

## *Millennialism Scale: A Measurement of Thoughts and Feelings on the Millennium*

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### **Abstract**

Amongst many Christian denominations is the belief in a millennium, which is a period of 1,000 years either directly preceding or following the second coming of Jesus Christ. There are two differing perspectives based upon the millennium, separated by those who are pre-millennialists and post-millennialists (Mason, 2004). Pre-millennialists believe that people do not have the responsibility of creating peaceful conditions for the second coming of Christ because he will fix the earth. Post-millennialist believe that building a peaceful environment is a responsibility and a commandment that must occur in order for Christ to return again (Mason, 2004). These views have been found to influence how millennialists act in their marriages, attitudes towards climate change and the environment, and a number of other aspects of life and society (Curry, 2008; Wilcox, Linzey, & Jelen, 1991). Basing our questions on a model we created in 2014, this project has updated the previous survey and statistically improved the model. After running exploratory and confirmatory factor analyses, we created an 8-question model measuring an individual's pre-millennialist and post-millennialist score, CFI = 0.919, TLI = 0.880, AIC = 5806, BIC = 5864, RMSEA = 0.115, SRMR = 0.066. Data was collected from a diverse sample of 223 multicultural participants in the United States. We propose that this survey is a valid measure of pre-millennialist and post-millennialist mindsets, and be used to measure such things whenever needed in order to further the data collection on this subject in a statistically validated and standardized way.

Keywords: survey, peace, pre-millennialist, post-millennialist, millennium

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## **Millennialism Scale: A measurement of thoughts and feelings on the millennium**

Creating peace around the world has been a major goal for people throughout history, however it has proved difficult to find a way to realistically create a more peaceful world (Global Peace Index, 2016). As the world continues to foster more and more turmoil and grievance, there is a greater call for peace. Peacebuilding, as described by the UN and private organizations, is an attempt to tackle the sources of hostility and build conflict resolution in local capacity after peace has been imposed or negotiated (Doyle & Sambanis, 2001). Peacebuilding is put into place to prevent further destruction or hostility between groups (Zartman & Touval, 1985). Many strategies and methods have been formulated from case studies throughout history (Doyle & Sambanis, 2001). Mason (2004) observed two groups of people, those who actively went out to make a difference and those who let the world go in hopes that time would solve the problem (Cassanova, 2001).

The millennium is defined by Mason (2004) as a period of 1,000 years either directly preceding or following the second coming of Jesus Christ. The millennialism scale measures two different types of people: Pre-millennialists and Post-millennialists. Mason defines pre-millennialists as people who believe it is a commandment to build a peaceful environment in order for Christ to return; whereas post-millennialists believe that they do not have to create the conditions for Christ to return because he will come and fix everything when he comes back. Pre-millennialists believe Christ will return when the world decays into conflict while post-millennialists believe they will work to bring about the millennium and then Christ will return. These two mindsets differentiate those who are seeking the Second Coming of Jesus Christ by actively going out to create peaceful conditions and those who think by letting there be a lack of peace.

One study found those that act or have gone to war for peace believe more in being able to change the world while those who have never acted for peace don't believe their actions will change anything (Sarrica & Contarello, 2004). This demonstrates pre-millennialist mindsets and post-millennialist mindsets which involve people's attitudes and how that influences their behavior. Those that do not believe they are supposed to change the world (pre-millennialists) because Christ will fix everything don't go out trying to create peace, whereas post-millennialists are activists who try to change the world for the better and create peace to resolve conflict because they believe it is their duty.

Within a peacebuilding program offered at a university in the northwestern United States, it was observed that students tended to change their attitudes in many areas of peace and social justice which can be described as involving equity in resources, rights, and treatment of individuals or groups who do not share equal power due to racial, ethnic, age, socio-economic status, religion, physical ability or sexual orientation (Constantine, Hage, Kindaichi, & Bryant, 2007). To measure this change, a millennialist scale was designed to measure thoughts and feelings on the millennium. Curry (2008) found post-millennialists believe they need to create social change in order to prevent global warming and think the world is worth saving.

Wilcox, Linzey, and Jelen (1991) suggests pre-millennialist and post-millennialists mindsets are political consequences. They found that there is a difference in political power ideology between the two mindsets.

Ajzen (1991) suggested that by discovering how people perceive the future, you can identify their behaviors and attitudes. Ajzen described perceived behavioral control as “one’s ability to perform an act.” He believes behavioral control would influence an individual’s intention to act and the action itself. In a social justice context, this would involve people with the belief that they could ‘make a difference’ in the world. Ajzen also believed you could predict social justice actions with subjective norms which was defined as support or the lack of support in an environment to perform a behavior. Torres-Harding, Siers, and Olson (2012) describe behavioral intentions as someone’s engagement in social action or social justice-related activities. Christian denominations differ in their behavior and attitudes of what to do during this time of depravity (Bainton, 2008; Cassanova, 2001). We believe the millennialism scale can be used to measure thoughts on this time before the second coming. This scale should provide the ability to measure differences between those with differing beliefs about the Second Coming. It also can be used to investigate what drives human behavior based on religious ideology. In addition, it provides an opportunity to analyze differences in Christian denominations and their behavior based upon their beliefs of the Second Coming. We believe that there needs to be a consistent and valid measure of pre-millennialist and post-millennialist mindsets for further research. This has led us to the development of the Millennialist Scale: a measurement of thoughts and feelings on the millennium.

## **Method**

### **Participants**

Survey responses were collected from 224 multicultural students from an undergraduate university in the United States. The sample consisted of 65 males and 159 females with an average age of 22.1 years and standard deviation of 3.95 years. The diverse sample had 126 Caucasians, 42 Asians, 8 Hispanic, 42 Polynesians, and 6 unidentified.

### **Materials**

**14 Question Millennialist Scale (MS).** This scale seeks to identify differences in belief toward the Second Coming of Jesus Christ. Items were generated through interviewing students at an undergraduate university and analysis.

**26 Item Intrapersonal Dimension Scale (IDS).** Measures how much the individual agrees to intrapersonal statements based on experience in the past week (Lee, 2002). An example question states on a scale from 1 to 7, how strongly they agree with, “I am clear about my thoughts under stress.”

**Pro-social Personality Battery (PPB).** 30 item survey covering topics in social responsibility, empathy, moral reasoning, and self-reported altruism (Penner, Fritzsche, Craiger, & Freifeld, 1995).

**Social Justice Scale (SJS).** A 24 item questionnaire developed to measure attitudes toward social justice related to self-efficacy, efforts, social norms, and intentions related to activities and behaviors of social justice (Torres-Harding, Siers, & Olson, 2012). Subscales include attitudes toward social justice, perceived behavioral control, subjective norms, and behavioral intentions.

**RStudio.** R version 3. 3. 2 of RStudio was used to run the statistical analysis of the data (RStudio Team, 2016).

**Psych.** The Psych package version 1.5.8 was used to run the factorial analysis in R (Revelle, 2015).

**GPArotation.** The package GPArotation version 2014. 11- 1 was used to find the Cronbach alpha value for exploratory analysis (Bernaards & Jennrich, 2005).

**Lavaan.** The Lavaan package version 0.5 - 20 was used in the confirmatory analysis (Rosseel, 2012).

**Semplot.** The Semplot package version 1.0.1 was used in the confirmatory analysis (Epskamp, 2014).

## **Procedure**

A diverse group of undergraduates were given a combined survey consisting of the MS, IDS, PPB, and SJS. The survey was administered electronically using Qualtrics (Qualtrics, Provo, UT). After agreeing to informed consent, the survey took the students about 30 minutes to complete.

## **Results**

### **Exploratory**

Millennial Scale questions were created through professional experts in the field of Peacebuilding. Question structure also received feedback from experts in the area including Patrick Mason and David Pulcifer who are both published authors in peace studies as well as Zach Tilton who is an alumnus of the peacebuilding program and works in the peace corps. Interviews were conducted from people with different cultural, ethnic, and language backgrounds such as Pacific Islanders, Asians, and Hispanics from over 70 different countries. Interview questions pertained to whether the question made sense, if it was worded correctly, and if it could be interpreted incorrectly. It was found that in the initial screening of questions, the words “Kingdom of God” worked better than “Zion.” An exploratory Factor analysis was run on the initial 44 questions developed by experts. After checking for validity,

questions with a Cronbach's alpha above 0.6 were kept. The survey was then distributed again for further analysis. After exploratory factor analysis, a 14 question model of the millennialist survey was validated. Another round of data collection resulted in better fitted model by removing 6 questions to increase factor loadings for each question. An 8 question model was identified with questions 2, 5, 6, and 8 loading under premillennialism and questions 1, 3, 4, and 7 loading under postmillennialism: Q1 loading = 0.78, Q2 = 0.75, Q3 = 0.87, Q4 = 0.75, Q5 = 0.63, Q6 = 0.69, Q7 = 0.83, and Q8 = 0.80 (table 1). Modification indices were reviewed to confirm items loaded properly into their appropriate factors. Cronbach Alpha of 0.82 was calculated. These results suggest the model is plausible (Schermelleh-Engel, Moosbrugger, & Muller, 2003).

### **Confirmatory**

Confirmatory factor analysis validated the 8 question model CFI = 0.919, TLI = 0.880, AIC = 5806, BIC = 5864, RMSEA = 0.115, SRMR = 0.066. According to Hu & Bentler (1999), a Standardized Root Mean Square Residual Index (SRMR) with a value less than 0.08 is considered good fit. The SRMR finds the average standardized residuals between observed and hypothesized covariance (Chen, 2007). The root mean square error of approximation (RMSEA) measures the difference between observed and hypothesized covariance per degree of freedom and is an acceptable measure when between 0.08 and 0.10 (Cangur & Ercan, 2015). The Tucker Lewis Index (TLI) measures the independence of the model compared to the target model and is said to be acceptable above 0.95. Cangur and Ercan explain the Comparative Fit Index (CFI) as a measure of independence of the model compared to the target model in relation to the chi-square test statistics and is acceptable when larger than 0.95. Anderson, Burnham, and Thompson (2000) explain Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) as the best predictive fit estimations and said to be best when found lower than other models. The AIC and BIC can be compared to the old 14 question model which had the corresponding scores AIC = 7110 and BIC = 7188. These results confirm the strength and validity of the 8 question model over the 14 question model.

### **Regressions**

A linear regression analysis was used to validate the effectiveness of the 8 question Millennialist Scale. Premillennialism was used to predict factors from the IDS, PPB, and SJS. We were able to predict attitude toward social justice from premillennialism score  $F(1, 172) = 30.76$ ,  $p\text{-value} < 0.001$ , with an adjusted R-squared = 0.1468 (figure 1). Premillennialism predicted behavioral control  $F(1,172) = 21.71$ ,  $p\text{-value} < 0.001$ , adjusted R-square = 0.10 (figure 2). Premillennialism predicted behavioral intentions  $F(1, 172) = 16.8$ ,  $p\text{-value} < 0.001$ , adjusted R-square = 0.08 (figure 3). Premillennialism predicted subjected norms  $F(1,172) = 12.04$ ,  $p\text{-value} < 0.001$ , adjusted R-square = 0.06 (figure 4). Premillennialism predicted intrapersonal score  $F(1,172) = 6.368$ ,  $p\text{-value} = 0.012$ , adjusted R-square = 0.03 (figure 5). Premillennialism predicted altruism  $F(1, 172) = 3.058$ , one-tailed  $p\text{-value} < 0.05$ , adjusted R-square = 0.012 (figure 6).

## **Conclusion**

The millennialist survey was validated in measuring an individual's attitudes toward the second coming of Christ. Through the exploratory analysis, each question was found to fit into either pre-millennialist or post-millennialist mindset factors. The confirmatory analysis showed that the overall fit of the model and questionnaire is reliable and may be used as a whole. The regression analyses found the usefulness of the questionnaire when measuring social justice and other peacebuilding attitudes.

The millennialist survey allows for peacebuilding research and efforts to be further analyzed. The survey equips researchers with the ability to measure peacebuilding behavior and attitudes through the measurement of premillennialism and postmillennialism. Abu-Nimer (2001) sought to identify and measure the attitudes between religious cultures and find a way to have them work together toward peace. In addition to interviews, the millennialist survey can be a tool to measure attitudes quantitatively rather than only qualitatively to better discover ways in which we can help them work together toward creating peace. Religion is said to fuel conflict but also be the way to resolve conflict (Landou, 2003). Understanding someone's attitude toward the Second Coming may also predict important factors about an individual like their political ideology and public policy (Sriram, 2007).

The millennialist survey has a few more areas to explore in future research. One problem the questionnaire may face is the use toward other religions or people who are not familiar with the Christian faith. It may be proposed that the wording of the questionnaire be altered to fit more faiths of religion such as using attitudes toward the end of the world rather than the Second Coming. It may be advisable to explain the second coming as if it was saying "If the world was going to end tomorrow, what would you do?" Since religion is so integrated into peacebuilding and conflict resolution, we propose that the millennialist survey is a valid measure of people's attitudes toward the Second Coming which can be used to measure peacebuilding attitude and behavior.

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## Appendix A

Millennialism Scale: A measurement of thoughts and feelings on the millennium

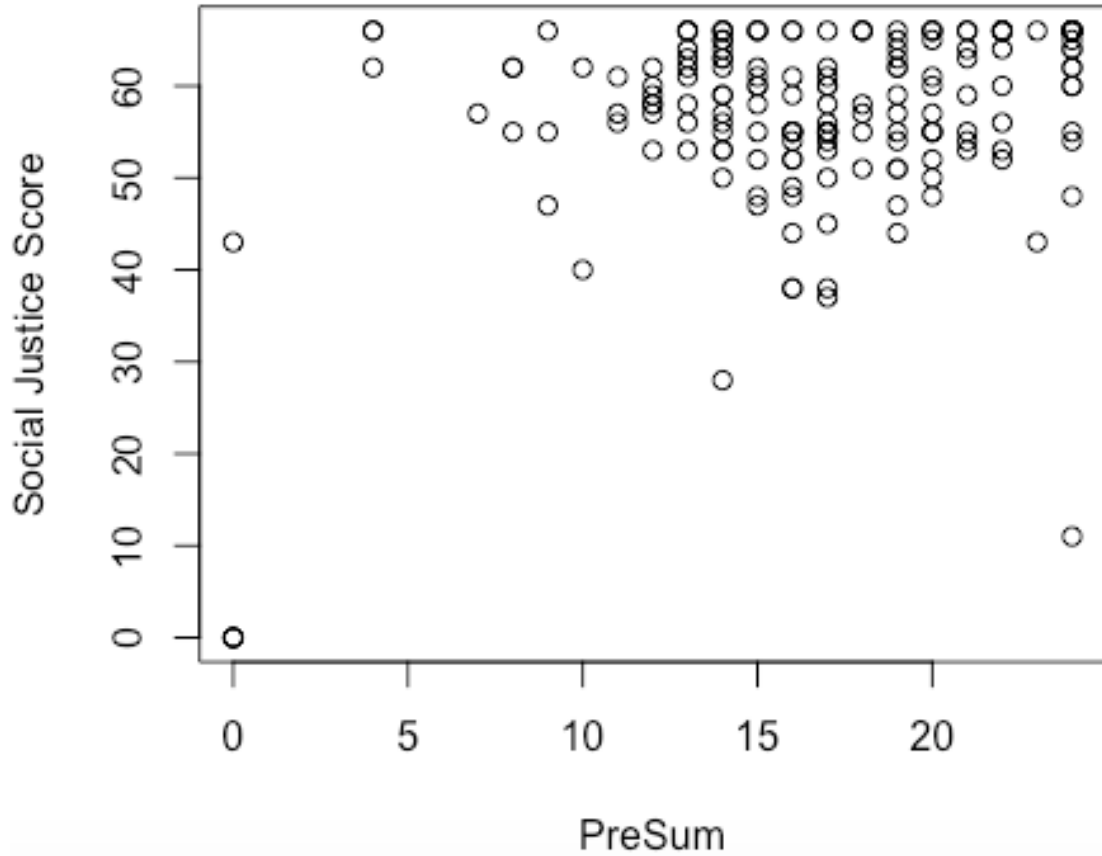


Figure 1 Predicting Social Justice from Pre-millennialism

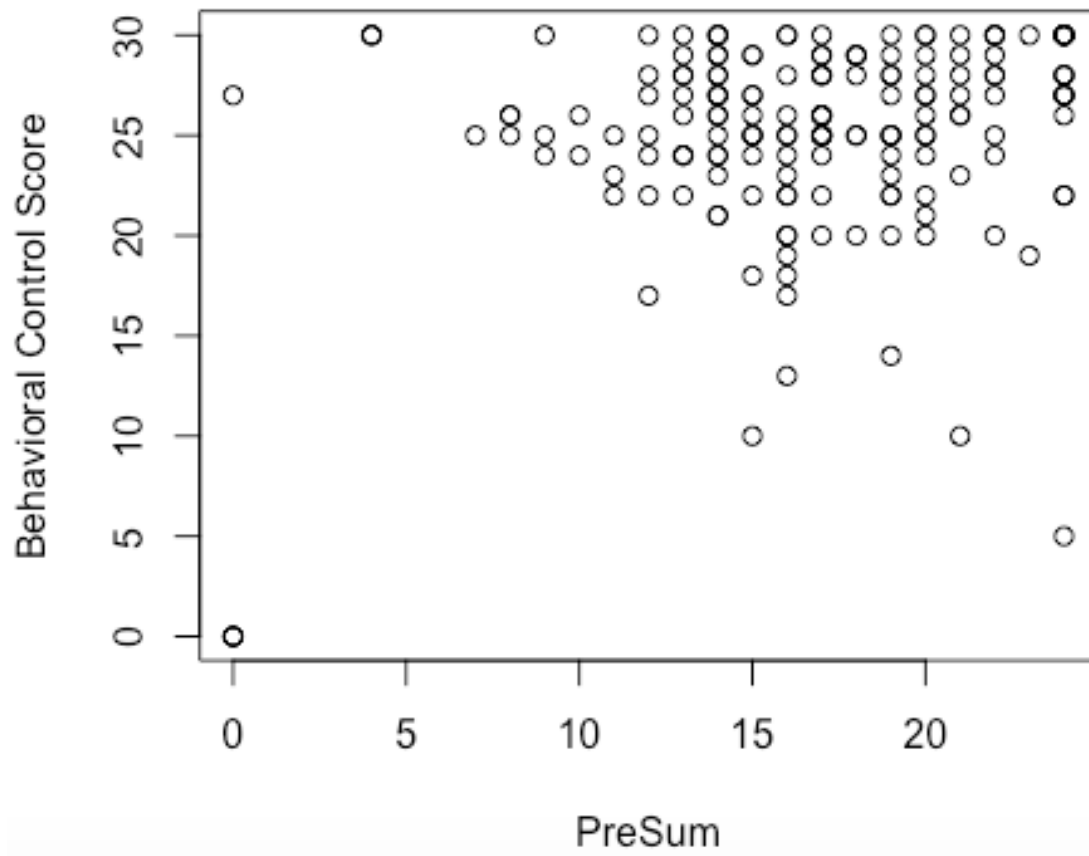


Figure 2 Predicting Behavior Control from Pre-millennialism

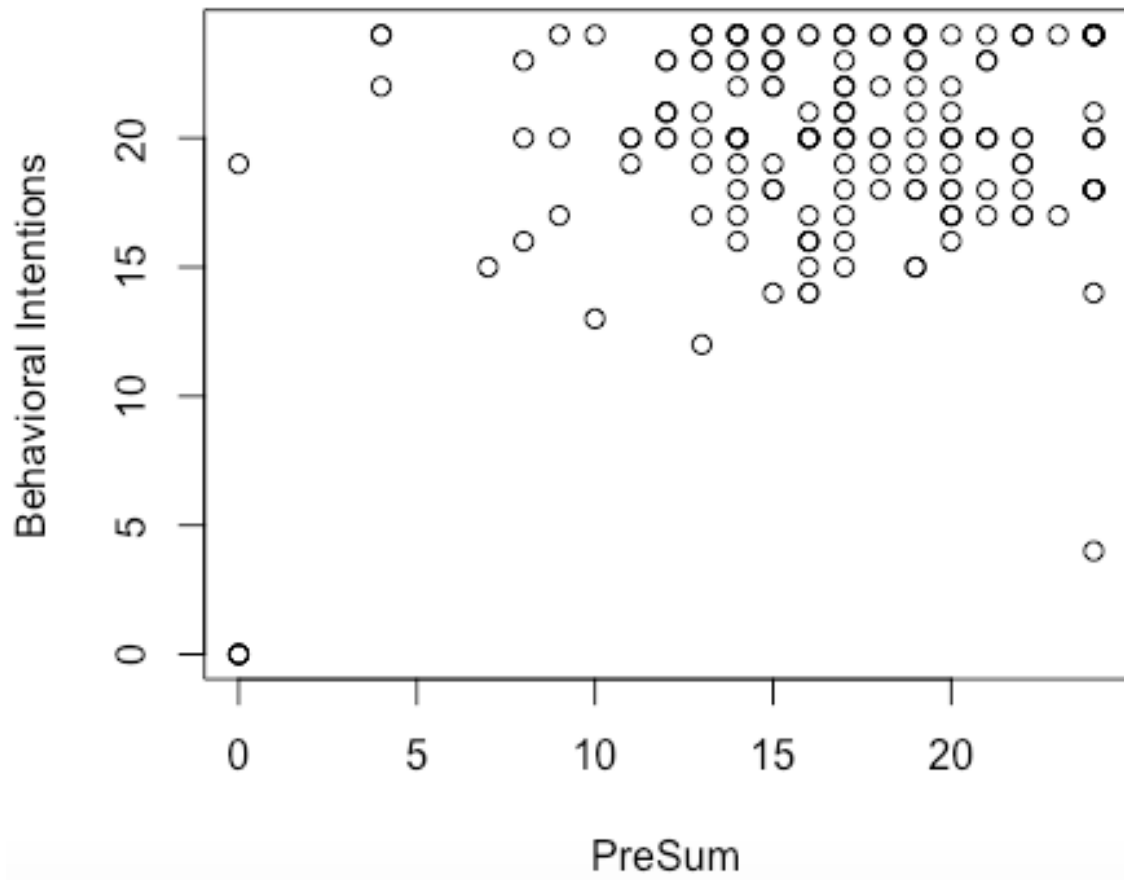


Figure 3 Predicting Behavioral Intentions from Pre-millennialism

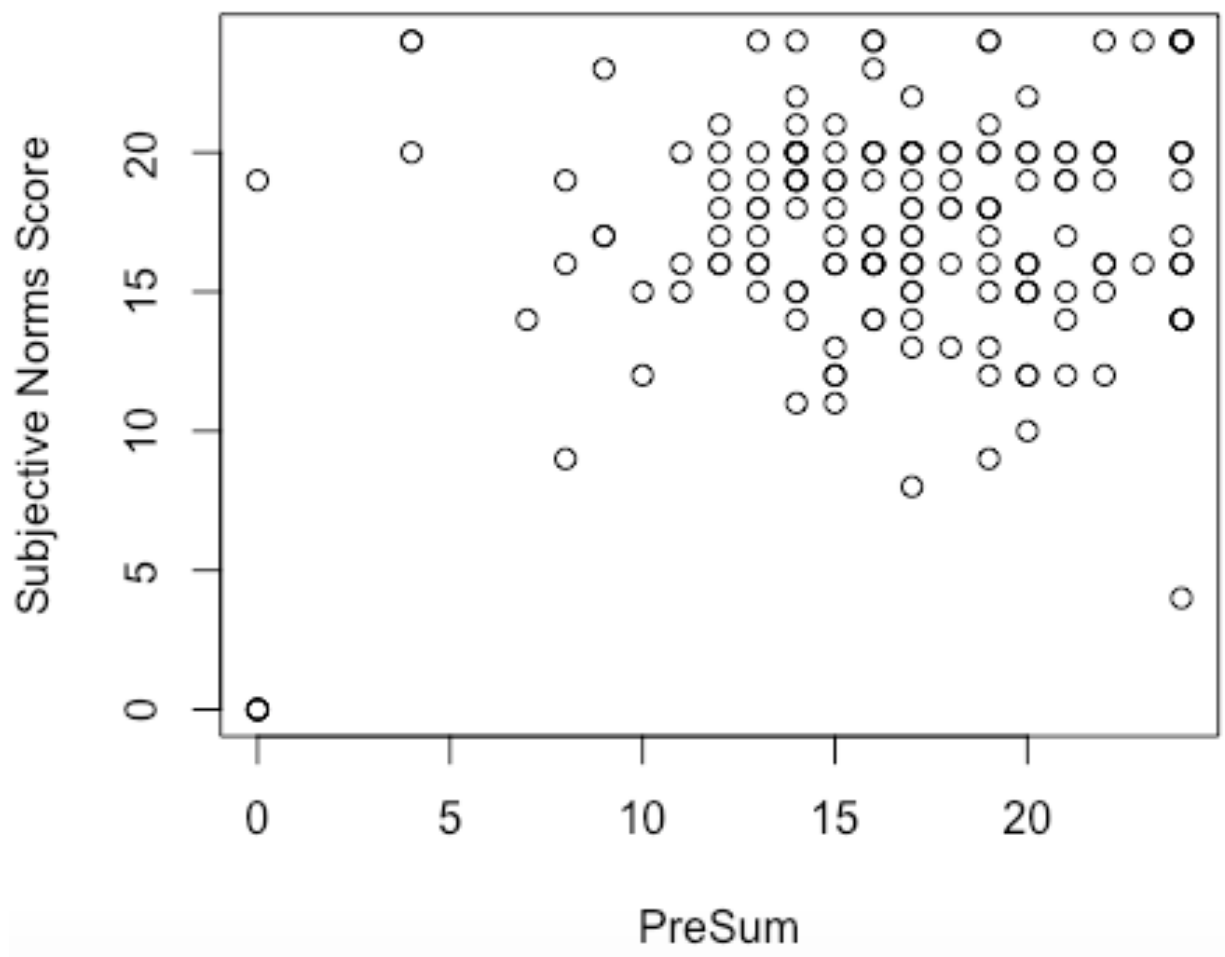


Figure 4 Predicting Subjective Norms from Pre-millennialism

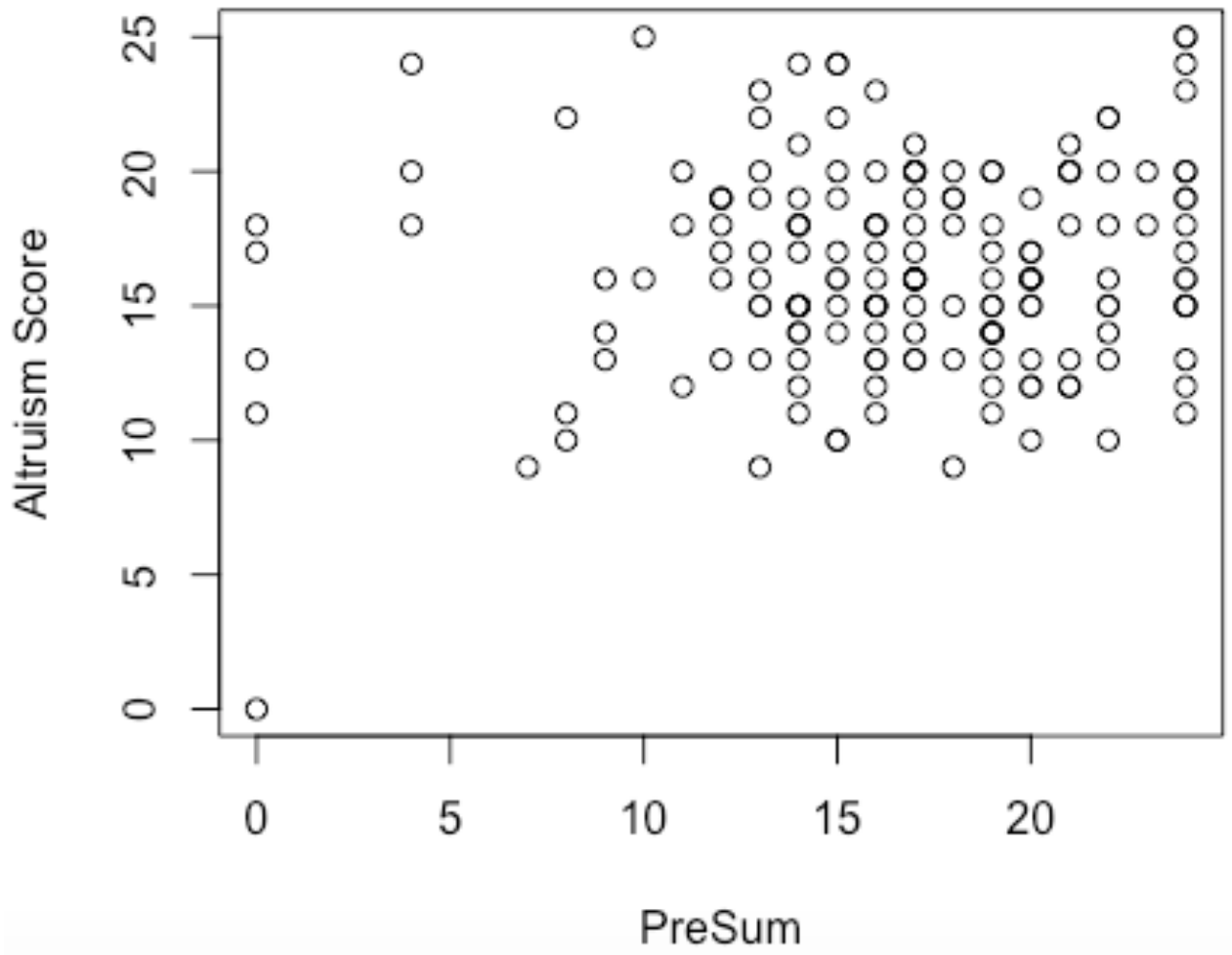


Figure 5 Predicting Altruism from Pre-millennialism

Table 1 8 Question Millennial Scale

**Millennial Inventory**

**Instructions:** These are questions about your thoughts and feelings concerning the millennium. Please read each question carefully and rate how much you agree with each of the following statements. Please be as honest and accurate as possible in your response.

	Strongly Disagree			Strongly Agree		
1. Christ will not come until the righteous create the conditions for the second coming.	1	2	3	4	5	6
2. When Christ comes he will make his followers of one heart and one mind.	1	2	3	4	5	6
3. Christ will not come until his followers are of one heart and one mind.	1	2	3	4	5	6
4. We need to create unity for Christ to come.	1	2	3	4	5	6
5. Christ will come when the people of the earth are the least unified.	1	2	3	4	5	6
6. Christ will come at the height of poverty in the world.	1	2	3	4	5	6
7. Christ will not come until his followers care for the poor and needy to the point that they eliminate poverty among themselves.	1	2	3	4	5	6
8. When Christ comes He will create the conditions for God's Kingdom on earth to be established.	1	2	3	4	5	6