

# Construction and Validation of the Religious Fanaticism Scale in PR: Preliminary Findings

José Rodríguez Gómez<sup>1,2,\*</sup>, Estefanía Texidor Vega<sup>1</sup>

<sup>1</sup>PhD Clinical Psychology Program, Universidad Carlos Albizu, San Juan Campus, San Juan, PR

<sup>2</sup>Medical Sciences Campus, Geriatric Educational Center, University of Puerto Rico, San Juan, PR

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**Abstract** Fanaticism is defined as excessive, obsessive and even sickly in the evaluation or defense of a subject, theme, action or idea [1]. In either way, religious fanaticism can be seen like the inability to accept that the world has a complex diversity and then nobody has an absolute truth thus conceiving a society restricted to a mental or destructive ankyloses (Rodríguez, 2017). The purpose of this study is to develop Rodríguez- Gómez Religious Fanaticism Scale (EFRRG) (2016), as an instrument that measures how fanatical a person can be in terms of following a religious leader without any kind of critical analysis before his suggestions, or requirements. The sample was composed of 89 Puerto Rican adults (average age = 51 years), where 90% professed the protestant religion. The final scale consists of 14 items in 4 point Likert format, where the higher the scale score, the greater the fanaticism. The instrument demonstrated adequate internal consistency, according to Kline (2005) (Cronbach's Alfa, 0.79). A statistically significant inverse relation was found between completed education ( $Rho = -.310, p < .005$ ) and income ( $Rho = -.310, p < .005$ ). We suggest to continue to carry out studies to strengthen the psychometric criteria with a more extensive sample and administer it in multiple scenarios of religious denominations in Puerto Rico.

**Keywords** Religious fanaticism, Puerto Rico, Scale

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## 1. Introduction

Fanaticism is defined as “That person that is not open to reason, someone that is not prepared to think or argue, someone that in place of using the logic of an argument, uses authority and arbitrariness [2]. Through this research, the social and psychological impact of religious fanaticism in addition to the construction of a scale that evaluates said construct in Puerto Rico is considered. The scale pretends to identify how fanatic a person can be in terms of following a religious leader without any kind of critical analysis before his suggestions or requirements. At the moment, it has not been possible to identify, according to our literature review of the last ten years, a scale that evaluates such construction.

Although the separation of Church and State is maintained, Puerto Rico continues to be a religious island and ideological beliefs in this direction continue to influence the decisions of its followers and even of political leaders. In a study carried out by the Pew Research Center (2011) it was found that there are 3, 630,000 Christians in Puerto Rico, of whom

2,620,000 are Catholics, 940,000 Protestants, 10,000 Orthodox Catholics and 70,000 other Christians [3]. Therefore, the possibility that each of these subjects are highly influenced by the leaders who advise and guide them in their spiritual processes is real. It is very likely that the opinions of the leaders influence their positions on social issues such as gender education in schools, gender equality, the legalization of abortion, even in the participation of politics and election of candidates for government [3]. When there is a critical analysis and the person is able to take a stand before each question, it is not harmful to participate in a religion or any other social group; on the contrary, it is possible that is a buffer in difficult situations. However, when all the thoughts of religious leaders are taken for granted and correct, without considering that they are also human beings with the ability to make mistakes, it is where they get into a possible religious fanaticism that could raise problems at a psychosocial level.

Religious fanaticism can be conceptualized as a social problem when it interferes with the functioning of the individual and leads people to the extreme of defending their beliefs without taking into account any other point of view. This can cause difficulties in adjustment, work and even in their own congregation. It is important that in the context of, for example, psychological therapy, religious fanaticism be recognized to help people to be flexible in their way of thinking and their way of seeing things; not in order to

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\* Corresponding author:

jrodriguez@albizu.edu (José Rodríguez Gómez)

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change the ideologies, but to offer them tools that allow a better social adjustment. In this way, they can develop conflict resolution skills and increase tolerance and empathy. When carrying out a literature review in PR, in the last 10 years, using databases with descriptors aimed at identifying religious fanaticism, scales or related instruments, it was not possible to identify in these areas, demonstrating the lack of a scale of religious fanaticism and, therefore, the need to develop research in this direction. This is why the need arises to build and validate the Rodríguez-Gómez Religious Fanaticism Scale (2016), especially when considering the historical context of Puerto Rico. In this context, the field of religion can be a factor that lends itself to the manipulation of people or social groups with the negative triggers that this can cause. An instrument developed in order to initially identify as a screening the problem of religious fanaticism will be very useful. This scale can be used in the context of therapy as well as in research that considers the need to address this problem.

For purposes of this research, the construction and beginning of validation of the Rodríguez-Gómez Religious Fanaticism Scale (2016) was carried out and their psychometric properties were analysed, as well as their factorial structure using a sample of people in Puerto Rico. If the psychometric properties are adequate, the instrument can serve as an innovative tool in the field of Clinical Psychology and related areas, both in practice and investigative in Puerto Rico. Among the objectives of the research, are the following: 1. Construction and beginning of the validation of the Rodríguez-Gómez Religious Fanaticism Scale in accordance with the basic criteria of adequate proof construction of De Vellis (2012) and Kline (2005); and establish correlations, if the scale is adequate, with sociodemographic variables as compiled in the questionnaire for such purposes. 2. Carry out an item analysis with the purpose of calculating the discrimination index (*rbis*) of each item. Those items that met a value greater than or equal to .30 were selected [4,5]. 3. Determine the internal consistency of the scale using Cronbach's alpha criterion. It is recommended that this coefficient of internal consistency be greater than or equal to .70 [4]. 4. Carry out an exploratory factor analysis with Varimax rotation in order to observe how many factors meet an Eigen value greater than or equal to 1. It was also used as a criterion that the items meet a factorial load greater than or equal to .30 to be located in a factor [4].

### Hypothesis:

H<sub>1</sub>: It is expected that the instrument will be reliable according to Cronbach's alpha internal reliability index (greater than .70). A statistically significant difference ( $p \leq .05$ ) will be observed between the score of the Rodríguez-Gómez (2016) and the sociodemographic variables explored (i.e., gender, marital status, income, religion) of the participant.

## 2. Method

### Participants:

89 adult Puerto Rican participants (52 woman and 37 men) were selected by availability with an average of 51 years of age (DS 18 years), were 90% of participants professed the protestant religion. Over 50% have a bachelor's degree ( $n=36$  or 40%) or a master's degree ( $n=19$  or 21%). Likewise, 48% of the sample have an income between \$8,000 and \$40,000. 60% of the participants are married, 70% have children and the majority work full time schedule (=39). The participants were selected through churches that endorsed the investigation, the same are Presbyterian Church USA (PCUSA), Rvdo. Ramón Olivo Robles and Barceloneta, New Testament Pentecostal Church Inc.

### Procedures and instruments:

The sample was selected by availability among the previous two Protestant churches mentioned ( $n=89$ ). The principal investigator, or research assistant, obtained initial contact with the church (Minister/Reverend) leader to allow their access to the congregation and church members. Churches were visited on a Sunday where an ecclesial celebration and the church members were invited to participate in the study by direct communication. The purpose of the study, the procedures, the ethical aspects, as well as the use and management of the information was explained orally and in writing through the Participant's Informed Consent Form. This Research was endorsed by the Institutional Review Board for Research (IRB) of the Carlos Albizu University, thus satisfying all the ethical criteria necessary to carry out the research and protection of subjects participating in the research. In addition, they were explained in what consisted the sociodemographic data sheet and the Rodríguez-Gómez Religious Fanaticism Scale. The participants were informed that they could contact the principal investigator by phone and or through their email to raise any questions or concerns. Those who decided to participate voluntarily were distributed the instruments in written form in a manila envelope, and could be answered individually and privately in their homes or place of preference where confidentiality is kept. The researcher shared with the church members how the envelopes would be collected with the instruments of those participants who wished to answer them.

**Inclusion Criteria:** The participants were women and men of 21 years of age and older, who have resided in Puerto Rico for at least 5 years and have been members of any religious organization/denomination. The participants themselves must have agreed with the information contained in the informed Consent Form for Participants and answer in full the items of the instrument.

### Instruments:

1. Informed consent form for participants: This document aimed to offer the participants a vision of the purpose of the research, as well as a role in it.

2. Sociodemographic data sheet: The questions contained in this form were used to obtain information related to the characteristics of the study participants. Information was collected on the following variables: (a) age, (b) sex, (c) marital status, (d) academic preparation, (e) employment, (f) annual income, (g) children, (h) religion, (i) importance of spiritual belief or religion and (j) current psychological or psychiatric treatment.
3. Rodríguez- Gómez Religious Fanaticism Scale: The purpose of this study was to develop and test a self-report measure of religious fanaticism, as defined by the model previously discussed in the revised literature. The author developed a bank of 20 items that were answered, in line with the literature review and a focus group of 7 people knowledgeable about religion issues (believers and non-believers) which contributed to the creation of items around the area of religious fanaticism. Answers are provided on a Likert scale of 4 points that range from, 4-totally agree, 3-partially agree, 2-partially disagree and 1-totally disagree, based on the previously presented theoretical conception of religious fanaticism. The initial item bank was reviewed by 11 subjects that included experts in the area of psychology, test construction teachers, social researchers, as well as students and members of the community, for understanding, logic and readability of the items. The items were edited based on the feedback received. A number of items were constructed based on previous measures such as the acceptance of orders by the member belonging to a religion or denomination, religious abuse, manipulation by the religious leader or meaning and importance on the influence of the religious leader in the subject.

The final scale, after the exploratory factor analysis resulted in the preliminary draft of the scale of 14 items that are answered on a 4-point Likert scale. The minimum score of the scale is 14 points and the maximum score is 56 points. It usually takes around 15-20 minutes to respond. The greater the numerical magnitude, the greater the level of religious fanaticism of the person. These 14 items were selected after the evaluation of items [6]. The psychometric properties of the scale were obtained as a result of this validation study, which included Cronbach's alpha, as internal consistency index, exploratory factor analysis and rbis.

An exploratory factor analysis was carried out were all the responses, where subject to a principal component analysis with a Varimax rotation normalized [4]. Factor analysis represents method to study if a number of variables of interest are lineally related to a minimum number of unobservable factors. The varimax rotation emphasizes the detection of factors that are associated to the variables. On the other hand, it discourages the detection of factors that influence all the variables [4, 5].

### General Procedures:

Once the IRB approved this research proposal, the principal investigator contacted the church leader to authorize the collection of the sample; and those members that answered sociodemographic questionnaire and the Scale. The dates on which the churches where visited was coordinated. 100 manila envelopes were prepared. Each envelope included: 1) two copies of the informed consent sheet for Participants, 2) a Sociodemographic Data Sheet, 3) a copy of the Rodríguez-Gomez Religious Fanaticism Scale, and 4) a copy of the List of Psychiatric Hospitals and Emergency Rooms in Puerto Rico, for, in case of being necessary, to be consulted by the subjects. This envelopes were taken to the churches, as well as referral sheets, additional copies of the Informed Consent, pens and empty manila envelopes in case they were needed.

To match the Sociodemographic Data Sheets with the Rodríguez Gomez Religious Fanaticism Scale (2016), without identifying the participant, a code was assigned to each document of the envelopes. On the day agreed with the church members, the researchers showed up at the assigned time and proceeded to make the invitation to participate in the study. They distributed an Informed Consent Form and those present were guided on the purpose of the investigation, the inclusion and exclusion criteria of the same, the voluntariness of the participation, the procedures carried out to guarantee confidentiality and that the participation does not constitute any risk. Before proceeding to fill out the Consent Sheet, an opportunity was provided to clarify doubts and concerns. Those who were willing to participate marked with an X in the authorization space on the Participation Consent Sheet. Those who were interested in participating were given a manila envelope containing a blank copy of the Informed Consent Form, which they could take, a Sociodemographic Data, Rodríguez-Gomez Fanaticism Scale (2016) and, a list of Psychiatric hospitals and emergency rooms in Puerto Rico. The researchers informed the participants that the documents would be filled out in a place where they had privacy, good lighting and keep their confidentiality. The space was provided by the church members in the participating churches. It was coordinated with the participants when would the researchers would return to find the envelopes with the instruments answered. Every document generated during the visits was guarded by the principal investigator in a designated box. Documents were transported to the researchers academic office where they were kept locked in a closet until completing the data collection phase and statistical analysis.

### Statistical analysis:

The research design used was of a non-experimental exploratory design. The psychometry of the Religious Fanaticism Scale of Rodríguez Gómez (2016) was evaluated and correlated with the sociodemographic variables (i.e., gender, marital status, among others),

to know if there are significant correlations ( $p < .05$ ) between these variables and the scale. This type of design takes place in circumstances where the research problem has been little studied or has not been addressed before [7]. The psychometric properties of the scale will also be analyzed, its validity, reliability and discrimination being understood as well as its factorial structure (i.e., construct validity).

### 3. Results

Once the data was collected, the IBM SPSS version 23 statistical program was used to analyze it. The sample presents the following descriptions: A. An average of 51 years (DS+18 years); B. There are more women ( $n=52$  o 58%) than men ( $n=33$  o 37%); C. The majority are married ( $n=53$  o 60%); or single people never married ( $n=20$  o 22%); D. Over 50% have a bachelor's degree ( $n=36$  o 40%) or a master's degree ( $n=19$  o 21%); E. A majority works full time ( $n=39$ ) following the retirees ( $n=26$ ), for a total of 72%; F. An annual income between \$ 8,001-20,000 ( $n = 23$  or 25%) and twenty-one subjects has between \$ 21,000 - \$ 40,000 ( $n = 21$  or 23%). In general, approximately 48% of the sample has a salary between \$ 8,000- \$ 40,000. The majority have children ( $n = 63$  or 70%) versus those who do not ( $n = 36$  or 29%); In terms of religion, 90% are Protestants, 2.0% are Catholics, 6.0% are other religions and 2.0% are non-religious.

Several statistical analyses were carried out to measure the psychometric properties of the scale. First, a frequency analysis was carried out for the sociodemographic variables of the participants. Statistically significant inverse relationships were found between completed education ( $Rho = -.310$ ,  $p < .005$ ) and income ( $Rho = -.300$ ,  $p < .009$ ). There were no statistically significant differences by sex, age, marital status, children, work status, or psychological or psychiatric treatment. The results previously discussed are in harmony with literature [1]. Second, an item analysis was performed to know the discrimination index (rbis) of each of the items. Items whose indexes are .30 and higher were considered acceptable (Kline, 2005). Subsequently, a factor analysis was performed using the Varimax rotation technique. For this, it was expected that the factor load was

greater than or equal to .30 and that the factors have an Eigen value greater than or equal to 1 [4].

The internal consistency of the instrument was evaluated using Cronbach's Alpha method (Kline, 2005). The coefficient of internal reliability obtained was 0.79, one considered adequate according to Kline [4]. The Rodríguez-Gómez Religious Fanaticism Scale (2016) proved to have content validity, which indicates that it is a good screening instrument of fanaticism in a person who follows a religious leader.

### 4. Discussion

It is suggested to continue carrying out studies to strengthen the psychometric criteria with a more extensive sample and to carry out cross-cultural studies. Likewise, it is suggested to administer the scale in multiple scenarios of religious denominations in Puerto Rico and in other countries. Similarly, it is suggested to adapt the scale for other social areas (i.e., political fanaticism).

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