Prejudice and attitudes towards non-religious individuals with the influences of religious orientation

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PREJUDICE AND ATTITUDES TOWARDS NON-RELIGIOUS INDIVIDUALS
WITH THE INFLUENCES OF RELIGIOUS ORIENTATION

by
Arielle M. Pinzon

A Thesis

Submitted in partial fulfillment of the requirements of the
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of
The Graduate School
at
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Approved by
Advisor
May 7, 2007

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ABSTRACT

Arielle M. Pinzon
PREJUDICE AND ATTITUDES TOWARDS NON-RELIGIOUS INDIVIDUALS
WITH THE INFLUENCES OF RELIGIOUS ORIENTATION
2007/08
Dr. Frank Epifanio and Dr. Roberta Dihoff
Master of Arts in School Psychology

The purpose of this study was to examine the connections between prejudice, and religiosity. Data was obtained by administering measures to 45 college students. The first measure was a set of vignettes (A and B) that involved a person who was described as “fairly religious”, or “atheist”, and a rating scale. The other measure was the Religious Orientation Scale Revised version (Gorsuch & McPherson, 1989). This was used to measure religiosity in terms of intrinsic of extrinsic. T-tests were run to determine the statistical differences between each group, as well as on specific adjectives. Correlation tests were run to determine whether religiosity was related to attitudes toward the individuals described in the vignettes. There was a statistically significant difference between group A and group B. There was also a statistically significant difference between the adjectives: “Spiritual”: t(43)=5.458, p=.000, “Reliable”: t(43)=2.490, p=.017 and “Honest”: t(43)=2.117, p=.040. The following adjectives approached significance: “Moral”: t(43)=1.958, p=.057, “Humble”: t(43)=1.887, p=.066 and “Insightful”: t(43)=1.774, p=.083. The participant’s attitudes towards the individuals on the vignettes did not correlate to the scores on the ROS-R scale or subscales.
Table of Contents

List of Figures v
List of Tables vi

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td></td>
</tr>
<tr>
<td>The Problem</td>
<td>1</td>
</tr>
<tr>
<td>Statement of Need</td>
<td>1</td>
</tr>
<tr>
<td>Purpose</td>
<td>3</td>
</tr>
<tr>
<td>Hypothesis</td>
<td>3</td>
</tr>
<tr>
<td>Theory</td>
<td>3</td>
</tr>
<tr>
<td>Definitions</td>
<td>4</td>
</tr>
<tr>
<td>Assumptions and Limitations</td>
<td>5</td>
</tr>
<tr>
<td>Overview</td>
<td>5</td>
</tr>
<tr>
<td>II.</td>
<td></td>
</tr>
<tr>
<td>Literature Review</td>
<td>7</td>
</tr>
<tr>
<td>Introduction</td>
<td>7</td>
</tr>
<tr>
<td>Definitions</td>
<td>7</td>
</tr>
<tr>
<td>Research on the Effects of Perceived Prejudice</td>
<td>8</td>
</tr>
<tr>
<td>Research on Stereotyping and Prejudice</td>
<td>9</td>
</tr>
<tr>
<td>Implicit Scales and Measures of Prejudice</td>
<td>13</td>
</tr>
<tr>
<td>Research on Prejudice and Religiosity</td>
<td>16</td>
</tr>
<tr>
<td>Research involving Atheism and Atheists</td>
<td>19</td>
</tr>
<tr>
<td>Summary</td>
<td>21</td>
</tr>
<tr>
<td>III.</td>
<td></td>
</tr>
<tr>
<td>Methodology</td>
<td>24</td>
</tr>
<tr>
<td>Introduction</td>
<td>24</td>
</tr>
<tr>
<td>Sample</td>
<td>24</td>
</tr>
</tbody>
</table>
Research Design 26
Measures 26
Hypothesis 27
Collection of Data and Analysis 28

IV. Analysis of Results 29
Introduction 29
Results 29
Summary of Findings 33

V. Summary and Conclusions 35
Discussion 35
Limitations and Implications for Future Research 38

References 39

Appendices

Appendix A: Vignette A ("fairly religious") 45
Appendix B: Vignette B ("atheist") 47
List of Figures

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 3.1 Age</td>
<td>25</td>
</tr>
<tr>
<td>Figure 3.2 Class</td>
<td>25</td>
</tr>
<tr>
<td>Figure 3.3 Religion</td>
<td>26</td>
</tr>
<tr>
<td>Figure 4.1 Likert Scale Averages</td>
<td>31</td>
</tr>
</tbody>
</table>
List of Tables

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 4.1 Group Statistics</td>
<td>30</td>
</tr>
<tr>
<td>Table 4.2 Independent Samples Test</td>
<td>30</td>
</tr>
<tr>
<td>Table 4.3 Group Statistics</td>
<td>31</td>
</tr>
<tr>
<td>Table 4.4 Correlations</td>
<td>33</td>
</tr>
</tbody>
</table>
Chapter I: The Problem

Statement of Need

Making quick assumptions about people based on group affiliation, e.g. stereotyping is a factor that is common in day-to-day life. Bigotry and prejudice are usually an offshoot of stereotyping, and can be harmful to the groups and individuals implicated by it. Examples of this in the extremes are found in study of Nazi Germany, the Ku Klux Klan and the current situation in the Darfur region of the Sudan.

Over the years in modern American culture, minority groups traditionally victimized by discrimination have seen increases in public awareness that have led to greater tolerance in general. Unfortunately, discrimination of groups that lack a strong identity such as the non-religious or more specifically, atheists, have not benefited from this trend.

Mainstream media and politicians have frequently portrayed atheists in a negative light. President Bush Senior is allegedly quoted as having said in a 1987 interview; “No, I don't know that atheists should be considered as citizens, nor should they be considered patriots. This is one nation under God” (Source Watch, 2007). This statement would have been unacceptable if the term “atheist” were exchanged with “homosexuals”, “Muslims” or another minority group. As atheists lack a strong group affiliation, it was difficult to build any public outcry towards this kind of statement and as a result the issue was largely ignored.

Another example along the same lines more recently was a panel aired on CNN in January of 2007. The title of the piece was “Why do Atheists Inspire Such Hatred?”
involving a story of a family in Mississippi who was ostracized for identifying themselves as atheists. After the story on the family was concluded, a panel of religious individuals had a discussion based on the title of the piece. Again, if the word “atheists” had been exchanged for another minority group, this type of story would not be acceptable. The panel did not include any atheists in the discussion and included statements such as, “They (atheists) need to shut-up”, and “They are on the attack…I really believe that they are the ones who are the intolerant ones against Christians” (Paula Zahn Now, 2007). This statement is misleading, as most atheists are not organized, and typically do not identify with any one set of values.

The main factor in considering this study was research conducted at the University of Minnesota by Penny Edgell, Joseph Gerteis and Douglas Hartmann, as part of the American Mosaic Project. This study showed that Americans perceive atheists as the group least likely to embrace common values and a shared vision of society. This result was contrary to initial hypotheses that assumed Muslims would be the least trusted out of all the groups included in the study, in a post 9/11 era. The second question in the study also came up with respondents identifying atheists as the cohort other that Americans do not want their children to marry. Of course, this does not say anything about what atheists are actually like, as the focus in this research was more directed towards the “symbolic” boundaries between the religious and the nonreligious.

The researchers of the study noted that other fringe minority groups - viewed in the past as “others” or outsiders within the “us vs. them” group mentality - have slowly been seeing increases in tolerance as religious and cultural diversity increases. However, their analysis showed that “attitudes about atheists have not followed that same historical
pattern as that for previously marginalized religious groups.” (Edgell, 231).

Purpose

The reasons why atheists are viewed as the least trusted group are still fairly unclear, and more work is necessary in investigating the range and depth of meanings associated with the term “atheist”, not only as “a symbolic moral boundary to membership in American society”, but on a more personal level as well. Very little research has been done in the area of prejudice towards non-religious groups such as atheists or agnostics. The purpose of this study is to examine the connections between prejudice, and religiosity.

Hypothesis

The main hypothesis in this study is that the level of an individual’s religiosity or religious affiliation is a contributing factor for the results seen in the University of Minnesota study cited above. It is hypothesized that people who self-report themselves as more extrinsically or intrinsically religious will rate an individual who is an atheist differently than they would rate someone who is religious. Hopefully, it would also be possible to compare perceptions of religiously oriented subjects to the perceptions of less religious subjects such as agnostics, or atheists; however this would depend on the sample size.

Theory

In the University of Minnesota study (Edgell, Gerteis, and Hartmann, 2006), it was shown that Americans draw symbolic boundaries that sharply exclude atheists in both private and public life. Looking at theories of why atheists are seen as the cohort “other” in American society another question is posed. Why would subjects judge
morality based on a group’s non-affiliation with another group? In this case, atheists are simply a group of people that do not identify as religious and do not believe God exists. It also seems to be the case that belief in God does not guarantee good behavior. Past research has shown that there is a very strong reaction to atheists—frequently in the context of the indexing of political and social tolerance. This will be discussed further in Chapter 2.

In past research, using a survey model creates the assumption of culturally symbolic boundaries, and subjects were not thinking of a specific atheist when asked about their attitude towards this “outside” group in public and private life. Instead, this study will include factors that will help participants see each category of either religious or atheist on a more personal, less symbolic level.

Also of importance in the literature is the concept of extrinsic and intrinsic religiosity. Extrinsic religiosity can be looked at the way an individual “uses their religion”. The opposite of extrinsic religiosity is intrinsic religiosity, which is when a person “lives their religion” as an end in itself. Past research has shown that most people fall somewhere on the spectrum between extrinsic or intrinsic religiosity. In terms of early research on extrinsic vs. intrinsic religiosity, it has been established that churchgoers are more prejudiced than non-churchgoers. Past research has also suggested that people with an extrinsic religious orientation are significantly more prejudiced than people with a more intrinsic religious orientation.

Definitions

In operational terms, prejudice will be thought of as how differently an individual rates someone different from themselves. In identifying as part of a religious group,
subjects will be sharing their attitudes towards either a religious or atheist individual, which may or may not be positive. If the subject is closer to the more religious part of the spectrum on measures, and rates an atheist individual negatively it can be said that a certain amount of prejudice exists.

Religiosity will be operationally defined by how religious a subject is. This will be rated on scales measuring how religious they consider themselves, how frequently they participate in religiously oriented activity such as going to church or praying, and finally, how strongly they feel about their religious beliefs.

Assumptions and Limitations

There may be many limitations to the study in terms of selection of participant, design and the ability to gather data without confounding factors. College students will be the participants of this study, and it is unknown how religious they are, or how open-minded they may be in reacting to an individual of religious or non-religious orientation. It will also have to be assumed they are being genuine in their responses. This is important to consider as this study will not be looking very deeply into the symbolic cultural boundaries, but more at the personal boundaries and attitudes that people exhibit towards an individual different from themselves. Of high importance is simply in investigating the range and depth of meanings associated with the term “atheist” on a more personal level. It is also important to consider good participant effects, which may occur in a study like this.

Overview

In the following chapters a review of the literature and the methodology will be discussed. The literature review in Chapter 2 will go over past and current research on
prejudice, stereotyping, and religiosity. Chapter 3 will provide an explanation for the
design and methodology of the study. It will include a description of the measures that
will be used and the sample size. In the chapters following after the research has been
c Conducted the results will be presented, analyzed and interpreted.
Chapter II: Literature Review

Introduction

Many studies have researched different aspects of prejudice and stereotyping. There has not been enough research done on prejudice towards the non-religious. In this chapter, past research is reviewed beginning with the wide-ranging findings on prejudice in general. Prejudice in reference to religion will then be discussed. The last section will focus on how religion and religiosity has been studied in the past. The last part will involve more in depth discussion of the study that took place during part of the Mosaic Project, by Edgell, Gerteis and Hartmann. This study will be discussed in relation to the stereotypes of atheists as well as statistics related to levels of religiosity and overall societal health.

Definitions

It is important to define the term prejudice in contrast to other terms such as stereotyping, discrimination, ethnocentrism, and bias. According to the American Heritage Dictionary (2006), discrimination is “treatment or consideration based on class or category rather than individual merit”. Bias can be defined as “a preference or an inclination, especially one that inhibits impartial judgment”. Stereotyping is “a conventional, formulaic, and oversimplified conception, opinion, or image of a person or group”. Ethnocentrism can be defined as “belief in the superiority of one's own ethnic group”. Finally, prejudice can be defined as “an adverse judgment or opinion formed beforehand or without knowledge or examination of the facts”.

7
Research on the Effects of Perceived Prejudice

Before beginning a review of research on individual’s prejudices and types of prejudices, the question of “What is it like to be a victim of prejudice?” must be addressed. Since the results of the Mosaic Project were published (discussed in the last section of this chapter), this is a relevant area of research to look into as non-religious individuals and individuals who identify as atheists or agnostics are likely to feel a certain amount of perceived prejudice, whether or not they experience outright discrimination. Kenneth L. Dion (2001) conducted a lot of research on prejudice from the perspective of the “victim” or target, beginning in the early 70’s. Interestingly, early experiments Dion (1975) conducted showed evidence that perceived gender prejudice does not inevitably lower self-esteem in the victim or target. However, the strength of this buffering affect varies across groups and may not appear in every group subject to prejudice or discrimination. Dion and Earn (1975) conducted further research that showed evidence for the stress model of prejudice and discrimination. These studies resulted in correlation evidence that perceived prejudices are stressful “although ‘hardy’ people may be somewhat less susceptible to discrimination-related stress” (Dion, 2001). In his review of the research and duplication of his own experiments, he found that perceiving oneself to be a target of prejudice or discrimination can have a negative impact on the individual, but can also act as the fuel for social change in groups that are able to organize.

Research conducted by Carvallo, and Pelham (2006) investigated the role that the need to belong (NTB) plays in people’s judgments of personal and group discrimination and in attributions people make for potentially discriminatory evaluations. Their research was primarily based in Crosby’s (1982) research that involved the personal-group
discrimination discrepancy. In this study, women reported that they experienced lower levels of discrimination than they reported for women as a group. This is a serious problem because it may lead to individuals of out-groups indirectly communicating to others that discrimination is not an important social problem. In some cases, individuals may unwittingly play an active role in maintaining their own maltreatment. According to Williams and Sommer (1997), NTB is defined as the desire for frequent positive and stable interactions with others. It can easily lead to a strong need for social acceptance and an even stronger aversion to social rejection. Carvallo and Pelham's research showed that people high in NTB reported experiencing lower than average levels of personal and higher than average levels of group discrimination on the basis of gender.

Research on Stereotyping and Prejudice

McCaulty, Stitt and Segal (1980) argued based on an analysis of research on stereotypes that what is wrong with stereotyping is basically what is wrong with conceptual human behavior in general. The first problem with stereotyping is that it can easily be misused when its so-called predictions are relied upon too much. An example of this would be when an employer makes a decision about hiring someone based only on his or her ethnicity. The second problem with stereotyping as a construct is that it is a natural for people to perceive and organize the world in ways that include many generalizations about things. People have an innate ability and desire to imagine most things before they are experienced, and it is not a skill that makes sense to completely eliminate. As an earlier researcher in the realm of stereotyping said, "What matters is the character of stereotypes, and the gullibility with which we employ them." (Lippmann, 1922).
One study that McCaulty, Stitt and Segal (1980) criticized was Katz and Brady’s early experiment on the topic in 1933. They investigated how much of racial prejudice is a result of private attitude and how much is a result of public attitude. They noticed that much of the research before theirs had conflicting results in terms of the causes of racial prejudice. In their study, 100 college students were asked to assign characteristics from a list of 84 adjectives onto 10 different racial categories. The results of the study led to the conclusion that the agreement between the student’s adjectives was too great to be based only on each student’s direct contact with the racial groups. While this was informative, this method told us little about stereotypes that are defined as bad generalizations.

An obvious problem with studying prejudices is that it is often conducted with a limited number of ethnic minorities in mind. Non-ethnic minorities, and attitudes about them are more difficult to study and there is less research in this area. Chesler (1965) investigated four dimensions of ethnocentrism (race, religion, nationality and socioeconomic class) with 13 specific groups falling in these categories. Two likert-type scales were used. One scale was the Intergroup Relations Scale (IRS), and the other was a scale entitled the Attitudes Toward Disabled Person’s Scale (ATDP). Results showed that individuals who expressed ethnocentrism on the IRS scale toward one specific minority group expressed similar attitudes toward other groups and dimensions. On top of that, individuals who expressed high rejection of outgroups on the IRS scale also expressed rejection of the physically disabled on the ATDP scale.

Another theory of prejudices is that it stems in part, from the motivation to maintain a feeling of self-worth and self-integrity and therefore can be self-affirming. Steele,
Spencer, & Lynch (1993) have argued that people seek to maintain "an image of self-integrity, that is, overall moral and adaptive adequacy" Fein and Spenser (1997) devised a few experiments to better understand these theories. Their research suggested that negative stereotyping might be a common method of maintaining one's self-image. The method involved asking individuals to evaluate a member of a stereotyped group. Individuals were less likely to evaluate that person negatively if they had been involved in a self-affirmation procedure. Participants who had been threatened by negative feedback instead, were more likely to evaluate that person stereotypically – but only if they perceived that person as part of a stereotyped group. These participants also reported an increase in self-esteem after derogating the stereotyped target.

Over the years, research has shown that other people can have a strong influence on the thoughts and behaviors of individuals. It is not unusual for people to turn to others in order to know what attitudes and behavior are appropriate when dealing with an out-group. Haslam et al. (1996) found that individuals changed their stereotypes of national groups so that they were more similar to the beliefs allegedly held by members of a desirable in-group, and they changed their stereotypes away from the beliefs allegedly held by an undesirable out-group. A study by Stangor et al. (2001) suggested that altering people’s perception about the extent to which stereotypes are shared consensually can significantly change racial stereotypes. A study by Sechrist and Stangor (2001) focused on the influence of direct exposure to out-group members as determinants of stereotypes and prejudices. Their first experiment showed that learning that one’s beliefs are shared or not shared with others influences attitudes, behavior as well as the strength of the attitude-behavior relationship. Sechrist and Stangor’s second experiment demonstrated a
potential mechanism for such effects by showing that simply learning whether others share one’s own stereotypes influences the accessibility of those stereotypes.

While much of the above research focuses on the ways that individuals might stereotype out-groups, or even their own group, Cottrell and Neuberg (2005), sought to understand the core emotional reactions people have to different groups. These emotions included anger, disgust, fear, pity and guilt and involved reactions to African Americans, Mexican Americans, Fundamentalist Christians, activist feminists, gay men, Native Americans, Asian Americans, European Americans and non-fundamentalist Christians. The main hypothesis was that different groups can evoke qualitatively different profiles of emotional reactions, and that different groups can evoke qualitatively different profiles of perceived threats. The results of the experiments suggested that these two hypotheses could be held to be true. The diversity of the results was often masked by general measures of prejudice and threat. On top of that, threat and emotion profiles were associated with one another in the manner predicted. It was shown that specific classes of threat were linked to specific, functionally relevant emotions. Overall, it was found that groups similar in the threat profiles they elicited were also similar in the emotion profiles they elicited.

Baker (1930) wrote that contact between races under conditions of equality would lead to “suspicion, fear, resentment, disturbance, and at times open conflict”; while Lett (1945) argued that interracial experiences could lead to “mutual understanding and regard”. Lett also suggested that when groups are isolated from each other, “prejudice and conflict grow like a disease”. A meta-analysis of research on intergroup contact theory was conducted by Pettigrew and Tropp (2006) and concluded that intergroup
contact typically reduces intergroup prejudice. Contact theory was originally devised for racial and ethnic encounters and was found to be extendable to other groups.

Bodenhausen, Sheppard, and Kramer (1994) expressed that “stereotypes can be viewed as judgmental heuristics that are relied upon by social perceivers whenever they lack the ability of the inclination to think more extensively about the unique personal qualities of out-group members”. In a review of past research, Wegener, Clark and Petty (2006) noted that empirical investigations demonstrated an increased use of stereotypes when people are under time pressure or cognitive load, are experiencing an overload of information, or are at low levels of circadian arousal. Overall, they also noted that use of stereotypes is decreased when motivation to think about individuating information is relatively high, as when people expect to be held accountable for their ratings of targets. They further explored the idea of thoughtful vs. non-thoughtful stereotyping by conducting a series of five experiments. On the whole, their research suggested that more thoughtful stereotyping is more resistant to future attempts at change and to warnings of possible bias.

Implicit Scales and Measures of Prejudice

In a study by Devine (1989), subjects were subliminally exposed to a series of words, the majority of which were stereotypically associated with Black Americans. White participants were then asked to judge a race unspecified male target, a task they were told was unrelated to the series of words they saw. Participants who were exposed to a higher percentage of words associated with Black Americans judged the target to be more hostile than subjects who were exposed to a much lower percentage of those words.
This study was important in identifying an implicit social cognition effect and in suggesting the role of automatic or unconscious processes in stereotyping and prejudice.

In 1995, Greenwald and Banaji reviewed the research on implicit social cognition in terms of attitudes, self-esteem and stereotypes. According to their definition, “a stereotype is a socially shared set of beliefs about traits that are characteristic of members of a social category...a stereotype may encompass beliefs with widely diverging evaluative implications.” The extent to which stereotypes operate implicitly, outside of conscious cognition is an important question when doing research in this area. A few studies in the past tried fairly successfully to study stereotypes and prejudices indirectly (e.g. Hamilton & Gifford, 1976, and Crosby, Bromley, and Saxe, 1980). These studies implied that stereotypes are often expressed implicitly in the behavior of individuals who explicitly disavow the stereotype.

In 1998, a groundbreaking study done by Greenwald, McGhee and Schwartz developed a way of researching implicit, or unconscious prejudices. This test was called the Implicit Association Test (IAT), and assessed differences in evaluative associations between pairs of semantic or social categories. A few different experiments were run using the IAT, the last involving biases towards Black or White individuals in White participants. Results “revealed patterns consistent with the expectation that White subjects would display an implicit attitude difference between the Black and White racial categories. More specifically, the data indicated an implicit attitudinal preference for White over Black.”
More recently, in 2001, Devine discussed various studies that dealt with how automatic implicit prejudice and stereotyping are. Ashburn-Nardo, Voils and Monteith (2001):

...argue that the automatic nature of evaluative differentiation between in-groups and out-groups suggests readiness of the human mind to receive and accept biases favoring the in-group. An important finding from this set of studies is that clear evidence that bias is present even when participants have no preexisting experience with or bias toward the in-groups or out-groups.

The meaning of IAT responses is in question here. A couple of studies even refute that the IAT measures implicit prejudice and stereotypes, for example- Brendl et al. (2001) and Karpinski and Hilton (2001). Nonetheless, Devine felt that the IAT, and similar measures using context manipulations produce replicable patterns of moderation of implicit biases. Dasgupta and Greenwald (2001) showed that “thinking about admired out-group members (e.g., Tiger Woods) and disliked in-group members (i.e., Jeffrey Dahmer) leads to a diminution of implicit race bias on the IAT, an effect that lasts up to 24 hr.” Dasgupta and Greenwald reasoned that their manipulation may make salient positive exemplars of the out-group and affect the extent to which participants associate Blacks with evaluatively positive information. This research goes to show that “what is revealed on implicit measures is determined by what knowledge is activated by situational conditions.” (Devine, 2001)

In a study by Rudman, Ashmore and Gary in 2001, the malleability of implicit prejudice and stereotypes was studied using the IAT. They hypothesized that automatic and controlled intergroup biases could be modified through diversity education. Students
who were enrolled in a prejudice and conflict seminar showed significantly reduced implicit and explicit anti-Black biases, compared with control students who did not take the seminar. In their discussion, it was theorized based on past research as well as their own study that an individual’s insight into their own biases is linked to reduced explicit prejudice. This was not reliably correlated to implicit prejudice scores, and they concluded that emotional reconditioning might be an effective way of reducing automatic biases.

Research on Prejudice and Religiosity

Of concern in this review of the literature is the body of research that suggests that people who are “religious” according to various criteria tend to be more prejudiced than those who are not “religious” (Wilson, 1960). Wilson based his research on various experiments that proposed the above hypothesis. The Extrinsic Religious Values Scale (ERV) was used, as well as a scale that measures religious conventionalism. In order to determine the amount or prejudice of the individuals studied, a scale used to measure anti-Semitism was used. The ERV scale measured how extrinsically religious each individual was, or how much a participant’s religious affiliation had to do with utilitarian or self-serving purposes. This can be looked at the way an individual “uses their religion”. The opposite of extrinsic religiosity is intrinsic religiosity, which is when a person “lives their religion” as an end in itself, and most people fall somewhere on the spectrum between these two factors. The results showed a high correlation between the ERV scale and anti-Semitism in general, and suggest that religiosity and anti-Semitism are highly related.
From Wilson’s research, and past research similar to it, it has been established that churchgoers are more prejudiced than non-churchgoers (Allport and Kramer, 1946; Rosenblith, 1949; Rokeach, 1960; Stouffer, 1955), and that people with an extrinsic religious orientation are significantly more prejudiced than people with a more intrinsic religious orientation (Wilson, 1960; Feagin, 1964). It can be assumed from these studies that the inner experience of religion (what it means to the individual) is an important causal factor in developing a tolerant or a prejudiced outlook on life (Allport and Ross, 1967).

Based on the above generalizations, Allport and Ross (1967) set out to discover whether or not a certain type of cognitive style permeates the thinking of many people in such a way that they are indiscriminately pro-religious and furthermore, highly prejudiced. As part of the study, they used the Social Problems Questionnaire that contains negative statements about African Americans, Jews, Asians, Mexicans and Puerto Ricans. The second set of measures was the Indirect Prejudice Scale, with various statements about the mental ill, and the “jungle” philosophy of life (statements suggesting a generalized suspiciousness and distrust), which subjects could agree or disagree with. The last scale was the Religious Orientation Measure and involves items that measure both intrinsic and extrinsic religiosity. Their research, involving a large sample from many members of churches, suggested that churchgoers who are indiscriminately pro-religious are more prejudiced than the consistently extrinsic, and in turn, much more prejudiced than the consistently intrinsic types. These three categories are vital in the study of religiosity and prejudice, as well as the categories of nonreligious and indiscriminately antireligious which were beyond the scope of this particular study.
The above study went without refutation, but the case was reopened by Batson et al. (1978) in which it was pointed out that using a questionnaire to measure prejudice was a flawed method. Batson argued that participants might have scored low on prejudice based on a desire not to appear prejudiced, rather than a true lack of prejudice. A new category was then included along with extrinsic (religion as a means) and intrinsic (religion as an end) orientation to religion—religion as a quest. This orientation is defined as “the degree to which the individual sought to face religious issues in all their complexity, while resisting clear-cut answers.” The results of this study confirmed the possibility that those with a more intrinsic religious orientation have an increased desire to not appear prejudiced. The only orientation associated with a genuine lack of prejudice was the “religion as a quest” group.

In more recent years, Batson, Flink, Schoenrade, et. al (2006), set out to investigate extrinsic and intrinsic orientations of religiosity in a new context. Specifically they looked into whether more intrinsic religiousness would be associated with displaying less racial prejudice when the prejudice was overt, but not when it was covert. Each participant was asked to fill out a questionnaire assessing their religious orientation, and then asked to pick a room to watch a movie shown in “Theater A” or “Theater B”. One room had a white individual already sitting inside, while the other had a black individual sitting inside. Overt racial prejudice was determined by the subject’s choice when the same movie was going to be played in both rooms. The covert prejudice condition added a factor in their choice by saying each theater was playing a different movie. The experimenter predicted that measures of the intrinsic, end orientation to religion would correlate negatively with choosing to sit with the white person when both
black and white persons are to watch the same movie, but the correlation with these measure would be close to zero when the black persons are to watch different movies. They also predicted that measure of the quest orientation to religion would correlate negatively with choosing to sit with the white person even when black and white person are to watch different movies. While not all the results were statistically significant, the pattern of correlations was consistent with both of these predictions.

Research involving Atheism and Atheists

As mentioned in Chapter 1, research conducted at the University of Minnesota by Penny Edgell, Joseph Gerties and Douglas Hartmann, as part of the American Mosaic Project found atheists to be the least trusted group in the United States. This study showed that Americans perceive atheists as the group least likely to embrace common values and a shared vision of society. This result was contrary to initial hypotheses that assumed Muslims would be the least trusted out of all the groups included in the study, in a post 9/11 era. The second question in the study also came up with respondents identifying atheists as the cohort other that Americans do not want their children to marry. Of course, this does not say anything about what atheists are actually like, as the focus in this research was more directed towards the “symbolic” boundaries between the religious and the nonreligious.

The researchers of the study noted that other fringe minority groups- viewed in the past as “others” or outsiders within the “us vs. them” group mentality- have slowly been seeing increases in tolerance as religious and cultural diversity increases. However, the analysis they did showed that “attitudes about atheists have not followed that same historical pattern as that for previously marginalized religious groups” (Edgell, 231).
The Gallup poll in 1999 showed growing willingness by voters to support Catholic, Jewish, Gay and other candidates identified with groups once considered out of the mainstream. However, atheists continue to remain at the very bottom of this list, and there has been little progress in this category since the mid-to-late 1950s. As stated before, this kind of empirical data does not explain why there is such a strong reaction to a group this small, hard to identify and as disorganized as the category of atheists. In fact, a major voice in atheism today, Richard Dawkins wrote that trying to organize or unite atheists is like “...is like herding cats. They're too independent-minded” (Baker, 2007). According to a review of the General Social Survey by Hout and Fischer (2002), 14 percent of Americans do not name a religious preference, but most say they do believe in God and pray on a regular basis. Only 7 percent of this group agrees with the statement “I don’t know whether there is a God and I don’t believe there is any way to find out”, 3 percent of Americans affirm that they do not believe in God, and finally- only 1 percent self-identifies with being an atheist or agnostic (Kosmin, Mayer, and Keysar, 2001). This “1 percent” is somewhat debatable, as according to a review of statistics, the range of individuals in the United States that “do not believe in god”, can be anywhere from 3.8%-9% (Martin, 2007) A smaller percentage is probably a result of stigma attached to the word “Atheist”. It is obvious that the numbers are small, but when the respondents of the survey answered the questions of public and private life- it is difficult to determine which atheist they were thinking about. Were they thinking about the 14 percent that self-identify as non-religious, the 7 percent who are not sure, or the 1 percent who openly identifies with being an atheist?
During their analysis of results in the Mosaic project, Edgell, Gerteis and Hartmann reviewed interviews that had been conducted. These interviews suggested that participants associated the term "atheist" with:

...illegality, such as drug use and prostitution—that is, with immoral people who threaten respectable community from the lower end of the status hierarchy. Others saw atheists as rampant materialists and cultural elitists that threaten common values from above—the ostentatiously wealthy who make a lifestyle out of consumption or the cultural elites who think they know better than everyone else. Both of these themes rest on a view of atheists as self-interested individualists who are not concerned with the common good.

These associations are not based in fact, and are stereotypes that people have placed on atheists as a group. Research to the contrary of these stereotypes has shown that: “High levels of organic atheism (atheism that is not imposed upon by the individual’s government), are strongly correlated with high levels of societal health, such as low homicide rates, low poverty rates, low infant mortality rates, and low illiteracy rates, as well as high levels of educational attainment, per capita income, and gender equality.” (Martin, 2007)

Summary

The research reviewed in this chapter linked an array of issues involving prejudice, the results of prejudice, implicit vs. explicit prejudice, and prejudice and religious orientation. Early on in this chapter, the question of “What is it like to be a victim of prejudice?” was addressed. Since the results of the Mosaic Project were published, this is a relevant area of research to look into as non-religious individuals and
individuals who identify as atheists or agnostics are likely to feel a certain amount or perceived prejudice, whether or not they experience outright discrimination. It was found that perceiving oneself to be a target of prejudice or discrimination can have a negative impact on the individual, but can also act as the fuel for social change in groups that are able to organize.

In terms of studies on prejudice and stereotyping, research suggested that negative stereotyping might be a common method of maintaining one's self-image. Learning that one's beliefs are shared or not shared with others influences attitudes, behavior as well as the strength of the attitude-behavior relationship. Contact theory was originally devised for racial and ethnic encounters and was found to be extendable to other groups. It was concluded that intergroup contact typically reduces intergroup prejudice. Research has suggested that more thoughtful stereotyping is more resistant to future attempts at change and to warnings of possible bias.

A few studies identified the implicit social cognition effect, and suggested the role of automatic or unconscious processes in stereotyping and prejudice. Stereotypes are often expressed implicitly in the behavior of individuals who explicitly disavow the stereotype.

It has been found that most people fall somewhere on the spectrum between extrinsic or intrinsic religiosity. In terms of early research on extrinsic vs. intrinsic religiosity, it has been established that churchgoers are more prejudiced than non-churchgoers. Past research has suggested that people with an extrinsic religious orientation are significantly more prejudiced than people with a more intrinsic religious orientation.
Finally, the results of the Mosaic Project study were discussed, as well as the actual demographic of atheists, and statistics related to levels of religiosity and overall societal health.
Chapter III: Methodology

Introduction

This section involves thorough discussion of the research design, and measures that will be used. The sample of participants will be described as well as how the sample was selected. Finally there will be a description of how data was collected, and the analysis that was planned.

Sample

This study employed a sample of 45 undergraduate students at Rowan University, a mid-size public university in southern New Jersey. The respondents were 28.9% male (n=13) and 71.1% female (n=32). The mean age for this sample was 20.55 (SD=2.49) (See Figure 3.1). The breakdown of classes was as follows: 20% freshmen (n=9), 26.7% sophomore (n=12), 33.3% junior (n=15), 15.6% senior (n=7), and 4.4% graduate students (n=2). Mean GPA was 3.2 (SD=.379). This breakdown is shown in Figure 3.2.

Participants indicated their ethnicity was as follows: 82.2% Caucasian (n=37), 8.9% Hispanic (n=4), 2.2% African American (n=1), 2.2% Indian (n=1), and 2.2% Asian (n=1). One participant left this item blank. The breakdown for majors was 20% Health and Exercise Science (n=9), 62.2% Education (n=28), 2.2% History (n=1), 2.2% Spanish (n=1), 6.7% English (n=3), 2.2% Math (n=1), 2.2% undecided (n=1), and 2.2% graduate program (n=1). In terms of religion, participants were 82.2% Christian denomination (n=37), 4.4% Jewish (n=2), 2.2% Spiritual (n=1), 2.2% Agnostic (n=1), 2.2% Atheist (n=1), and 6.7% (n=3) did not specify their religion, or wrote “N/A” (See Figure 3.3).
Figure 3.1, Age

![Age distribution graph]

Figure 3.2, Class

![Class distribution graph]
Research Design

The independent variable was the religion specified in the vignettes. In one vignette (vignette A) the hypothetical person was called “fairly religious” and stated as someone who prays regularly. The other hypothetical person (vignette B) was called “atheist” and stated as someone who journals regularly. The two vignettes were identical otherwise, and involved a personal crisis. The dependent variable was the attitude each participant had toward the person described in the vignette.

Measures

Measures involved are 16 items from the Religious Orientation Scale-Revised (ROS-R) (8 from the I scale, 8 from the Es/Ep scale), and a scale which measures 21 positive traits of a hypothetical person in one of two vignettes that participants read.

The original Religious Orientation scale was developed by by Allport (1963; Allport & Ross, 1967) and developed by numerous others (Feagin, 1964; Hood, 1970,
1971; Wilson, 1960; King & Hunt, 1969). The ROS-R scale was developed by Gorsuch and McPherson (1989). It measures intrinsic religiousness (I; religion as an end unto itself) and extrinsic religiousness on two levels (E; religion as a means to some end, like friendship or solace, on a social level (Es), and a personal level (Ep)). According to Hill and Hood, (1999):

The reliability estimate for I (Revised) was .83. The reliability estimates for Ep (Revised), Es (Revised), and Ep/Es (Revised) were .57, .58, and .65 respectively. The reliability of the intrinsic scale is sufficient and is comparable to the reliability estimate of the original Age Universal Scale.

As for the vignettes and the list of positive adjectives or traits, these were written by the researcher and validity and reliability have not been established (See Appendix A and B). However, the method of using adjectives to rate a participants attitude has been used frequently in the past, for example, as early as Katz and Brady's 1933 study on 100 college student's description of different ethnic and religious groups. The measure for this study was created so that the participant would be required to consider a person beyond their religion, and put things on a more personal level.

Hypothesis

It was hypothesized that individuals who rate themselves on the ROS-R scale as more intrinsically religious would have a similarly positive attitude towards both vignettes, with a slightly more positive attitude towards vignette A. Individuals who rate themselves on the ROS-R scale as more extrinsically religious would have a more negative attitude towards the individual in vignette B, compared to vignette A. Individuals who rate higher in both areas (indiscriminately pro-religious) would
demonstrate a more negative attitude toward the individual in vignette B, compared to vignette A. Individuals who rate low in both areas (indiscriminately anti-religious) would have a more negative attitude toward the individual in vignette A.

It was also hypothesized that group A and group B would have a significant difference in the total score on the vignette task.

Collection of Data and Analysis

The Religious Orientation Scale Revised version was used with credit given to Hill and Hood (1999). Following approval from Rowan University’s Institutional Review Board, subjects were obtained by solicitation. Students in Education classes at Rowan University were solicited during class time to fill out the two surveys and demographic information. Students were not given any credit for participating, and were told that participation was completely voluntary. Students were given informed consent forms, which explained their rights as participants and made clear that it was done in complete anonymity. To maintain anonymity, students were asked not to sign their name anywhere on the consent forms or the survey.

The analysis will involve a one way independent samples t-test between the independent variable on its two levels (religious and atheist), and the dependent variable-the participant's score on the list of adjectives. To find the strength of the relationship between the ROS scales and the results of the attitude scale of adjectives, two correlation tests will be run. The first calculation of correlation will involve the I scale calculated against the attitude scores, while the second will involve the E scale calculated against the attitude scores.
Chapter IV: Analysis of Results

Introduction

The purpose of this study was to examine the connections between prejudice and religiosity. A secondary purpose was to investigate the range and depth of meanings associated with the term “atheist” on a more personal level. Very little research has been done in the area of prejudice towards non-religious groups such as atheists or agnostics.

The main hypothesis of this study is that the level of an individual’s religiosity or religious affiliation is a contributing factor for the results seen in the University of Minnesota, Mosaic Project study discussed in the literature review. Edgell, Gerteis and Hartmann had found that minority groups viewed in the past as “others” or outsiders have slowly been seeing increases in tolerance as religious and cultural diversity increases. However, the analysis they did showed that “attitudes about atheists have not followed that same historical pattern as that for previously marginalized religious groups. In fact, they found that, “atheists are at the top of the list of groups that Americans find problematic in both public and private life, and the gap between acceptance of atheists and acceptance of other racial and religious minorities is large and persistent.” Another hypothesis of this study was the people who self-report as more extrinsically or intrinsically religious will rate an individual who is an atheist different than they would rate someone who is religious.

Results

An alpha level of .05 was used for all statistical tests. A one way independent samples t-test was run between the independent variable on it's two levels (vignette A and
B), and the dependent variable- the participant's score on the list of adjectives. There was a statistically significant difference between group A and group B: $t(43)=2.284$, $p=.027$.

The mean score for group A ("fairly religious" vignette) were 81.1 ($SD=7.9$). The range of scores in this group was from 72-101. The mean score for group B ("atheist" vignette) was 73.54 ($SD=13.7$). The range was from 63-94.

Table 4.1, Group Statistics

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vignette A</td>
<td>23</td>
<td>81.1739</td>
<td>7.98665</td>
<td>1.66533</td>
</tr>
<tr>
<td>Vignette B</td>
<td>22</td>
<td>73.5455</td>
<td>13.78311</td>
<td>2.93857</td>
</tr>
</tbody>
</table>

Table 4.2, Independent Samples Test

<table>
<thead>
<tr>
<th>Vignette</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
</tr>
<tr>
<td>Vignette</td>
<td>Equal variances assumed</td>
</tr>
<tr>
<td></td>
<td>2.284</td>
</tr>
</tbody>
</table>

To determine the specific differences between each group, one way independent samples t-tests were run between the independent variable on it's two levels (vignette A and B), and the dependent variable tested on each of the adjectives used. There was a statistically significant difference between groups A and B, in terms of the adjectives: "Spiritual": $t(43)=5.458$, $p=.000$, "Reliable": $t(43)=2.490$, $p=.017$ and "Honest": $t(43)=2.117$, $p=.040$. The following adjectives approached significance: "Moral": $t(43)=1.958$, $p=.057$, "Humble": $t(43)=1.887$, $p=.066$ and "Insightful": $t(43)=1.774$, $p=.085$.\[30\]
p=.083. A graph of the difference of means on these adjectives, between group A and group B is shown on Figure 4.1. Table 4.3 illustrates the difference of means for all terms used in the vignette rating scale.

Figure 4.1, Likert Scale Averages

Table 4.3, Group Statistics

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliable</td>
<td>A</td>
<td>23</td>
<td>4.0000</td>
<td>.73855</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>22</td>
<td>3.5000</td>
<td>.59761</td>
</tr>
<tr>
<td>Honest</td>
<td>A</td>
<td>23</td>
<td>4.2609</td>
<td>.68870</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>22</td>
<td>3.8636</td>
<td>.56023</td>
</tr>
<tr>
<td>Practical</td>
<td>A</td>
<td>23</td>
<td>3.7391</td>
<td>.81002</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>22</td>
<td>3.9091</td>
<td>.52636</td>
</tr>
<tr>
<td>Intelligent</td>
<td>A</td>
<td>23</td>
<td>4.0870</td>
<td>.66831</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>22</td>
<td>3.9091</td>
<td>.61016</td>
</tr>
<tr>
<td>Grounded</td>
<td>A</td>
<td>23</td>
<td>3.8696</td>
<td>.69442</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>22</td>
<td>3.6364</td>
<td>.78954</td>
</tr>
<tr>
<td>Trait</td>
<td>Column</td>
<td>Row</td>
<td>Value A</td>
<td>Value B</td>
</tr>
<tr>
<td>---------------</td>
<td>--------</td>
<td>-----</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Insightful</td>
<td></td>
<td>23</td>
<td>4.1304</td>
<td>.81488</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
<td>3.7273</td>
<td>.70250</td>
</tr>
<tr>
<td>Trustworthy</td>
<td></td>
<td>23</td>
<td>3.7826</td>
<td>.79524</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
<td>3.5000</td>
<td>.51177</td>
</tr>
<tr>
<td>Spiritual</td>
<td></td>
<td>23</td>
<td>4.6957</td>
<td>.55880</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
<td>3.1364</td>
<td>1.24577</td>
</tr>
<tr>
<td>Open-minded</td>
<td></td>
<td>23</td>
<td>4.0870</td>
<td>1.08347</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
<td>3.8636</td>
<td>.88884</td>
</tr>
<tr>
<td>Social</td>
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<td>23</td>
<td>4.0435</td>
<td>.82453</td>
</tr>
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<td></td>
<td></td>
<td>22</td>
<td>3.9091</td>
<td>.61016</td>
</tr>
<tr>
<td>Committed</td>
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<td>23</td>
<td>4.6087</td>
<td>.65638</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
<td>4.5909</td>
<td>.59033</td>
</tr>
<tr>
<td>Tolerant</td>
<td></td>
<td>23</td>
<td>3.7826</td>
<td>.90235</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
<td>4.0000</td>
<td>.69007</td>
</tr>
<tr>
<td>Warm</td>
<td></td>
<td>23</td>
<td>3.5217</td>
<td>.66535</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
<td>3.4545</td>
<td>.67098</td>
</tr>
<tr>
<td>Extroverted</td>
<td></td>
<td>23</td>
<td>3.0870</td>
<td>.99604</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
<td>3.3182</td>
<td>.77989</td>
</tr>
<tr>
<td>Moral</td>
<td></td>
<td>23</td>
<td>4.1304</td>
<td>.81488</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
<td>3.6818</td>
<td>.71623</td>
</tr>
<tr>
<td>Imaginative</td>
<td></td>
<td>23</td>
<td>3.3478</td>
<td>.98205</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
<td>3.3182</td>
<td>.83873</td>
</tr>
<tr>
<td>Problem solving</td>
<td></td>
<td>23</td>
<td>4.2609</td>
<td>.61919</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
<td>4.1364</td>
<td>.56023</td>
</tr>
<tr>
<td>Altruistic</td>
<td></td>
<td>23</td>
<td>3.4348</td>
<td>.66237</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
<td>3.2727</td>
<td>.55048</td>
</tr>
<tr>
<td>Humble</td>
<td></td>
<td>23</td>
<td>3.5652</td>
<td>.66237</td>
</tr>
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<td></td>
<td></td>
<td>22</td>
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<td>.52841</td>
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<td>Methodical</td>
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<tr>
<td></td>
<td></td>
<td>22</td>
<td>3.5000</td>
<td>.59761</td>
</tr>
</tbody>
</table>
To find the strength of the relationship between the ROS-R scales and the results of the attitude scale of adjectives, correlation tests were run. This involved the I, E and other subscales calculated against the attitude scores. The participant’s attitudes towards the individuals on the vignettes did not correlate to the scores on the ROS-R scale or subscales. The intrinsic subscale positively correlated to the extrinsic subscales on the p < .05 level of significance (expected). The range of the total scores on the ROS-R was 24-62 with a mean of 42 ($SD = 9.59$).

Table 4.4, Correlations

<table>
<thead>
<tr>
<th></th>
<th>Rostotal</th>
<th>Vignette</th>
<th>Intrinsi</th>
<th>Exsoc</th>
<th>Exper</th>
<th>Etotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rostotal Pearson Correlation</td>
<td>1.000</td>
<td>0.140</td>
<td>0.763**</td>
<td>0.591**</td>
<td>0.743**</td>
<td>0.810**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.359</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>45.000</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Vignette Pearson Correlation</td>
<td>0.140</td>
<td>1.000</td>
<td>0.119</td>
<td>-0.121</td>
<td>0.187</td>
<td>0.099</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.359</td>
<td>0.438</td>
<td>0.427</td>
<td>0.218</td>
<td>0.518</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>45</td>
<td>45.000</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Intrinsi Pearson Correlation</td>
<td>0.763**</td>
<td>0.119</td>
<td>1.000</td>
<td>0.304</td>
<td>0.328</td>
<td>0.371*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.438</td>
<td>0.042</td>
<td>0.028</td>
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<td>45</td>
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</tr>
<tr>
<td>Exsoc Pearson Correlation</td>
<td>0.591**</td>
<td>-0.121</td>
<td>0.304</td>
<td>1.000</td>
<td>0.464**</td>
<td>0.755**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.427</td>
<td>0.042</td>
<td>0.001</td>
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<tr>
<td>N</td>
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<td>45</td>
<td>45.000</td>
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</tr>
<tr>
<td>Exper Pearson Correlation</td>
<td>0.743**</td>
<td>0.187</td>
<td>0.328</td>
<td>0.464**</td>
<td>1.000</td>
<td>0.889**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
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<td>0.028</td>
<td>0.001</td>
<td>0.000</td>
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<tr>
<td>N</td>
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</tr>
<tr>
<td>Etotal Pearson Correlation</td>
<td>0.810**</td>
<td>0.099</td>
<td>0.371</td>
<td>0.755**</td>
<td>0.889**</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.518</td>
<td>0.012</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45.000</td>
<td>45</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Summary of Findings

There was a statistically significant difference between group A and group B.

There was also a statistically significant difference between the adjectives: “Spiritual”:

33
t(43)=5.458, p=.000, “Reliable”: t(43)=2.490, p=.017 and “Honest”: t(43)=2.117, p=.040

The following adjectives approached significance: “Moral”: t(43)=1.958, p=.057, “Humble”: t(43)=1.887, p=.066 and “Insightful”: t(43)=1.774, p=.083. The participant’s attitudes towards the individuals on the vignettes did not correlate to the scores on the ROS-R scale or subscales, which means none of the hypotheses were supported.

However, the purpose of the study, to add knowledge and data to this area of research and to investigate meanings associated with the term “atheist” was fulfilled.
Chapter V: Summary and Conclusions

Discussion

Past research has suggested that people with an extrinsic religious orientation are significantly more prejudiced than people with a more intrinsic religious orientation and that atheists as a group have not seen increases in tolerance. The main hypothesis of this study is that the level of an individual’s religiosity or religious affiliation is a contributing factor for the results seen in the University of Minnesota, Mosaic Project study discussed in the literature review. Another hypothesis of this study was the people who self-report as more extrinsically or intrinsically religious will rate an individual who is an atheist different than they would rate someone who is religious.

More specific hypotheses involved correlations between the ROS-R and attitude towards the individual in the vignette each participant read. It was hypothesized that: individuals who rate themselves on the ROS scale as more intrinsically religious would have a similarly positive attitude towards both vignettes, with a slightly more positive attitude towards vignette A. Individuals who rate themselves on the ROS scale as more extrinsically religious would have a more negative attitude towards the individual in vignette B, compared to vignette A. Individuals who rate higher in both areas (indiscriminately pro-religious) would demonstrate a more negative attitude toward the individual in vignette B, compared to vignette A. Individuals who rate low in both areas (indiscriminately anti-religious) would have a more negative attitude toward the individual in vignette A.
Correlation tests did not reach significance, so no conclusion can be made on how a person’s religiosity determines their prejudice towards non-religious individuals. However, t-tests did reach significance in a way that showed a significant bias towards the non-religious “atheist” in the vignette. This suggests there is a significant difference in how atheists are perceived as compared to someone who is labeled “fairly religious”.

The t-tests that measure significant differences between the two groups on specific adjectives shed some light on what meaning various adjectives have when participants applied them to atheists versus someone who is fairly religious. Participants tended to rate the fairly religious person as much more “spiritual”, “reliable” and “honest” than the atheist counterpart. The mean values for these terms show that participants rating an atheist for these characteristics tended to put them on the “neutral” or “agree” choices (3-4) on the likert scale. The difference between the two group’s ratings on the word “spiritual” is especially striking, as participants who rated the fairly religious individual tended to score the individual on a mean of 4.6 \( (SD=0.55) \) or close to “strongly agree” on the likert scale, while participants tended to score the atheist individual closer to 3 or neutral with a mean of 3.1 \( (SD=1.2) \). In terms of the word “spiritual”, this difference was expected, as participants cannot assume the atheist in the vignette is spiritual without evidence that she meditates or has religious or spiritual beliefs outside of the idea of God. (For example, in a technical sense Buddhists are “atheists”, as they do not believe in an eternal creator or God- yet the religion still contains many theistic and devotional elements.) There is much more concern over the bias between the words “reliable” and “honest”. Participants were much more likely to agree or strongly agree with these adjectives for describing someone who is fairly religious (with means of 4.0-4.2 (SD
range from 0.73-0.68), than someone who is an atheist. This is in line with the Mosaic Project study that came to the conclusion that atheists are the least trusted minority in public and private life. There was nothing to indicate reliableness or honesty in the vignettes, yet participants had trouble deciding on whether or not atheists could be described by these words- and tended towards a mean of 3.5 \((SD=0.59)\) on “reliable” and a mean of 3.8 \((SD=0.56)\) on “honest”. Another adjective of note was the word “moral”, which had very similar results to the words “honest” and “reliable”.

To reiterate from Chapter 2: during their analysis of results in the Mosaic project, Edgell, Gerteis and Hartmann reviewed interviews that had been conducted. These interviews suggested that participants associated the term "Atheist" with "illegality, such as drug use and prostitution—that is, with immoral people who threaten respectable community from the lower end of the status hierarchy. Others saw atheists as rampant materialists and cultural elitists that threaten common values from above—the ostentatiously wealthy who make a lifestyle out of consumption or the cultural elites who think they know better than everyone else. Both of these themes rest on a view of atheists as self-interested individualists who are not concerned with the common good"

This quote highlights some possible reasons why participants in the current study tended to react neutrally to terms to do with reliability, honesty and morality when rating an atheist individual. To restate what was said in Chapter 1, most atheists are not organized, and typically do not identify with any one set of values. This makes them a difficult group for people to stereotype or make judgments about. In an interview with the San Francisco Chronicle, Richard Dawkins, a well-known atheist and scientist is quotes as
having said, “Organizing atheists is like herding cats. They're too independent-minded” (Baker, 2007).

Limitations and Implications for Future Research

There were many limitations of this study that should be mentioned. There was not enough variation of religiosity for results to be significant for either of the main hypotheses. The majority of participants stated their religion as Christian or other Christian denomination, with very few participants stating themselves as something other than Christian (15.4%). A sample size of only 45 was limiting to the significance of correlation tests, as well as t-tests of specific adjectives on the vignettes. It was not possible to compare for gender, as only 13 of the participants were male.

In future research, a larger sample size could be used, and a different method of recruitment. There are many Atheist and Secular Humanist organizations, and it would be possible to receive permission to survey their members. It would also be interesting to see how the results would change if the vignettes portrayed both the religious and atheist individuals in a negative light, using negative adjectives to rate the participants attitudes. Another question would be what would have changed if all the adjectives were negative on the vignettes used in the current study? Using the Implicit Association Test (IAT) in tandem to this kind of research would have been fascinating as well. Finally, this method of research could be used to investigate other minority groups as it has in the past.
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APPENDIX A

Vignette A ("fairly religious")
Monica is a social worker who lives with her husband in Philadelphia, PA. She has been happily married for a few years but lately has been having a lot of arguments with her husband, Charles. Monica is fairly religious and prays regularly to reflect on her life. She also turns to her family and friends for support. She has found that these things have helped her deal with the extra stress in her marriage. Eventually, she suggested that she and Charles go to couples therapy. After a few months things have gotten a lot better.

Please Rate Monica on the following qualities from 1 to 5:

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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td>strongly disagree</td>
<td>disagree</td>
<td>neutral</td>
<td>agree</td>
<td>strongly agree</td>
</tr>
</tbody>
</table>

1. ___ Reliable
2. ___ Honest
3. ___ Practical
4. ___ Intelligent
5. ___ Grounded
6. ___ Insightful
7. ___ Trustworthy
8. ___ Spiritual
9. ___ Open-minded
10. ___ Social
11. ___ Committed
12. ___ Tolerant
13. ___ Warm
14. ___ Extroverted
15. ___ Moral
16. ___ Imaginative
17. ___ Problem-Solving
18. ___ Altruistic
19. ___ Humble
20. ___ Charitable
21. ___ Methodical
APPENDIX B

Vignette B ("atheist")
Monica is a social worker who lives with her husband in Philadelphia, PA. She has been happily married for a few years but lately has been having a lot of arguments with her husband, Charles. Monica is an atheist and journals regularly to reflect on her life. She often turns to her family and friends for support. She has found that these things have helped her deal with the extra stress in her marriage. Eventually, she suggested that she and Charles go to couples therapy. After a few months things have gotten a lot better.

Please Rate Monica on the following qualities from 1 to 5:

<table>
<thead>
<tr>
<th>1</th>
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</tbody>
</table>

1. ___ Reliable  
2. ___ Honest  
3. ___ Practical  
4. ___ Intelligent  
5. ___ Grounded  
6. ___ Insightful  
7. ___ Trustworthy  
8. ___ Spiritual  
9. ___ Open-minded  
10. ___ Social  
11. ___ Committed  
12. ___ Tolerant  
13. ___ Warm  
14. ___ Extroverted  
15. ___ Moral  
16. ___ Imaginative  
17. ___ Problem-Solving  
18. ___ Altruistic  
19. ___ Humble  
20. ___ Charitable  
21. ___ Methodical