided in the future. Perhaps for the participants of this study at least, video games are functioning the “new taboo” media among SDA young people. It would be interesting to explore this subject in more detail and see if it applies to other populations.

### **Micro level**

At the micro/organizational level, this study examined the relationship between SDA-specific beliefs and lifestyle practices and anticipated future practices. In general, agreement with doctrine is higher than agreement with lifestyle practices. Agreement with all doctrines correlate positively and significantly with all anticipated future practices. Not surprisingly, those who agree with doctrines now are also highly likely to indicate that they will agree with those doctrines and be church members in the future. The correlations with seeking spiritual development in the future are a bit lower. This may suggest that the SDA system of education is “working” in terms of indoctrination—training students on core beliefs, but it may be less effective in helping them see the need for broad spirituality outside of those doctrines. If the goal of religious communication is to help grow spiritual awareness broadly, then communicators may need to think about how to move beyond indoctrination to support for a deeper level of “life-orienting” spirituality that supports the individual in connecting with the community and the universe (Hiscock, 2019).

The lifestyle practices reported in Table 5 were drawn largely from earlier studies that were conducted in the 1970s (Brantley, 2020). Clearly, some of the taboos from that era are no longer important to many of the current generation of SDA college students. But for those who have the strongest intention to follow doctrine and lifestyle guidance in the future, there is a positive and significant correlation with all the lifestyle practices. The majority of these participants however see little relationship between



many of these taboos and having a long-term personal relationship with Jesus or continuing to seek spiritual development. Therefore, these taboos could be seen as markers for “orthodoxy” for some and as inhibitors to other types of spiritual development for others. While these particular taboos are unique to the SDA context, there are lessons for religious communication more broadly. Findings suggest that a focus on “markers” of religiosity may help bind members to the organization but may be less effective in supporting long-term spiritual growth.

### ***Meso and macro levels***

The religiosity scale (Genia, 1993) was used to examine relationships between factors such as worship as a community activity and anticipated future practices. On average, these students reported themselves to be moderately religious (3.47 on a 5-point scale), and correlations with all expected future practices were positive with a value of .50 or higher. Examination of the religiosity scale shows that it covers a broad range of topics that have some overlap with other elements of the systems model proposed in Figure 1. For example, it includes measures of personal study (individual level), adherence to beliefs (micro level), community worship (meso level), and exploration of the greater meaning of life (macro level). As such, future researchers might find this measure to be valuable in assessing a broad range of factors.

These students scored a bit higher on the spirituality scale than the religiosity scale (3.75 vs. 3.47). All the correlations with expected future practices were positive and significant, but none reached the .50 and above levels found for religiosity. The highest correlations were with continuing to worship with others, intention to retain church membership, and expectation for continued spiritual growth. These measures are all more clearly focused on broad exploration of the spiritual realm rather than on the specific practices of religion. They resonate with these emerging adults but are not as strong as the religiosity measures for predicting expected future religious practices.

Future researchers should consider both the religiosity and spirituality contexts and consider which of these measures would be most meaningful in the context of their specific research questions. Future researchers might also consider developing a new scale for religiosity that is more focused on the practice of religion within a religious community (meso level) that does not overlap with other levels of the systems model.

### **Limitations and future studies**

As with any research project, future changes could lead to greater insight. First, it would be good to have a larger sample—preferably representing

more than one SDA college/university. A longitudinal design could enable studying actual religious practices and beliefs after graduation from college. Additionally, this study was conducted in early 2021 during the global COVID-19 pandemic. It is possible that the disruption of that event could have led to responses that were atypical.

Several suggestions for the refinement of scales and measures are referenced in the discussion section. Brief references were also made to some data that were collected but not included as core to the research questions of the current study. Future studies could use these refined and expanded measures to study—for example, the relationship between media use patterns that focus on spiritual growth and other uses and gratifications. They could also study the relationship between understanding and agreement with doctrine and between agreement and actual practice related to lifestyle taboos.

## Conclusion

This study explored religious communication in the context of a proposed model that combines public relations system theory and a systems model of spirituality. The researchers found a rich media environment in which both interpersonal and mediated communication played an important role in education about Church beliefs and expanding spiritual growth.

This study found that students scored higher on spirituality than on religiosity. This supports two possible conclusions. First, communication practitioners who work for religious organizations need to address spiritual enlightenment rather than focusing primarily on the practice of religion in their messaging to emerging adults. Second, researchers may need to consider revisions to the long-standing measures of religiosity. The scale that was used for this study (Genia, 1993), represents a refinement of a scale that was developed in the 1960s (Allport and Ross, 1967). It includes items that are more focused on the macro level of the spirituality system than on the meso level. Revised scales should more clearly differentiate between the concepts of religiosity and spirituality.

Another interesting finding was that the more distanced from mainstream Christian beliefs SDA teachings are, the less strong is the belief in or intention to remain committed to them in the future. This suggests that either more work may be needed to shore up these teachings or the importance/relevance of them in relationship to current and future generations may need to be reexamined.

Finally, an opportunity exists for making a similar investment in communication via digital and social media as has historically been made in traditional media. Young people are being impacted by social media

influencers and consuming social media for information/entertainment, but more can be done to use these tools for supporting spiritual growth as well as religion.

In short, this research offers a case study of an organization that has some challenges in bringing its communication tools into the 21st century. It is also challenged in how to instill beliefs in college students about core church teachings and practices while also supporting community and spiritual exploration.

## Disclosure statement

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## Appendix A.

### Measures

#### *Expected future religious practices*

Agreement was measured on a five-point scale from 1 = highly unlikely to 5 = highly likely.

- I will have a personal relationship with Jesus
- I will believe in church doctrines
- I will abstain from certain lifestyle practices as recommended by the church
- I will regularly worship with others
- I will be a member of the Seventh-day Adventist church
- I will continue to seek spiritual development

#### *Interpersonal communication: how often do you communicate with the following categories of people for spiritual growth?*

Scored on a seven-point scale: 1 = Never, 2 = Very rarely—less than once a month, 3 = Rarely—about once a month, 4 = Sometimes—more than once a month but less than weekly, 5 = Regularly—at least once a week but less than daily, 6 = Often—daily but not more than once a day, 7 = Very often—more than once a day.

- Friends or peers
- Family
- Pastors or spiritual leaders
- Teachers
- Study groups
- School staff
- Social media influencers

#### *Mediated communication: how often do you use the following communication tools for spiritual growth?*

Scored on a seven-point scale: 1 = Never, 2 = Very rarely—less than once a month, 3 = Rarely—about once a month, 4 = Sometimes—more than once a month but less than weekly, 5 = Regularly—at least once a week but less than daily, 6 = Often—daily but not more than once a day, 7 = Very often—more than once a day.

- Bible
- Books
- Apps
- Ellen G. White's Writings
- Educational Materials
- Social Media
- Streaming Video
- Websites
- Podcasts
- Movies
- Blogs
- Radio



- Television
- Magazines
- Newspapers
- Video Games

***Agreement with SDA beliefs: please indicate your agreement with the following unique Seventh-day Adventists beliefs***

Agreement was measured on a five-point scale from 1 = not at all to 5 = very much.

- The fourth commandment of God's unchangeable law requires the observance of the seventh-day Sabbath as the day of rest, worship, and ministry
- God created the world in 6 days of 24-h each in the relatively recent past
- When people die their bodily remains decay and they have no consciousness or activity until the resurrection
- The second coming of Christ is imminent and it will be literal, personal, visible, and worldwide
- The Seventh-day Adventist church is specially called as a remnant to keep the commandments of God and the faith of Jesus
- The spirit of prophecy was manifested in the ministry of Ellen G. White
- The investigative judgment began in 1844 and Christ is acting as our advocate in the heavenly sanctuary right now

***Importance of abstaining from lifestyle practices: to what extent do you agree that it is important to abstain from the following***

Agreement was measured on a five-point scale from 1 = strongly disagree to 5 = strongly agree.

- Using tobacco
- Eating unclean foods
- Having sex outside of marriage
- Using alcoholic beverages
- Having a romantic relationship with a person of same sex
- Dressing immodestly
- Eating any animal products
- Listening to popular non-religious music
- Drinking caffeinated beverages
- Wearing jewelry (other than a wedding ring)
- Dancing
- Going to movies

***Religiosity measures: please indicate your level of agreement with each of these statements***

All items were measured on a five-point scale from 1 = strongly disagree to 5 = strongly agree. Items marked with an \* were reverse coded for analysis

- Religion is especially important to me because it answers many questions about the meaning of life.
- It is important to me to spend periods of time in private religious thought and meditation.



- My religious beliefs are what really lie behind my whole approach to life.
- Quite often I have been keenly aware of the presence of God.
- I try hard to carry my religion over into all my other dealings in life.
- I read literature about my faith.
- What religion offers me most is comfort when sorrows and misfortune strike.
- The primary purpose of prayer is to experience relief and protection.
- A primary reason for my interest in religion is that my house of worship is an enjoyable social opportunity.
- The purpose of prayer is to secure a happy and peaceful life.
- One reason for my being a congregation member is that such membership helps to establish a person in the community.
- My church is most important as a place to formulate good social relations.
- Although I believe in my religion, I feel there are many more important things in life.\*
- It doesn't matter so much what I believe so long as I lead a moral life.\*
- Although I am a religious person, I refuse to let religious considerations influence everyday affairs\*

***Spirituality measures: how well do the following statements describe your personal experience over the last 6 months?***

All items were measured on a five-point scale from 1 = strongly disagree to 5 = strongly agree

- Developing self-awareness
- Developing kindness toward other people
- Developing respect for others
- Developing meaning in life
- Developing a love for other people
- Developing a sense of identity
- Developing awe at a breathtaking view
- Developing joy in life
- Developing trust between individuals
- Developing a sense of "wonder" in the environment
- Developing connection with nature
- Developing forgiveness for other people
- Developing peace with God
- Developing worship of the Creator
- Developing a personal relationship with God
- Developing inner peace
- Developing harmony with the environment
- Developing oneness with God
- Developing prayer life
- Developing oneness with nature

## **Appendix B.**

### **Recruitment email for students**

Hi Students,

There's an interesting study being conducted by one of the professors on campus that explores possible relationships between spirituality, communication patterns, and beliefs, and we want to encourage you to participate.

The survey takes about 15 minutes to complete, and the researchers are offering twenty gift certificates of \$25 each as an incentive (you'll have the option to sign up for a drawing to win one).

To complete the survey, click on [this link](#).

Thank you!