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Health Beliefs, Behavior, Spiritual Growth, and Salvation in a Global Population of Seventh-day Adventists

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Health Beliefs, Behavior, Spiritual Growth, and Salvation in a Global Population of Seventh-day Adventists

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Abstract

Background The Seventh-day Adventist Church is a growing global denomination with strict substance use abstinence and recommended dietary requirements that together are called the “Health Message.” Abstinence from alcohol and tobacco is a requirement of membership and a plant-based diet is strongly advised.

Purpose While a wide variety of research has reported the Adventist health advantage, very little research has been conducted on Adventist members’ attitudes toward and adherence to the Health Message. This research examines members views, from a global survey, about the health message, personal adherence, and belief that adherence ensures salvation.

Methods The survey was conducted in 2017/2018 with a total N of 63,756. The questionnaire was translated into about 60 languages and then back translated into English for improved accuracy.

Results Over 80% of the respondents reported that they agreed the Adventist health message was wholistic, core to Adventist beliefs, supported by science, and increased the probability of a longer life. There were very few differences by global regions. About 80% also agreed that they should abstain from tobacco and alcohol and follow a healthy diet. However, about 45% believed that they could pick and choose which parts to follow with only a little over one-third reporting that they followed the Health Message a great deal. Strict adherence appeared to be in abstinence from alcohol (91%) and tobacco (97%). Only about 19% reported being vegetarian or vegan. Over 47%, mostly in the Southern Hemisphere, reported the belief that if they kept the Health Message completely, they would be assured of salvation, though this is at odds with formal doctrine.

Conclusions and Implications The data suggest that church leadership has been successful in obtaining global acceptance of the Health Message, convincing members of its scientific basis, and to abstain from tobacco and alcohol use. However, the data also show almost half of members believe that they can pick and choose elements to follow. In addition, these data have major implications for church leadership in

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disentangling the implications and expectations of the Health Message from the Church's fundamental belief that salvation is only through faith in Christ.

Keywords Religion · Health · Salvation

Religion and Health

From its earliest days the Christian Church was involved with health (Stark 1996). Stark argues that an important part of the success of Christianity was its role in caring for the sick in the Roman Empire, particularly during times of epidemics. Gary Ferngren (2009) has stated that the view of early Christianity toward the sick was characterized by a perspective that illness was not a punishment from God(s), but a part of existence in the world. All sick deserved care regardless of their religious beliefs, gender, or ethnicity. Faith-based hospitals are a current and growing part of the U.S. health care system. As of 2017, 17% of all hospitals were faith-based, up from 12% in 2005 (Elflein 2018). Health services have been for centuries, and continue to be, a core part of the involvement of Christianity in society.

Religion has also been studied to understand the impact of religious involvement on health behaviors, health status, and longevity. A wide variety of research has shown that those involved in their faith—from service attendance to personal devotions—are more likely to live longer (Li et al. 2016), have a higher sense of well-being (Perry 1998), lower rates of suicide (Chen et al. 2020), and better overall health (Chen and VanderWeele 2018; Williams and Sternthal 2007). They also are more likely to engage in pro-social behavior such as community volunteer activities (Saroglou 2013). Finally, those more involved with their faith are less likely to engage in high-risk behaviors, such as substance abuse, than those less involved or uninvolved in religion (Ford and Hill 2012; Mellor and Freeborn 2010; Wallace and Forman 1998).

Religion may also have specific health behavior requirements that involve diet or other practices that significantly improve health status. One of the oldest religious traditions, Judaism, has well-developed and complex health laws involving diet—foods that can and cannot be eaten and requirements as to how foods must be prepared (Leviticus 10). Islam has similar prohibitions (such as restrictions on pork consumption) and processing ritual called Halal. The ancient religions that emerged out of the Indian subcontinent tend toward vegetarianism and even veganism (Noureldin and Santos 2015). Jainists tend to be vegan. While there is a vegetarian tradition in Hinduism, eating of meat other than beef is common and appears to be increasing. To be a follower of God (or gods) one must abide by these traditions. While some have viewed these requirements as beneficial to health (Mirmiran et al. 2019; Sabate 2004; Sarri et al. 2003), most scholars seem to view these requirements as part of a holiness tradition (e.g., see Sprinkle 2000) rather than, at core, health-promoting. Generally, Christianity, while emerging from Judaism, did not accept Jewish dietary laws defining clean or unclean food, likely based on Peter's vision reported in Acts 10.

Some religious traditions also have forbidden alcohol consumption. Throughout its existence, Islam has always forbidden the consumption of alcohol. Judaism has had an approach that integrates alcohol with religious rituals particularly in the context of Sabbath rituals. Christianity has had a complex relationship with alcohol use. While all branches of Christianity are opposed to alcohol abuse and drunkenness, many have incorporated alcohol (wine) as a part of a sacred ritual, the Eucharist. On the other hand, some parts of what has been called a “holiness tradition” were in the past opposed to alcohol use in any form. In the United States, the nineteenth and early twentieth century prohibition movement was led and supported by major Christian denominations, particularly Methodists, Baptists, and elements of the Restoration Movement (Cherrington 1920; Warner 2009). The Women’s Christian Temperance Union was at the forefront of many social reforms, particularly the alcohol prohibition movement (Dannenbaum 1981). Over time, after the repeal of the Volstead Act, Christian groups moved away from abstinence to moderation. Today, almost all parts of even conservative Christianity have come to view moderate alcohol use as acceptable (see McBride et al. 1996; Wheaton College Covenant Statement 2020). However, many American evangelical groups also have memberships that are strongly encouraged to abstain from alcohol even though abstinence is not a requirement of membership. As Warner noted, alcohol abstinence seems to be related to Christian perfection in the context of other prohibited behaviors (Warner 2009). Today the only relatively large global Christian groups that may be called prohibitionist in that members are required, as a condition of membership, to abstain from alcohol (and tobacco) are two of the so-called “American Originals” (Lawson et al. 2012): the Church of Jesus Christ of Latter-Day Saints and the Seventh-day Adventist Church. Notably, both of these “American Originals” are also strict in their interpretation of Christian perfection and prohibit a broad range of behaviors and practices through policies, mores, and folkways (Warner 2009). It should be noted that Warner (2009) reported that Seventh-day Adventists had an alcohol abstinence rate of 60%. However, the Adventist sample was less than 30; too small for a valid estimate (see Michalak et al. 2007 for the original data report). Other studies with large Adventist samples (Beeson et al. 1989; Butler et al. 2008) have found recent Adventist alcohol abstinence rates higher than 90%.

The Health Message of the Seventh-day Adventist Church

The Seventh-day Adventist Church is a relatively large, global Christian denomination that prohibits alcohol and tobacco consumption, and that accepts the Levitical definition of clean and unclean meats—though without the ritual processes described in Leviticus. The Seventh-day Adventist Church arose in the United States from what was called the Second Great Awakening and Millerite religious movements in the early to mid-nineteenth century and was formally organized in 1863 (Schwartz 1979). Today the Church has over 21 million adherents across the globe in over 200 countries (Office of Archives, Statistics, and Research 2020) and is recognized by the World Council of Churches as probably the most widespread Protestant denomination. The Church is also recognized as centrally

organized into one world church (only about 8% of membership is in the U.S.) with a representative form of government (World Council of Churches 2020).

The health beliefs of the Seventh-day Adventist Church are organized under what Adventists call the “Health Message” because of the perceived process of Divine revelation that led to their development. The co-founder of the Church, Ellen G. White, reported a vision on June 5, 1863 in which God showed her that members of the Adventist Church need to abide by the Levitical dietary laws, abstain from alcohol and tobacco, and observe the seventh day as the Sabbath (Skrzypaszek 2014). This vision affirmed the wholistic approach to life emphasizing the links between the physical, mental, and spiritual components of human existence. This was the first of a series of Health Message visions that moved the Adventist Church toward a number of practices including vegetarianism, the development of Stop-Smoking clinics operated by churches, and the operation of the largest Protestant health-care system in the United States (Dyrda 2019). Today, Seventh-day Adventists recommend the consumption of a balanced vegetarian (lacto-ovo) or vegan diet (no animal-based products) with supplementation of essentials such as vitamin B 12. This recommendation is a core part of a wholistic emphasis of the relationship between mind, body, and spirit. At the core of the Adventist Health Message is a belief that the human body is the temple of the Holy Spirit, and that Adventists should be temperate in consuming that which is good for the body and should avoid that which damages the body. When joining the church new members make a number of commitments in what is called a Baptismal vow. Vow number 10 involves health behaviors:

Do you believe that your body is the temple of the Holy Spirit; and will you honor God by caring for it, avoiding the use of that which is harmful, and abstaining from all unclean foods; from the use, manufacture, or sale of alcoholic beverages; from the use, manufacture, or sale of tobacco in any of its forms for human consumption; and from the misuse of or trafficking in narcotics or other drugs. (General Conference of Seventh-day Adventists 2016, p. 46).

Further in the Church Manual (p. 62), fourteen behaviors are listed that will result in church discipline. The last three relate to this commitment:

12. The use, manufacture, or sale of alcoholic beverages.
13. The use, manufacture, or sale of tobacco in any of its forms for human consumption.
14. The use or manufacture of illicit drugs or the use, misuse, or sale of narcotics or drugs without appropriate medical cause and license.

The discipline includes removal from membership. This is an example of what Sociologists would call a *More*: a behavioral expectation required to maintain group membership. It is important to note that food is not on this disciplinary list. Meat eating and even the eating of unclean meats is not a matter of church discipline and could be regarded as what sociologists have historically called a strong *Folkway*. A folkway is a social norm that, though important, does not

have a strong moral component that defines group membership (Manning 2017; Sumner 1906). The violation of this folkway may result in informal or social sanctions (such as, in a congregational context, not being elected to a church leadership office). Yet to conceptualize vegetarianism solely as a “folkway” is incomplete. To be sure, vegetarianism is a strong folkway hallowed by time and custom. Although not a cause for formal discipline, Church leaders regularly (and strongly) promote vegetarianism, while publicly deprecating the eating of “flesh”. Many Adventist-run schools and hospitals across the globe do not, as a rule, serve meat. That vegetarianism neither is required in a Baptismal vow nor is a reason for church discipline arises from a particular Adventist understanding of healthy living and an important reason for valuing it. There is a belief that adhering to the Health Message enables clear thinking and correct discernment, which in turn is the basis for proper understanding of biblical teaching and of church doctrine. Alcohol, tobacco, and illicit drugs not only taint the “temple of the Holy Spirit,” but also distort judgment, and can thereby impair theological judgment and thus imperil salvation. Meat is seen as harmful to health but not as harmful to theological understanding.

Seventh-day Adventist Health Beliefs and Science

In the past Adventists have been defined as a sect. However, about 25 years ago, the Seventh-day Adventist Church began being characterized as a conservative strict denomination by social scientists (Dudley et al. 1997; Lawson 1998). Adventists believe in the inspiration (thought, not verbal) of the Bible and the continuing requirements of the Ten Commandments (critically including worshiping on the seventh day, Saturday). Unlike many conservative religious groups, Adventists also have a strong emphasis on higher education. The Church operates 115 colleges across the globe with over 145,000 students (General Conference of Seventh-day Adventists 2017). At core, the leaders of the Seventh-day Adventist Church believe and teach that their Health Message—while perceived to be provided by the inspiration of God to the Church’s co-founder, Ellen G. White—has also been confirmed by science. Research funded by the National Institutes of Health and published in major medical journals supports the vegetarian/vegan diet advocated by Adventists (e.g., see Orlich et al. 2013). Adventists, on average, live up to a decade longer than the general population largely because of abstaining from tobacco and alcohol as well as being more likely to be vegetarian or vegan (Fraser and Shavlik 2001; Fraser et al. 2020). Recent research that indicates that there is no safe level of alcohol use and there are no health benefits from its use (GBD 2016; Alcohol Collaborators 2018), is cited in major Adventist Church journals (Landless and McBride 2018). All this research has been used by Church leaders to argue for scientific support for what is perceived to be a direct revelation from God to a Church co-founder.

Methods

Purpose

It is the purpose of this current study to present data from the 2017 to 2018 Global Church Member Survey (GCMS) (Bailey et al. 2018) of Seventh-day Adventist Church members. The focus of these analyses is on members' views regarding the Health Message, their personal adherence to the Health Message, and the relationship between adherence and salvation. The Seventh-day Adventist Church is among the fastest growing denominations in the United States and across the globe; with an annual global growth rate between about one and seven percent in the last two decades (Office of Archives, Statistics, and Research 2019). As the Pew Foundation has noted, Seventh-day Adventists are the most ethnically diverse Church in the United States (Lipka 2015). Thus, this project allows for the examination of the degree to which mores (e.g. alcohol and tobacco use) and folkways (e.g. dietary practices) are distributed across a diverse global church membership.

Questions regarding the Health Message were a part of a larger, global study commissioned by the General Conference of Seventh-day Adventists and conducted in 2017/2018. The total number of respondents that completed some portion of the questionnaire was 63,756. The survey was developed by the research team building on previous world church surveys, with input from the Church's Office of Archives, Statistics, and Research (ASTR) and research teams from across the globe. Important focus was placed on measuring doctrinal adherence and meeting Church organization goals utilizing a conceptual framework focused on social bonding/integration. The questionnaire was developed in English and translated into about sixty languages. The questionnaire was then back-translated into English to help ensure a valid translation process. University-based research teams from each of the Adventist Church World Divisions familiar with their individual Division nuances were responsible for collecting the data. World Divisions can be understood as the 13 global regions or territories of the Adventist Church with elected church leadership. A purposive stratified sampling approach was used within the World Divisions to ensure variance in church size and location. The sampling approach resulted in considerable variance in demographics with 49.1% female and 50.9% male with no Division falling below 35% of either gender. There was no overall statistically significant relationship between the frequency distribution of gender by Division. (For the complete report describing the demographic findings see Bailey et al. 2018.)

While some surveys were collected via the internet, generally data was collected at some type of church service. Local research teams utilized their local Institutional Review Board, or equivalent review process. The meta-analysis research team was responsible for analyzing the integrated global data. The final sample is best understood as consisting of committed members who attended church on the day the questionnaire was collected or took the time to complete it on-line and were willing to spend an hour or more filling out the questionnaire. Data collection teams instructed the respondents to answer the questions truthfully reflecting their personal views. Every attempt was made to avoid demand characteristics in answers to the questionnaire. The entire

Table 1 Perception about the Adventist Health Message

	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
Health Message is holistic (mind, body, spirit) and contributes to spiritual growth	59.2%	32.6%	6.3%	1.0%	1.0%
Core to Adventist belief and cannot be questioned	46.0%	38.9%	9.1%	4.2%	1.8%
Health Message largely supported by science	42.0%	38.7%	12.4%	3.9%	3.1%
Following Health Message increases probability of a longer life	58.2%	33.7%	5.8%	1.4%	1.0%

project was approved by our University's Institutional Review Board. There were at least 53,000 completed responses to each of the questions examined in this paper.

Seven types of Health Message variables are examined.

1. Belief that the Adventist Health Message is wholistic and contributes to spiritual growth
2. Perception that the Health Message is core to Church beliefs
3. Perception that the Health Message is supported by scientific research
4. Personal acceptance (i.e. in belief) of the Health Message
5. Personal following (i.e. in behavior) of the Health Message
6. Substance use and dietary practices
7. Belief that following the Health Message ensures salvation

This analysis is an examination of the frequency distribution for each of the seven variables, and to an extent differences by gender, age, educational level, and differences by World Divisions of the Church. As noted, the Adventist Church is one of the most global Christian denominations with a large majority of its members outside of the United States. Thus, the Adventist Church encompasses very diverse cultural contexts which has caused some tension in the Church revolving around a number of issues (Johnsson 2017).

Results

Over 80% of respondents affirmed the perception of the Health Message as contributing to spiritual growth, as core to Adventism, as supported by science, and as contributing to longevity (Table 1). Given the vastly different global cultures that the Adventist Church exists in, there is a very high level of agreement regarding the wholism of the Health Message and its contribution to spiritual growth. Just over 59% of the respondents strongly agreed that the Health Message is wholistic with an additional almost 33% agreeing and only 2% of the global respondents disagreeing or strongly disagreeing. Wholism, defined in the questionnaire, is a core part of the communication of the Church to its members and emphasizes the positive impact of the Health Message on mental and physical health as well as spiritual development. Almost 85% of the respondents agreed that the Adventist Health Message is core to Church beliefs and cannot be questioned with only about 6% disagreeing; the modal (the most frequently checked) response was "strongly agree". The data suggest that Church leadership has been very successful at convincing members, regardless of cultural context, that the Adventist Health Message is wholistic, core to Adventist beliefs, and beyond questioning.

Data are also presented in Table 1 that examine respondents' perceptions of the scientific basis of the Health Message and the perception that following the Health Message increases the probability of a longer life. As has been noted, the National Institutes of Health have funded several studies examining the health impact of adherence to the Adventist Health Message (alcohol/tobacco abstinence

Table 2 Personal acceptance and following of the Adventist Health Message

	Embrace wholeheartedly	Accept church position	Some questions	Major doubts	Reject
Should abstain from alcohol, tobacco, and illicit drugs	80.4%	11.4%	2.7%	1.4%	4.1%
Have a healthy diet and abstain from unclean meats	81.1%	12.6%	3.4%	1.0%	1.8%
I can choose what parts of Health Message to follow	Strongly agree 16.7%	Agree 28.6%	Not sure 14.4%	Disagree 22.9%	Strongly disagree 17.3%
I follow the Health Message	A great deal 34.6%	A moderate amount 38.8%	Occasionally 15.5%	Rarely 8.6%	Never 2.6%

and vegetarianism/veganism) on mortality (e.g. see, Banta et al. 2018; Orlich et al. 2013). Church media has frequently published the positive results of these findings (e.g., see Fraser and Butler 2004). Specifically, over 80% of the respondents agreed or strongly agreed that the Health Message is supported by scientific research with almost 92% agreeing or strongly agreeing that following the Health Message increases the probability of a longer life. For both variables, “strongly agree” was the modal response with a majority (about 58%) strongly agreeing that following the Health Message increases the probably of a longer life. It is also important to note that there was not a substantive difference in these perceptions by gender; the correlation between gender and the distribution of these four questions ranged from 0.004 to 0.022. Similarly, there were no substantive differences by age group with correlations on the four questions examined ranging from 0.001 to 0.051. Also, analysis by educational level showed very few differences between the answers for these four questions. Only the question regarding the scientific base of the Health Message yielded a correlation above 0.04 with educational attainment. Those who had a college degree or higher were more likely to strongly agree that there was scientific support for the Health Message than those with only a primary school education (48.7% vs. 40.1%, $r=0.093$). These data may reflect the success of Church leadership and Church media in highlighting scientific research that shows the longevity impact of adherence to the Adventist Health Message regardless of global cultural context, gender, age, and to a significant extent, education.

Consistent with the data showing substantial agreement on perceptions of the role of the Health Message in Adventism, over 80% of respondents wholeheartedly embraced these key Health Message components about drug use and diet (see Table 2). Only about 4% rejected the Church’s position on abstaining from alcohol and tobacco, with less than 2% rejecting the concept that they should abstain from unclean meats. It should be noted that almost 13% accepted the Church’s position on substance use and clean meats because it was the Church’s position, not because they whole-heartedly embraced it; however, they adopted the official position, nonetheless. There was also no substantive difference by gender with correlations less than $r=0.02$. Again, the data suggest a very high level of personal acceptance of

Table 3 Practicing the Health Message

	Yes	No				
Use of tobacco in last 12 months	2.8%	97.2%				
Use of alcohol in last 12 months	9.0%	91.0%				
Dietary practices	Vegan	Vegetarian	Pescatarian	Meat 1X per week or less	Meat few times per week	Meat most days
	5.0%	13.9%	11.1%	32.2%	24.3%	13.5%

these core tenets of the Adventist Health Message regardless of cultural context or gender.

Personal acceptance (i.e. belief) paralleled perceptions of the centrality of the Health Message to the Adventist Church. Willingness to practice all aspects of the Health Message diverged from beliefs (see Table 2). Questions that focused on whether or not the respondent believed that they could choose the parts of the Health Message to follow and whether or not they personally followed the Health Message showed the common finding that changes in belief are more easily accomplished than changes in behavior (Webb and Sheeran 2006). Just over 45% agreed or strongly agreed that they could pick and choose with about 40% disagreeing or strongly disagreeing, a bi-modal distribution. Further, just over one-third of the respondents reported that they adhered to the Health Message a great deal (although an additional about 39% report adhering a moderate amount). Only about 11% said they adhered only rarely or never. There were no substantive differences by gender. The data clearly show that the respondents accepted the Adventist Health Message as core to Adventism and as scientifically supported and that they wholeheartedly embraced the message. However, the data also clearly show that most members reported that they did not follow it entirely, a great deal of the time. About as many members were likely to believe that they could pick and choose aspects of the Health Message to follow, compared to those who did not think they could pick and choose. These data suggest that the spirit may be willing, but the flesh is a weaker adherent to the Health Message.

As shown in Table 3, two behaviors of interest demonstrate an underlying complexity in adherence to Church requirements. Behaviors that are required for remaining in the church, mores, were widely adopted (i.e. tobacco and alcohol abstinence), while behaviors that are dependent on folkways, even strong ones, for regulation (i.e. diet) were much less likely to be adhered to. In the last 12 months, fewer than 3% of the global respondents reported that they had used tobacco and only 9% reported that they had used alcohol. While the use of alcohol and tobacco by males was slightly higher than the rate for females, the correlation between gender and substance use was only 0.04. These rates are considerably lower than reported in the general global population (Peacock et al. 2018). It is the significantly lower use of tobacco relative to the general population that has been cited for the last fifty years as a primary reason that Adventists, on average, live longer (Lemon et al. 1964). As was noted earlier, the use of tobacco and alcohol are reasons for church discipline.

Diet shows a different pattern. Recent reports of the longevity of Adventists have noted the contribution of a vegan or vegetarian diet to lifespan (Orlich et al. 2013). As has also been noted, unlike the use of tobacco and alcohol, diet is not a matter of formal church discipline and is more of a sociological folkway. On a global level, only 5% of Adventists reported that they were vegans and an additional approximately 14% reported being vegetarians (lacto-ovo). The modal response is “meat eater once a week or less” (about 32%). Overall, about 38% reported eating meat at least a few times a week or more. There were no substantial differences by gender, $r=0.02$.

As data in Table 4 show, there were major differences by World Divisions of the Adventist Church. The part of the global Church that was most likely to be

Table 4 Differences by General Conference World Division in dietary practices

Total <i>N</i> =56,215	Vegan	Vegetarian	Pescatarian	Meat 1×per week of less	Meat few times per week	Meat most days
West-Central Africa <i>N</i> =2180	5.3%	13.9%	11.1%	23.7%	29.1%	22.0%
East-Central Africa <i>N</i> =6927	11.4%	30.3%	15.7%	24.8%	14.4%	33.4%
Southern-Africa & Indian Ocean <i>N</i> =4845	4.7%	10.8%	12.1%	34.0%	26.0%	12.4%
South America <i>N</i> =14,239	1.8%	7.3%	6.7%	24.0%	31.6%	28.5%
Inter-America <i>N</i> =4346	2.6%	11.0%	9.4%	41.5%	25.1%	10.4%
North America <i>N</i> =1696	15.7%	35.1%	8.8%	20.6%	13.6%	10.4%
Trans-European <i>N</i> =1184	6.2%	19.0%	11.7%	33.0%	23.7%	6.3%
Inter-European <i>N</i> =3735	3.7%	17.4%	6.6%	41.5%	25.0%	5.7%
Euro-Asia <i>N</i> =2095	2.2%	13.2%	8.1%	45.4%	24.4%	6.6%
North Asia–Pacific <i>N</i> =2770	5.8%	15.6%	22.0%	32.3%	13.9%	10.4%
Southern Asia–Pacific <i>N</i> =6258	4.9%	10.9%	16.2%	43.2%	18.4%	6.3%
Southern Asia <i>N</i> =2822	6.5%	11.4%	4.0%	40.6%	29.8%	7.7%
South Pacific <i>N</i> =3118	4.2%	11.3%	14.7%	32.7%	26.2%	10.9%

vegetarian or vegan was North America (Canada and the United States). In this part of the world about 51% of all respondents reported that they were vegetarians or vegans. The only other part of the world where members reported a high rate of vegetarianism or veganism was East Central Africa at about 42%. Respondents in South America reported the highest rate of meat eating with about 60% reporting eating meat a few times or more a week, and only 9% reporting a vegetarian or vegan diet. About 51% of those in West Africa also reported eating meat at about this level. For 9 of the 13 World Divisions of the Church, the modal dietary category was “meat eater once a week or less”. Generally, Seventh-day Adventists around the world are not frequent meat eaters, but can be characterized as flexitarians rather than vegetarians or vegans.

Table 5 Differences by General Conference World Division on beliefs about salvation

	Health Message ensures salvation			Salvation through Christ alone			Saved the moment I believe		
	A	D	Net	A	D	Net	A	D	Net
Total population <i>N</i> =55,822	47.1%	38.2%	+8.9	95.4%	2.1%	+93.3	90.0%	4.6%	+85.4
West-Central Africa <i>N</i> =2211	58.9%	25.4%	+33.5	96.1%	2.2%	+93.9	93.2%	3.6%	+89.6
East-Central Africa <i>N</i> =7023	73.9%	17.2%	+56.7	97.2%	2.1%	+95.1	93.7%	4.1%	+89.6
Southern-Africa & Indian Ocean <i>N</i> =4874	59.3%	24.6%	+34.7	96.0%	2.6%	+93.4	90.6%	4.6%	+86.0
South America <i>N</i> =13,379	38.9%	45.6%	-6.7	95.2%	2.5%	+92.7	93.0%	3.5%	+89.5
Inter-America <i>N</i> =4313	34.4%	50.1%	-15.7	96.5%	2.3%	+94.2	91.4%	4.8%	+86.6
North America <i>N</i> =1689	4.3%	92.5%	-88.2	97.1%	1.5%	+95.7	89.6%	5.1%	+84.5
Trans-Europe <i>N</i> =1172	10.7%	80.7%	-70.0	98.3%	1.0%	+97.3	90.9%	4.7%	+86.2
Inter-Europe <i>N</i> =3594	18.2%	70.4%	-52.2	98.4%	1.2%	+97.2	93.4%	3.2%	+90.2
Euro-Asia <i>N</i> =2025	31.9%	49.2%	-17.3	88.8%	0.8%	+88.0	91.5%	4.4%	+87.1
Northern Asia–Pacific <i>N</i> =2743	28.2%	50.7%	-22.5	96.8%	1.7%	+95.1	78.9%	12.1%	+66.8
Southern Asia–Pacific <i>N</i> =6874	58.3%	19.9%	+38.4	88.7%	3.1%	+85.6	86.7%	3.2%	+83.5
Southern Asia <i>N</i> =2869	80.0%	7.4%	+72.6	92.0%	2.9%	+89.1	75.2%	9.5%	+65.7
South Pacific <i>N</i> =3056	58.4%	30.2%	+28.2	97.5%	0.8%	+96.7	94.2%	2.3%	+91.9

Note. A = agreement (“agree” + “strongly agree”). D = disagreement (“disagree” + “strongly disagree”). Net = A minus D. “Not sure” responses are not shown

The Health Message and Assurance of Salvation

Officially, the Seventh-day Adventist Church holds to the traditional Protestant doctrine that salvation is solely through faith in Christ and by His grace as is described in Fundamental Belief 10 (General Conference of Seventh-day Adventists 2020). However, some parts of the church membership have tended to focus on the role of the Health Message in salvation. The Church co-founder, Ellen G. White, predicted that before Christ’s second coming, His true followers would give up meat (become vegetarians) and any animal products (become vegans; White 2010). Her advice was driven by such issues as water pollution, and contamination in how meat is handled as well as ethical issues on the treatment of animals. Current vegan advocates in the

church add concerns about hormones and anti-biotics in animal husbandry. Vegan advocates note that recent meta-analysis on diet and longevity tends to support plant-only based diets (Hang et al. 2020). As Warner (2009) implies, Adventists are also working within the framework of a strict understanding of Wesley's Christian perfectionist position. Data are presented in Table 5 on the respondents' views on the question "*Following the health message ensures my salvation*" as well as respondent views that salvation is through Christ alone and at the moment one believes in Christ. Because of the sensitivity of the question on "*following the health message ensures my salvation*", we rechecked the back translations of each language used in the survey as well as worked with language experts in the Adventist Church with extensive experience in translations. In one language that was used in parts of India (Khasi), the authors and experts found that the back translation seemed ambiguous and could have been interpreted by respondents as ensuring good health or longevity rather than salvation. Removing the responses to the survey that used the Khasi language reduced the N for this question by 549 cases. In every other language and area of the world, the back translation was equivalent to *ensure* or *guarantee* salvation. In the context of strict Christian perfectionist beliefs present among Adventists (Knight 2013; Warner 2009) this statement places human behavior as the guarantor of salvation—and in tension with belief in salvation from Christ alone.

The data in Table 5 show that about 47% of the respondents strongly agreed or agreed that following the Health Message ensured their salvation. Overall, respondents were more likely to agree with this statement (47%) than disagree (38%), about a 9% difference. It was in these data that there were major differences by various regions of the world. As is also shown in Table 5, it was the part of the world that had the most vegetarian or vegan members, North America, that was the most likely to disagree or strongly disagree that following the Health Message ensured salvation. Only about 4% agreed or strongly agreed with this statement with over 92% disagreeing or strongly disagreeing, a difference of about 88 percentage points. However, in the second most vegetarian/vegan part of the world, East Central Africa, about 74% strongly agreed or agreed that keeping the Health Message ensured their salvation. Interestingly, in one of the least vegetarian/vegan areas of the world, West-Central Africa, a large majority (about 59%) agreed or strongly agreed that keeping the Health Message ensured their salvation. In the part of the world that reported the most frequent meat eating, the South American Division, over one-third agreed or strongly agreed that keeping the Health Message ensured salvation. The Division of the Adventist Church that had the highest agreement that following the Health Message ensured their salvation was the Southern Asia Division with 80% agreeing or strongly agreeing. The net differences are presented for answers to this question and the very large differences by regions of the Adventist Church are very apparent. In the North American Division, there was a net difference of about -88 percentage points between agreeing and disagreeing that salvation is ensured by keeping the Health Message. The reverse exists in the Southern Asia Division where there was a positive difference of almost 73%.

When we saw these data, we examined two other questions in the survey also presented in Table 5; "*Salvation is through Jesus Christ alone*" and "*I am saved the moment that I accept what Jesus has done for me*". Over 95% of the global

respondents agreed or strongly agreed that salvation was through Jesus alone with 90% believing that salvation occurred the moment they believed. We examined views of salvation by the different Divisions of the Church. While there were some differences, they were small. In all Divisions of the Church, at least 88.7% of the respondents agreed or strongly agreed that salvation is through Christ alone. In ten of the thirteen Divisions over 95% agreed or strongly agreed. At least 75% of each Division agreed or strongly agreed that they were saved the moment they accepted Christ with at least 90% holding this position in nine Divisions. These data suggest that on a global level and in each World Division of the Adventist Church, the vast majority supported these two core Protestant doctrines, which are in tension with the belief that strict perfectionist practices in substance use and diet can *ensure* or *guarantee* salvation.

Discussion

The Health Message of the Seventh-day Adventist Church is one of the unique aspects of the beliefs and practices of the Church. It is the only relatively large Christian Church that not only maintains an alcohol and tobacco abstinence position as a requirement of church membership, but also strongly advocates vegetarianism and increasingly veganism. These belief positions go back to the origin of the denomination and the advocacy of the Church's co-founder Ellen G. White, a former Methodist. Her views place the Seventh-day Adventist Church within the community of religious groups that adopted strict practical interpretations of John Wesley's emphasis on Christian perfection in the aftermath of the Second Great Awakening.

For over 50 years, Adventists have been the subject of research supported by the National Cancer Institute and the National Institutes of Health that have tended to support the health benefits of the Adventist positions of abstaining from tobacco and alcohol as well as Adventist dietary practices (Lemon et al. 1964; Orlich et al. 2013). These findings have been widely reported in the official Church journal, the *Adventist Review*, which is designed to keep lay members of the church informed about issues and activities of the Church (Fraser and Butler 2004; Landless and McBride 2018). In many ways the data presented indicate, regardless of cultural context or socio-demographic characteristics, the effectiveness of Church leadership in convincing global members about the importance of the Health Message and the scientific evidence that supports it. Overall, the data show that globally more than 90% of the members of the Seventh-day Adventist Church see the Church's Health Message as wholistic, as integrating mind, body, and spirit. Adventist teaching emphasizes that spiritual discernment and understanding is enhanced by a healthy body and mind and the data reported indicate that the members agree with this position. Unlike most religions, Adventists reject mind–body dualism and view human beings as not having separable corporal and spiritual (soul) components (Bailey and McBride 2020). A healthy diet and abstinence from alcohol and other substances is viewed as enhancing spiritual life. “Since its organization as a denomination in the mid-nineteenth century, the Seventh-day Adventist Church has been advocating the counsel of the Church's primary health reformer, Ellen G. White, which emphasizes

the role of lifestyle in promoting health, happiness, and enhanced spirituality,” (Kent 2017, para. 1). The data reported in the present study suggest that Adventists viewed the Health Message as wholistic with about 85% viewing the Health Message as core to Adventist Beliefs and unquestionable. The data also suggest that Church leaders have been very successful at communicating the scientific research supportive of Adventist Church positions on abstaining from tobacco and alcohol as well as the promotion of a vegetarian diet. Over 80% of church members agreed or strongly agreed that the Adventist Health Message is supported by science; over 91% believed that if the Health Message is followed, there is an increased probability of a longer life.

The data further suggest that not only does the global Adventist membership see the Health Message as core to Church beliefs, but over 80% personally, wholeheartedly, embraced the position that they should abstain from alcohol, tobacco, and illicit drugs as well as not eat “unclean” meats (as defined in Leviticus 10). Less than 10% of the respondents had any questions or doubts about this position or rejected it. However, the data also show that while respondents wholeheartedly embraced the Health Message and thought there was scientific evidence to support it, the respondents were evenly split regarding whether or not they could choose which parts of the Health Message to follow. About 45% thought they could choose, and about 40% thought that they could not choose which parts to follow. These data suggest that while there was cognitive agreement and personal acceptance about the Health Message, there seems to be less willingness to accept all its aspects. However, the data suggest that in terms of alcohol and tobacco, Adventists were very likely to personally accept abstinence from tobacco and alcohol with less than 3% smoking in the last year and only about 9% drinking alcohol. This practice is, of course, supported by strong Church policies that forbid and prescribe discipline for tobacco and alcohol use. Alcohol and tobacco abstinence are a more that can result in the removal of church membership.

It appears that members are making choices in areas that might be called folkways, where the church does not discipline members for failure to practice the Health Message; dietary practices. While there was a recognition that the Church emphasizes a plant-based diet, a large majority of global respondents (over two-thirds) indicated that they ate meat at least once a week or more with an additional 11% reporting that they ate fish. On a global level, only about 19% of Adventists reported being vegetarian or vegan. There were major differences by the World Divisions of the Church. The only geographical part of the Adventist Church where the majority (about 51%) reported being vegetarians or vegans, was North America (the U.S. and Canada). Adventists in East Central Africa were the only other group to report a relatively high rate of vegetarianism or veganism at about 42%. In every other part of the world, over 75% of Adventists reported eating meat and/or fish at least weekly. Adventists in South America were the most likely to eat meat regularly with about 60% reporting eating meat a few times a week or more. The meat-eating pattern of South American Adventists is consistent with the high level of meat that is consumed in South America. The World Economic Forum in 2016 noted that such countries as Argentina, Uruguay, Brazil, and Chile are in the top ten of meat consuming countries (Smith 2018). However, the same Forum also notes that the

United States has the highest per capita meat consumption at 97 kg per person per year. Data also suggest that meat consumption is increasing in the U.S. with some shift toward chicken and away from other meats (Waite 2018). This increase in meat consumption is also occurring in the context of an increased marketing and availability of plant-based meat substitutes. Adventists in North America thus seem to be counter-cultural with about half reporting that they are vegetarian or vegan.

The differences between adhering to the Church position of not smoking or drinking and dietary advice lies in the difference between behavior that results in church discipline and a behavior that is strongly recommended but practiced more as a social norm rather than a membership requirement. In sociological terms, this may be the difference between mores and folkways. The violation of mores results in some type of moral censure or legal consequence whereas a violation of a folkway results in some level of disapproval rather than a moral or legal reaction (Schaefer 2020). While there are church members who may wish to raise vegetarianism to a requirement for membership (a more), Church officials have resisted such efforts. Alcohol and tobacco do not relate to any nutritional needs. The health harm of tobacco has been accepted for almost six decades and recent research has shown that there is no health benefit to alcohol consumption (GBD 2016 Alcohol Collaborators 2018). As a global Church, Adventist Church leaders recognize that vegetarianism and particularly veganism is not a possible nutritional diet in some parts of the world. It may also be important to recognize that while the Church may be considered a strict church (Iannaccone 1994), it is a Protestant church with a focus on individual conscience.

Of the more interesting findings from the research are the data that show that about 47% of the global members of the Seventh-day Adventist Church believed that if they followed the Health Message they would be ensured of salvation. As was noted, we carefully examined all the translations to make sure of the accuracy of translation and we removed one language group with a questionable translation. While it is possible to interpret this statement as meaning that practicing the Health Message is an outgrowth of salvation, this interpretation is less likely when the item is read in the context of strict interpretations of Christian perfectionism (Warner 2009) that are historically and currently present in the Adventist Church (Knight 2013).

Thus, these differences suggest the complexity of integration of the traditional Protestant belief in Christ as the only means of salvation and the expectations of a strict church (Iannaccone 1994; Knight 2013) that requires or strongly emphasizes the need to adhere to substance abstinence and dietary requirements. Globally and in each Division of the Adventist Church, there was overwhelming support for the belief that salvation is through Christ alone and that salvation occurs the moment Christ is accepted. The data may also reflect that respondents checked off agreement with a core belief, salvation by Christ alone, without a depth of understanding of what the resulting consequences would be for belief in the Health Message. In other analyses of these data, Bailey and McBride (2020) found that the same parts of the world that linked keeping the Health Message with salvation were also more likely to report conflicting beliefs about the current state of dead believers (concurrent beliefs in “soul sleep” and presence with Christ in Heaven).

It was in the oldest and original part of the Church, North America, where members seemed to be able to clearly differentiate between the benefits of the Adventist Health Message and the source of salvation. It may be that making this distinction requires a few generations of church membership. The Adventist Church's Fundamental Belief number 10 emphasizes both that salvation is through faith in Christ alone and that "we are given the power to live a holy life" i.e., Christian perfectionism (General Conference of Seventh-day Adventists 2020, p. 5). Once again, it could be argued that many respondents answering the question about keeping the Health Message ensuring salvation, may have been answering within this framework. We tried to avoid this by using the word *ensure* and to not introduce other concepts that might imply that the Health Message would assist in salvation and we checked the translation and back translation in each included language used to make sure that the back translation returned as *ensure* or *guarantee*. A search of the official journals of the Adventist Church did not turn up any article in the last few decades that implied that keeping the Health Message ensured salvation. However, we recognize that members, particularly newer individual or regional group members, may have difficulty differentiating between the expectation of living a holy life as a result of salvation and ensuring salvation by keeping the Health Message. While it is speculative, members in North America may be able to differentiate these theological issues to a greater extent than members in parts of the world where the Adventist Church is newer.

Limitations

As was noted, the sample reported in this paper consists of those who attended church or a religious service the day the data were collected and took the time to fill out the questionnaire or those who took the time to fill it out on the internet. We defined this population as committed members. Their answers may have been different compared to more marginal members who attended less frequently. We recognize that the infrequent attendees and those who did not take the time to fill out the questionnaire may have changed the distribution of the answers to the questions and that the results reported are from those who likely represent the more committed members of the Seventh-day Adventist Church. In addition, any global survey that is translated into over sixty languages has accuracy challenges. We tried to address this by using translation experts that work for the Adventist Church and by undertaking back translations. Because of the global nature of the Church and its routine translation of materials, there is considerable expertise in translation. Because the data were generally collected in a group setting, there is the possibility the respondents felt pressure to be more doctrinally compliant. Those who collected the surveys instructed respondents to answer truthfully and explained that all responses were anonymous. Nevertheless, our interpretations have generally pointed to the group context as organizing church member behavior and belief even when it is doctrinally inconsistent—indeed, our interpretations assume pressure to follow certain folkways is responsible for differences across World Divisions. Additionally, there was considerable variance in the respondents' personal application of the Health Message

which indicates a willingness to act independently of group demand characteristics and that respondents did not feel pressured to answer in a way expected by church authority. In many ways, these analyses only touched the surface of the analyses that could have been conducted. Future analyses will go to more depth on teasing out the effect of co-variables as well as examining the influence of cultural context by global regions on these findings. Our research team has been awarded the 2023 Global Church Member Survey which will allow us to continue the analyses that this paper initiated.

Conclusions

Overall, the data presented in this paper found a very high level of global church member agreement that the Adventist Health Message is core to the Church's belief system, is backed by scientific evidence, increases the probability of a longer life, and contributes to spiritual growth. There were very few differences by global regions of the Church or socio-demographic characteristics, as would be expected of a strict church (Iannaccone 1994). The elements of the Health Message that relate to church discipline (mores), alcohol and tobacco consumption, are widely adhered to whereas dietary recommendations for vegetarianism or veganism that do not relate to church discipline (folkways) have much less adherence. On a global level, only about 19% of Adventist church members can be considered vegetarians or vegans. While 90% or more of the global Adventist population believed that salvation was through Christ alone and that they were saved the moment they accepted Christ, about 47% reported that if they kept the Health Message they would be ensured of salvation. There were major differences by global region. It was in the most vegetarian/vegan part of the world, North America, where over 92% disagreed that keeping the Health Message ensured salvation. This apparent dissonance between a belief that salvation is through Christ alone and that keeping the Health Message insured salvation is complex. Even those areas of the world that were more likely to eat meat were also likely to see salvation as being ensured if they just kept the Health Message. The data suggest that Adventist Church leadership needs to engage in further member education to differentiate and avoid confusion between the benefits of adhering to the Adventist Health Message and the Church's belief that the actual source of salvation is through Jesus Christ alone. Overall, these data also suggest church members understand the difference between organizational mores and folkways with adherence to mores and much less to folkways, even strong ones. However, the data may also suggest that church members in parts of the world where the Church is newer are struggling with the integration of these norms with the Adventist Church's doctrine of salvation through Christ alone and the Church's views of Christian perfectionism.

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