Beliefs and practices of the members of the Seventh-day Adventist Church of Mexico

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Abstract: The Seventh-day Adventist Church (SDA) in Mexico is organized into five geographic zones (Conferences). The instrument Survey 2017 for Members of the SDA, created by the General Conference of SDA, was applied in order to identify the SDA members’ profile in Mexico in relation to aspects related to belief and practice. The sampling scheme used was non-probabilistic for convenience. The sample size was n = 2,351 members of the SDA in Mexico. An exploratory descriptive analysis was carried out in seven key aspects: personal demographics, household demographics and religion, religious behavior and religious roles, attitudes and experiences, wellbeing, beliefs and health. A factorial analysis was made to the sections "Attitudes and Religious Experiences" and "Beliefs", using Principal Component Analysis. The internal consistency of the Religious Attitudes and Experiences section was evaluated by means of the Cronbach's Alpha coefficient.

Three factors were identified regarding Attitudes and Religious Experiences: 1) Identity and Mission, 2) Biblical Foundations, 3) Training and Communication. For Beliefs, two factors were identified: 1) Fundamental Beliefs, 2) Spiritual Implications.

Regarding the extracted factors, comparisons were made by Conference, gender and age, using ANOVA of a factor. Spatial representations of the performance of each Conference were made.

The IBM SPSS Statistics Version 22, R-Studio®, and QGis® software were used for data analysis. The level of significance was set at 0.05

Keywords: Religious beliefs. Religious practice. Seventh-day Adventist Church.

I. INTRODUCTION.

The Seventh-day Adventist Church (SDA) is a Protestant Christian church organized in 1863 in the United States. It originates with the movement led by Guillermo Miller, who emphasized the need to preach about the soon return of Jesus Christ to this world [1].

The SDA is organized with a well-defined hierarchical structure, which assigns responsibilities to representatives and officers. Five levels define the structure of the SDA, from the individual believer to the world organization:

1. The local Church is composed of individual believers.
2. The local Field or Mission is composed of several Churches in a defined territory that can encompass a whole State or parts of it.
3. The Conference is composed of groups and missions within a larger territory (often a grouping of states or a whole country).
4. The General Conference (also known as General Conference), the largest unit of the organization, is composed of all the Conferences in all parts of the world [2].

Periodically the SDA conducts studies to evaluate various aspects associated with the religious behavior of its members in order to establish plans and actions aimed at achieving an integral development (physical, mental, spiritual and emotional) of its members. The present study is derived from one of the five-year studies carried out by the SDA in the Inter-American Division (DIA).

The DIA is composed of 43 countries, organized in 24 Conferences (figure 1), where Spanish, English, and French are spoken, having a great variety of cultures and ethnic groups. The DIA has 3, 650,038 active church members in 13,216 local churches belonging to 24 Conferences.

The DIA was organized in 1922 and its territory includes Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, British Virgin Islands, Cayman Islands, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, El Salvador, French Guiana, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Montserrat, Netherlands Antilles, Nicaragua, Panama, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Turks and Caicos Islands, United States Virgin Islands, and Venezuela [4].
Mexico is one of the countries belonging to the DIA, it has 5 Conferences (from the Southeast, North, Central, Chiapas and Interoceanic). The survey "Belief and Practice of Seventh-day Adventists of the Inter-American Division" serves as a motivator for the present study, as it provides demographic data, beliefs and religious practices for the five Conferences that make up the Mexican territory. The purpose of the study is to describe and compare various variables that could be associated with the religious behavior of the members of the SDA that make up the five Conferences of Mexico. 

Statement of the problem

What is the profile of the members of the SDA in Mexico, with respect to personal demographic aspects, household demographics and religion, religious behavior and religious roles, attitudes and experiences, well-being, beliefs and health? How is the performance of the Conferences of Mexico with respect to key indicators of belief and practice of its members?

Justification

Relatively little research has been undertaken in Mexico to study the aspects of belief and faith (attitudes, health, spiritual life, religious behavior, family life) of the members of the SDA. The present study will provide the leaders of the SDA in Mexico with the necessary tools for strengthening and improving the strategic plan of their churches, by analyzing the religious behavior of their members, based on fundamental beliefs, behaviors, attitudes, family life, participation in the community and activities of the SDA, in order to fulfill the evangelizing mission of the SDA, and to help the community, preparing the world for the soon return of Christ.

Main goal

Contrast the profile of the members of the Seventh day Adventist Church, regarding their beliefs and religious practices by Conferences that belong to the territory of Mexico, using multivariate statistical techniques. Identify the current status of the members of the SDA in Mexico, regarding their beliefs and religious practices

Specific objectives

1. Generate a statistical report with demographic analysis, belief profiles and practice of SDA members:
   - Of the Inter-American Division (DIA) deliverable in March 2018.
   - For the Mexican Conferences deliverables in April 2018 (DPI): April 2018.
2. Perform an exploratory factor analysis to identify relevant variables in relation to beliefs, attitudes and religious experiences.
3. Contrast the status and performance of the members of the SDA in the territory of Mexico, by Conferences, gender and age groups.

II. THEORETICAL FRAMEWORK

Descriptive statistics is a set of methods for the visual and numerical presentation of data, which includes graphs (such as graphs by columns, lines and Excel circulars), frequency distributions and histograms to organize and present the data, indicators of central tendency (means, medians, portions) and dispersion indicators (range, standard deviation, variance).

A frequency distribution is a table that shows the number of observations in several non-overlapping groups. The graphic description of a frequency distribution of numerical data in the form of a diagram is called a histogram.

The analysis of variance or ANOVA, is a methodology to test hypotheses and draw conclusions about the equality of the means of multiple populations. In its simplest form, the unidirectional ANOVA compares the means of the observed responses of several different levels of a single factor, tests the hypothesis that the means of all populations are equal against the alternative hypothesis that less an average is different from others, for its determination it divides the total variability of the data into two parts: the variability between groups and the variation within the groups. If the total variation among the groups is small compared to the variation within the groups it indicates that the populations are the same, but if the variation is large within the groups it indicates that there is difference in the means of the unknown population [5].
Intentional or convenience sampling: Consists in the selection by non-random methods of a sample whose characteristics are similar to those of the target population. It may also be that the researcher directly and intentionally selects individuals from the population. The most frequent case of this procedure is to use as sample the individuals who are easily accessible.

In general, the method can be useful when an exploration of a phenomenon in a population is intended or when there is no defined sample size [6].

Factor analysis is a technique used to discover groupings of variables in such a way that the variables of each group are highly correlated, and the groups are relatively incorrect. In this way, it is possible to reduce a number of intercorrelated variables to a lower number of uncorrelated factors, which allow explaining most of the variability of each of the variables [7].

### III. STATE OF THE ART.

The University of Helsinki, Finland, conducted a study to measure the characteristics of religious believers, where 5 religious subgroups were identified with 984 participants and five non-believing subgroups with 1000 participants, with an average of 1060 believers being recruited to participate in forums of discussion through the internet, these believers differ in analytical thinking, empathy, mechanistic cognition, autistic and schizotypal traits.

Believers and non-believers were selected from among all participants based on their responses in the Supernatural Belief Scale. The scale (α = .94) evaluating religion and beliefs with eight elements of 5 points answers ranging from 1 (totally disagree) to 5 (strongly agree). Participants whose average score was in the lower third (M = 1.00-1.30) were included in the non-believing group, and those whose average score was in the upper third (M = 2.5-5.0) were included in the group of believers.

The rest of the participants were labeled as "average believers", their religious affiliations were none (77%) or Christian (23%).

Finland is not a secular country, 78% believe in some kind of spirit or God, 12% consider themselves agnostic, and 10% consider themselves atheists, making Finland an average country in terms of religiosity and atheism. A univariate analysis of variance showed that, among all participants, women were more religious than men. In addition, women scored higher than men in empathizing and autistic and schizotypal traits.

One of the diseases that causes the excess of activities, is the stress, in Pakistan they carried out an investigation in students of nursing from 19 to 30 years 556 participants, of two Christian religions (N = 304) and Muslim (N = 252). They used the Perceived Stress Scale (PSS) tools to measure the level of perceived stress and descriptive measures to see the characteristics of the sample in a summarized way and the t-test to analyze the difference of measures in the perception scores among the students of Christian and Muslim nursing. Nurses in training face many potential sources of stress on a daily basis, from the clinical setting, the educational setting and from their own personal environment.

Some of which are exemplified as financial concerns, lack of perception, social support, emotional suffering due to frequent exposure to patient deaths, illness, long trips or away from home and conflicts with patients, their families and with colleagues and senior staff. The result indicates that there is a statistically significant difference in means of perceived stress scores between Christian and Muslim nursing students (t = -3.103, df = 554, p <.002), which identifies that the perceived stress level in Nursing students who belong to minority groups significantly higher than their dominant counterparts, this is due to the practices and beliefs they have [8].

### IV. METHODOLOGY.

The measurement instrument (survey) was conducted by the General Conference of Seventh-day Adventists with a total of 56 questions containing 289 items distributed in seven sections (Demographic Data, Religious Behavior, Religious Attitudes and Experiences, Wellness, Beliefs and Health). The Department of Postgraduate and Research of the University of Montemorelos was in charge of making the translation of the instrument, its application, data collection and statistical analysis.

The sampling method used was non-probabilistic for convenience, where the 5 Mexican Conferences were contacted via email and telephone calls to request data from their churches (number of associations, number of churches and number of parishioners). The instrument was then sent to the places where there was confirmation of participating in the study via email where the district pastor would be responsible for the printing and distribution in their churches. The means of delivery by standard parcel was also used.

In addition, the paper instruments were sent to various cities in Mexico by means of people who agreed to collaborate in the study as applicants of the survey. The pastor of the locality was contacted, and authorization was requested for the application of the surveys to the church. The data collection period was approximately 7 months (June-December).

The data was captured in the Microsoft Excel Professional Plus 2016 software, and Dropbox platform. The sample size was 2351 participants, distributed by Conference as follows (Central 338, Interoceanic 441, North 1046, Southeast 210). An exploratory descriptive analysis was carried out for each of the 56 questions contained in the instrument. One-way analysis of variance was used with Tukey comparisons to compare the performance of each of the Mexican Conferences with respect to certain indicator variables.

A factorial analysis was used for question 28 (24 items) and 41 (32 items), using the factor extraction method by Principal
Component Analysis, with Varimax rotation with Kaiser normalization 3 factors were obtained for question 28 (Identity and Mission), Biblical Foundations, Training and communication), for question 41 the factors (Spiritual Implications and Fundamental Beliefs) in the same way the technique ANOVA with paired comparisons of Tukey were applied to compare the averages of the Conferences. For the data analysis, the software, R-Studio®, and QGis® was used. The level of significance was set at 0.05.

The participants of the Conferences manifested a lower percentage in the pastoral visits, 48% said that they are visited one to four times a year (Fig. 4).

In terms of satisfaction with the church, the statistical techniques ANOVA and Tukey were used to make comparisons between the variables with the scale (5. Very satisfied, 4 satisfied, 3. Neutral, 2. Unsatisfied, 1. Very dissatisfied) (Fig. 5).

V. RESULTS.

The sample was made up of 2,351 participants, members of the SDA in Mexico. 57% were women and 43% men; 87% state that they have no disability, while 14% said they had some type of disability (Visual, audio, cognitive, deafness, movement, speech, other).

In terms of home, the average number of people living at home is 4.12, of which 3.26 keep the Sabbath as a Sabbath. That is, of every 4 people in the home 3 keep the Sabbath. 88% of the participants have children. Of every 2 children 1 is inside the church.

58.5% are married and living with their husbands, 31.3% are single, 3.8% divorced, 2% separated, 3.2% widowed, while 1.2% of the participants declared living in a free union.

Home characteristics.

<table>
<thead>
<tr>
<th>House size</th>
<th>Sabbath keeping persons in the house</th>
<th>Alive children</th>
<th>Children in the church</th>
<th>Years being a baptized member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.12</td>
<td>3.46</td>
<td>1.73</td>
<td>1.24</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>1.992</td>
<td>1.768</td>
<td>1.842</td>
<td>1.393</td>
</tr>
</tbody>
</table>

Mexican Conferences showed a higher percentage of daily Bible study (Fig. 3).
Three factors were obtained from a question from the “Beliefs” section of the survey (Spiritual Implications, Fundamental Beliefs and a confusing factor), using Factor Analysis, using the factor extraction method by Principal Component Analysis, with Varimax rotation with standardization Kaiser. The sample data corresponding to the five Mexican Conferences were analyzed.

The instrument uses the Likert measurement scale of 5 points: 1: Strongly disagree, 2: Disagree, 3: Not sure, 4: Agree, 5: Strongly agree.

Average performance was compared among the five Mexican Conferences, by means of the average score (score) obtained, with respect to each of the three factors extracted, by means of Analysis of Variance of a factor (ANOVA) with paired comparisons of Tukey.

There was evidence of a significant effect of the "Conference" factor with respect to the average score obtained (p-value = 0.00). Tukey’s comparisons for the variable "Spiritual Implications" suggest three homogeneous subsets of Conferences: 1) Southeast, Central, North, 2) Central, Interoceanic and North, 3) Chiapas. The lowest scores were observed in the Southeast (2.12) and North (2.19) Conferences, while the highest in the Conference of Chiapas (2.63).

A significant effect of the factor "Age Group" was found on the average score obtained with respect to the variables "Spiritual Implications" (value p = 0.000). Paired comparisons of Tukey suggest for this factor 3 groups where participants <15 years have a confused perception on spiritual issues such as the state of the Dead and salvation. While the groups of 16-45, 46 to +60 do not present this type of perception, they have more knowledge in the area.
The five Conferences report that most of their members eat meat a few times a week, which indicates that there is a percentage of 41.4 that follows the pro-health message moderately, a 22.4 constantly applies it in their life and a 36.2 % every now and then or never apply it.

In the last year, 6.7% of the participants have consumed alcohol (Fig. 9) and 2.8% tobacco (Fig. 10) which indicates that it is a minimum percentage, however, it is not suitable for health. Because of this 44.1% said that they can not choose which parts of the health message to follow and which ones to ignore, this indicates that they feel obliged to follow this message, while 16.2% are not sure of choosing to follow it and 39.7 feel with the freedom to choose the health message.

VI. CONCLUSION.

In this study, indicators and measures of descriptive statistics were found in the most relevant and important aspects of the members of the Seventh-day Adventist Church belonging to the Mexican territory distributed in five Conferences (North, Central, Southeast, Chiapas, Interoceanic) as the beliefs, areas of faith, perceptions and attitudes.

The participants were 43.4% men and 54.6 women, 86% did not present disability, the level of education presented was secondary completed, likewise 58.5% is married, 31.3% is single, 3.8 divorced, 2% separated, 3.2 widower ( a), the average number of people living in a household is 2 of these 4, 3 save the Sabbath, while for every 2 living children, 1 is in the SDA.

73.4% of respondents belong to a church of 51-200 members, stating that on a normal Saturday, that number of people meets in their churches, 50.8% attend at least once or more times a week to the small group, 89.8% attend Sabbath school every Saturday, as well as weekday services, the pastoral visit by Conference is rare, as well as the capacity security that church leaders have, affirm the youth, however, it is not neglected the study of the bible, personal devotion, the reading of religious writings and the attachment to the fundamental beliefs that help their spiritual growth, in such a way that there is the ability to implement the spiritual gifts, and do not feel pressured to keep the Sabbath, but they better face the tensions of the week by saying that their lives are full of meaning and purpose. This indicates that the participants are satisfied with their local church, so there is a total commitment to Christ.

On the other hand, emphasis should be placed on the pastoral visit, since it greatly influences the spiritual growth of the participants and the church, as well as having good organization in the programs for children, youth and adults.

Continue to develop the comprehensive health and doctrinal knowledge program; this will reflect a well-nourished, participatory and above all, active church.

REFERENCES


