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Components of Religious Beliefs, Religious Maturity, and Religious History as Predictors of Proscribed and Non-Proscribed Explicit and Implicit Prejudices

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LOYOLA UNIVERSITY CHICAGO

COMPONENTS OF RELIGIOUS BELIEFS, RELIGIOUS MATURITY,
AND RELIGIOUS HISTORY AS PREDICTORS OF PROSCRIBED
AND NON-PROSCRIBED EXPLICIT AND IMPLICIT PREJUDICES

A DISSERTATION SUBMITTED TO

THE FACULTY OF THE GRADUATE SCHOOL

IN CANDIDACY FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

PROGRAM IN APPLIED SOCIAL PSYCHOLOGY

BY

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CHICAGO, IL

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ABSTRACT

Many theorists propose a link between religiosity and prejudice; however, many studies show contradictory results. Recently, there has also been a growing interest in the differences between implicit and explicit prejudices. Current literature suggests that explicit and implicit attitudes are linked and one can influence the other. However, it is possible there are different sets of predictors of each attitude type.

African-Americans have historically been the most openly targeted minority in America. Recently, gay men and lesbians have also faced increased prejudice. The purpose of this project was to examine several aspects of religiosity (involvement, intrinsic/extrinsic, fundamentalism, quest, history, and maturity) and their relationship to explicit and implicit attitudes. Two hundred and eighty eight undergraduate students completed an online questionnaire measuring aspects of religiosity and computer based measures of explicit and implicit attitudes.

We found that very few aspects of religious beliefs predicted explicit attitudes toward African-Americans but almost all aspects were related to explicit attitudes toward gay men and lesbians. Religiosity did not predict implicit attitudes toward African-Americans or gay men, however; some aspects of religiosity were related to implicit prejudice toward lesbians. Furthermore, there were moderating and mediating effects for the implicit attitudes toward lesbians but not any other target group. This study demonstrates that relationships with religiosity and prejudice vary across aspects of

religiosity and type or prejudice. These results suggest reasons for the diversity of previous findings and set directions for more comprehensive future research.

CHAPTER ONE

PREJUDICE AS A PSYCHOLOGICAL CONCEPT

Prejudice is a seminal topic in social psychology. Generally defined, prejudice refers to negative attitudes or evaluations held toward a particular group because of certain characteristics that the group possesses (i.e., race, age, sexual orientation, etc.). Attitudes have been studied in social psychology since the inception of the field. In fact, early social psychologists defined their field as a study of attitudes (Thomas & Znaniecki, 1918). Allport (1935) argued that the concept of attitude “is probably the most distinctive and indispensable concept in contemporary American social psychology” (p. 798). Allport’s (1935) remark arguably still applies today, and by focusing on attitudes psychologists can obtain an enhanced understanding of the concept of prejudice.

The United States has a long history of prejudice. Although this country is founded on the premise that all men are created equal and that every American citizen should enjoy the same opportunities, civil liberties, and rights, different groups are openly targeted and discriminated against. From its inception, negative attitudes in America were aimed at Native Americans. The target then shifted to African Americans, women, Latinos and, in recent years, immigrants and homosexuals. Although these groups experience direct and open prejudice, minorities such as obese individuals and physically or mentally disabled people have been targets of much subtler forms of

prejudice. Even following historic events like the women's movement or the civil rights movement, both of which resulted in laws designed to protect minorities from prejudice and discrimination, many people still harbor negative attitudes and discriminate against many minority groups. In a recent report presented by the Federal Bureau of Investigation, incidents of hate crime in the United States rose by 7.8 percent in 2006 (Hate Crime Statistics, 2006). Racial prejudice continues to account for more than half of the reported instances of hate crimes. Other victims of hate crime are representatives of different sexual orientations or different religious groups. A rise in hate crime statistics shows that prejudice is still a serious problem in American society.

Roots and Theoretical Explanations of Prejudice

Some anthropologists argue that human beings, like many other animals, are innately prejudicial. That is, prejudice was hard-wired into the human brain through evolution as an adaptive response to protect our prehistoric ancestors from danger. Moreover, human survival was based on group living; therefore, outsiders were viewed as, and often were, very real threats (Neuberg & Cottrell, 2006). From the evolutionary perspective, the most important goal is the survival of the species through the proliferation of genes. To accomplish this, individuals must survive long enough to reproduce and protect offspring until those genetic derivatives are able to survive on their own. It follows that it may be beneficial to be prejudiced toward and discriminate against groups that are perceived as threats to survival (Kinzler, Dupoux, & Spelke, 2007; Neuberg & Cottrell, 2006).

The adaptive behavior paradigm proposes that animals develop prejudicial attitudes based on previous experiences. If an animal develops the idea that members of some other animal group have undesirable characteristics because of negative past experiences with members of that group, the animal may generalize that all members of the group bear the same characteristics. Consequently, the animal may become prejudiced against the entire group and avoid contact or, in extreme situations, become destructive toward that group. This perspective suggests that people, like other animals, are hard-wired to be prejudiced.

One of the first scientists to extensively research the psychological causes of prejudice was Gordon Allport. In his classic, *The Nature of Prejudice* (1954), he argues that there are two causes of prejudice: hostility and erroneous generalizations. Hostility refers to the general arousal and negative affect toward a target group. The behavioral manifestation of hostility directed at a specific target is the result of the second cause of prejudice, generalization. Allport (1954) argued that when an individual makes erroneous generalizations about another person, that person then becomes the target of the prejudiced individual's hostility. Generalization, according to Allport (1954), includes the essential component of categorization. An individual has to categorize the target person as a member of a certain social group. If another person is categorized as a member of that group, the hostility felt toward the group is projected onto that individual.

Throughout the history of social psychological theory and research, psychologists suggested several personality characteristics that may contribute to prejudice, including authoritarianism, dogmatism, closed-mindedness, social dominance orientation, and

many others (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Rokeach, 1948; Pratto, Sidanius, Stallworth, & Malle, 1994). These personality traits have been typically associated with bias toward one's own group. The initial explanations of the origins of these traits followed the psychodynamic perspective and suggested that they could be attributed to harsh and disciplinarian upbringing (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950). However, as the emphasis on childhood experiences faced strong criticism by many researchers, the explanation has been revised to focus on the lack of inter-group contact as an explanation of these personality traits and correlated prejudice (Stephan & Rosenfield, 1978).

Although the emphasis on childhood experiences has decreased over time, many psychologists argue that behaviors develop and propagate among generations. This group of learning theories include modeling, classical conditioning, and operant conditioning. *Modeling* theory was first proposed by (Bandura, 1973) who argued that people, especially young children, learn behaviors through observing other individuals act in particular situations. The observation alone is enough to learn the behavior, and the individual does not have to actively participate in the interaction. Consequently, this theory argues that people develop prejudicial thinking simply by observing discriminatory behaviors of others. They may then act in a discriminatory way when they have the opportunity and incentive to do so.

Classical conditioning theory argues that if an attribute (e.g., weak) is repeatedly associated with a specific group (e.g., women), people will connect the attribute with the group and this link will be activated whenever a person encounters an individual from

that group (Pavlov, 1927). If the attribute is negative and it gets activated whenever a person encounters an individual from that group, it may lead to the development of prejudicial attitudes. A classic example of such conditioning is the Little Albert experiment by Watson & Raynard (1920) in which the researchers conditioned an emotional response to a white rat in a child. Despite its ethical issues, this experiment demonstrates that it is possible to condition emotional responses in a person, especially at an early age.

Operant conditioning refers to the idea that consequences can form and modify behaviors (Thorndike, 1901). Three consequence types are proposed in the operant conditioning paradigm: reinforcement, punishment, and extinction. *Reinforcement* causes the behavior to occur with increased frequency, *punishment* causes the behavior to occur less frequently, and *extinction* is the lack of consequence following a behavior which, in most cases, causes the behavior to occur with less frequency. The consequence of reinforcement is of special importance when it comes to prejudice. That is, if individual's prejudicial attitudes and behaviors are reinforced by, for example, feeling of acceptance from peers, he or she will be more likely to continue expressing these attitudes (Connell, 1972).

The *social identity theory* has also been proposed as an explanation of prejudice (Tajfel & Turner, 1979). The minimal group paradigm proposed by Tajfel, Billig, Bundy, & Flament (1971) shows that mere categorization of people into groups is sufficient to induce general characteristics of group identification such as favoring one's ingroup to the detriment of outgroups. Similarly, the *realistic group conflict theory* (Sherif, 1966),

which argues that limited resources lead to conflict between groups, suggests that group interaction can also result in competition which may lead to hostility and aggression between the members of the groups. This intergroup approach received some criticism from researchers who argue that social categorization is not sufficient to influence intergroup behaviors (Grieve & Hogg, 1999). Furthermore, this perspective does not take into account many other variables that can potentially play important roles in intergroup contact.

More recently, Solomon, Greenberg, and Pyszczynski (1991) proposed *the terror management theory* which postulates that people have a need for self-preservation which is constantly threatened by the awareness of the inevitability of their own death. To deal with their mortality, people choose cultural world views and beliefs that give them the feeling of stability and consistency. These world views are then used as a standard against which judgments are made. Consequently, the *terror management theory* (Solomon, Greenberg, & Pyszczynski, 1991) postulates that people evaluate in-group members positively because they are most likely to share the same opinions and values. In contrast, out-group members typically have dissimilar cultural world views and, therefore, they are perceived as threatening to one's own set of beliefs. Numerous studies show that people tend to be biased toward their own group when they are made aware of their own mortality (Floriab & Mikulincer, 1998).

Most theories of prejudice focus on one root at a time. Stephan and Stephan (1996) have proposed a more integrated theory of prejudice. They argue that threat is a major cause of prejudice. Their idea is consistent with the evolutionary perspective which

states that animals, including humans, become prejudiced when their survival is threatened. However, Stephan and Stephan's (1996) *integrated threat theory* of prejudice postulates that there are not one, but four types of threats that may lead to negative attitudes: realistic threat, symbolic threat, intergroup anxiety, and negative stereotypes. *Realistic threat* refers to the actual threat to the very existence of the individual (e.g., war). The realistic threat idea has its roots in the realistic group conflict theory that postulates that conflict between groups may develop when there is competition for scarce resources (LeVine & Campbell, 1972). The realistic threat as described by Stephan and Stephan (1996) is more general than the realistic group conflict theory as it refers to any threat to the wellbeing of the individual. Moreover, in contrast to the realistic group conflict theory, realistic threat refers to a subjective perception of a threat. Stephan and Stephan (1996) argue that it is the perception of a real threat that can cause prejudice regardless of whether that threat actually exists or not. The *symbolic threat* refers to the perceived differences in values, beliefs, and attitudes, in other words, it is threat to the worldview of the individual. These threats arise because the individual believes that his/her value system is more just and moral than that of an out-group. Stephan and Stephan (1996) postulate that other theories include symbolic threat as a form of prejudice, whereas they see it as a cause leading to prejudice. *Intergroup anxiety* refers to the feeling of being personally threatened when anticipating or experiencing contact with a member of an out-group. These threats arise because of worries about a negative outcome of the interaction for the self. *Negative stereotypes* are considered a threat because they refer to the expectations concerning the behavior of a typical member of an

out-group. An individual having negative stereotypes about a member of an out-group would have negative expectations as to the outcome of the interaction with that member.

The causes of prejudice may vary across different target groups. For example, some males become prejudiced against women because they believe women are inferior due to biological reasons or because that's what they learned through socialization. The numerous of roots of prejudice and differences in cause across target groups makes it very difficult to identify specific aspects of people's worldviews and beliefs that are associated with negative attitudes. Thus, it is of the utmost importance that researchers focus on examining the correlates of prejudice in more detail.

Discrimination as a Behavioral Consequence of Prejudice

It is virtually impossible to talk about prejudice without mentioning the concept of discrimination. Whereas prejudice refers to the negative attitudes or feelings held toward members of some group, discrimination is the negative or destructive behavior that an individual engages in toward an out-group. More specifically, discrimination refers to the unequal treatment of people based on some characteristic they possess. In a sense, discrimination can be thought of as a behavioral consequence of prejudicial attitudes.

Farley (2004) classified discrimination into three categories: personal/individual, legal, and institutional. *Personal/individual discrimination* refers to any act resulting in unequal treatment of specific individuals on the basis of the individuals' group membership. *Legal discrimination* is the unequal treatment of groups of people that is supported by the law. Finally, *institutional discrimination* concerns with the unequal

treatment of individuals that is established in basic social institutions but not necessarily upheld by the law.

Although in most Western societies discrimination is illegal, prejudicial behaviors continue to be a serious problem in many countries including the United States. As previously mentioned, hate crimes, which are the most overt forms of discriminatory actions, occur frequently in America. Most often, however, discrimination takes on a much more subtle form than the hate crime. Indirect discrimination occurs when a condition is set such that only a small portion of people are able to comply with the condition. One of the most recognized examples of such discrimination is the Griggs v. Duke Power Company case in which an aptitude test designed to disqualify African-Americans was used in job applications (Griggs v. Duke Power Co., 1971).

African-Americans and Homosexuals as Targets of Prejudice

Although many groups experience prejudice and discrimination, historically, African-Americans have been the most openly targeted minorities in the United States. In recent years, gay men and lesbians have also faced increased negativism from society and a host of challenges to their civil rights. Consequently, it is appropriate that we focus on these minority groups and examine specific factors that may influence attitudes toward them.

Racism is among the most prevalent and pervasive types of prejudice on this planet. It has been a major issue in the United States since the colonial era. Historically, this nation was dominated by Caucasians from Europe, and all other racial groups, especially African-Americans, were subsequently marginalized, subjected to prejudice and

discrimination from both the White individuals and from the majority institutions. In the past, racial prejudice was expressed not only by the people holding negative attitudes toward other racial groups, but also by racially structured institutions (i.e., slavery, segregation, reservations, etc.) established by the government. Despite the fact that racial discrimination is currently criminalized (e.g., Civil Rights Act of 1964), negative attitudes and obvious inequalities exist between the different racial groups in the U.S.

A recent study by the American Civil Liberties Union showed that racial profiling is a growing concern in the United States (Sanctioned Bias: Racial Profiling Since 9/11 Report, 2004). Their findings demonstrate that although Whites are as likely to be stopped by the police as are African-Americans, racial minorities are more likely to be searched after being pulled over by the police. Police officers were also more likely to threaten or use force against African-Americans (Sanctioned Bias: Racial Profiling Since 9/11 Report, 2004). Correspondingly, the prison population has a disproportionate number of racial minorities, specifically, African-Americans (Prisoners in 2006, 2007).

Historically, homosexual people have also been targets of prejudice. Gay men and lesbians are one of the few minority groups that, in some countries, can be imprisoned for simply belonging to the “homosexual” group. For example, Iran, Nigeria, Saudi Arabia and several other countries regard homosexual acts as crimes that are punishable by imprisonment or even the death penalty. Similarly, certain states in the U.S. (e.g., Texas, Kansas, and Missouri) had laws prohibiting same-sex sodomy acts until 2003 when the U.S. Supreme Court invalidated these laws (Lawrence et al. vs. Texas, 2003). For a very long time homosexuality was seen as a clinical mental disorder and gay men and lesbians

lacked basic civil rights. It was not until the early 1970s when the American Psychiatric Association removed homosexuality from the list of mental disorders and gay men and lesbians started gaining some civil rights. In 1998 President Bill Clinton passed the Executive Order 13087 which was the first legal bill that prohibited discrimination in public services based on sexual orientation. Nevertheless, gay men and lesbians have virtually no other legal protections. Although there are some states (i.e., Vermont, Massachusetts, Hawaii) that recognize civil unions for homosexual couples, these unions are not recognized by the federal government. In recent years, homosexuality, especially gay marriage, has been a topic of increased controversy. As gay men and lesbians fight for their civil rights, they face much opposition from government and society. For example, in 2008 the California Supreme Court ruled that "limiting marriage to opposite-sex couples violate the state constitutional rights of same-sex couples and may not be used to preclude same-sex couples from marrying" (In re Marriage Cases, 2008). This ruling was invalidated in November 2008 by the passage of Proposition 8 which added a section that reads: "Only marriage between a man and a woman is valid or recognized in California" to Article I of the California Constitution (Constitution of the State of California). This opposition to gay rights and gay marriage comes mainly from adherence to certain religions (e.g., Muslim or Catholic).

A recent Gallup poll conducted between 2006 and 2008 in 129 countries shows that people who live in highly religious areas report that these are not good places to live for gay men and lesbians. These findings vary by denomination with Muslims reporting

the highest level of intolerance (74%) followed by Buddhists (59%), Jews (55%), Christians (54%), Hindus (45%), and Secularists (33%) (Pelham & Crabtree, 2009).

Several other studies demonstrate that homosexuals continue to be targets of prejudice and discrimination. For example, Hebl et al. (2002) found that homosexual job applicants experienced more interpersonal negativity during a job interview than heterosexual applicants. Moreover, homosexual applicants were also less likely to expect a job offer. Consistent with the argument that direct discrimination has decreased significantly, Hebl et al. (2002) did not find any evidence that homosexual applicants were discriminated against in a formal way. Nevertheless, gay men and lesbians face the subtle forms of discrimination which tend to be difficult to combat.

As can be seen from the brief overview of the history of prejudice in the United States, African-Americans and homosexuals emerge as minority groups that face the most prejudice and discrimination not only from the society, but also from social institutions. Subtle forms of discrimination against these groups can be seen in employment. It is critical that social psychologists examine the possible predictors or correlates of racism and sexual prejudice. Toward this end, this project examines specific aspects of religiosity as predictors of implicit and explicit attitudes toward these two minority groups. Religion shapes the world view of many individuals and minorities such as African-Americans or homosexuals are often perceived as threats to one's world view. For example, the special favors that African Americans receive (e.g., affirmative action) is contrary to the Protestant Ethic and homosexual behaviors tend to be perceived as

threatening moral values. Therefore, understanding the relationship between religious beliefs and attitudes toward minority groups is a crucial step in prejudice reduction.

Theoretical Explanations of Racism and Sexual Prejudice

Although social psychologists developed several theoretical explanations for prejudice in general, several models designed to explain specific forms of prejudice (e.g. racism and homophobia) have also been proposed. These models typically build on general theories of prejudice but they are more specific in the sense that they propose explanations of prejudice against particular groups.

Original explanations of racism focused on the old-fashioned, or direct, prejudice against African-Americans. Old-fashioned racism is blunt prejudice expressed by racial hatred, belief in racial inferiority, and support for institutional segregation (McConahay & Hough, 1976). In the 1970's, researchers proposed that the modern racism differs from old-fashioned racism in the sense that it focuses on anti-Black feelings and traditional American values, more specifically, the Protestant ethic (Gaertner & Dovidio, 1986; Sears, 1988).

The first two theories that focused on modern racism were the *aversive racism theory* proposed by Gaertner & Dovidio (1986) and the *symbolic racism theory* proposed by Sears (1988). Both models argue that people feel ambivalent toward the racial minority groups. That is, they are torn between the egalitarian values they truly hold and racism they harbor. This ambivalence manifests itself in a disguised form as support for traditional American values (Gaertner & Dovidio, 1986; Sears, 1988). The models differ in that *aversive racism theory* argues that because people strongly oppose racism and

believe it is wrong, they adopt more liberal values whereas the *symbolic racism model* postulates that people adopt more conservative and traditional worldviews ((Gaertner & Dovidio, 1986; Sears, 1988). Moreover, the *symbolic racism theory* argues that conflict between groups is not necessarily driven by rational self-interest but by feelings toward Africa-Americans. This notion sparked a lot of controversy from the group-conflict theorists who argue that the definition of self-interest is too narrow. In particular, the group-conflict theorists propose that people are not only interested in their personal welfare but also in the welfare of their social group (Sidanius, Devereux, & Pratto, 2001).

The *social dominance theory* has been proposed as an alternative to the symbolic racism model (Sidanius, 1993; Sidanius & Pratto, 1999). The theory postulates that every society is structured in a hierarchical fashion to help maintain order and reduce conflict between groups. Each society consists of at least two groups: the hegemonic group at the top and the negative reference group at the bottom. Furthermore, the theory argues that there are two components to the model: the *group-based dominance* which is a form of maintaining one's status and control over lower groups, and *general opposition to equality* which refers to the individual's inherent desire to be superior to others (Jost & Thompson, 2000). The hegemonic group tries to maintain their status using three mechanisms: institutional discrimination, individual discrimination, and behavioral asymmetry. These mechanisms are further driven by legitimizing myths designed to justify social dominance: paternalistic (myths that hegemony actually serves society), reciprocal (myths that hegemonic and minorities are actually equal), and sacred (myths that the hegemonic group is mandated to govern by God). Furthermore, the three mechanisms

used to maintain social dominance are also driven by several other factors such as social-comparison, social identity, and self-esteem maintenance (Jost & Thompson, 2000).

Social dominance theory has been proposed as an explanation for sexual prejudice. Historically, heterosexual men have held more power than any other group. According to the social dominance theory, heterosexual males try to maintain the existing hierarchy through institutional and individual discrimination. Since heterosexual men are the hegemonic group, they tend to have a greater desire to maintain their group superiority and also to have a higher degree of social dominance orientation. These factors manifest themselves through negativism and discrimination toward females and homosexual males (Sidanius, Pratto, & Bobo, 1994). Gay men and lesbians are perceived as belonging to the negative reference group. Thus, the hegemonic group (heterosexuals) tries to maintain its status of superiority by discriminating against homosexuals. This theory also suggests that females should not be as prejudiced as males because they do not belong to the dominant groups.

Research by Adams, Wright Jr. and Lohr (1996) shows that heterosexual males get equally excited when watching sexual scenes between homosexual couples and heterosexual couples. Thus, some psychoanalysts postulate that homophobia is the result of repressed homosexual urges that a heterosexual person is either unaware of or tries to deny. In addition, when these unwanted homosexual thoughts arise, heterosexual males may feel guilty and react with panic and anger (West, 1977). Furthermore, for heterosexuals who have difficulty integrating their homosexual urges, these unwanted

thoughts activate fear of becoming a homosexual which results in overall prejudice against gay men and lesbians (Slaby, 1994).

Herek (1987) proposed the *functional theory of attitudes* as an explanation of negative attitudes toward homosexuals. The theory postulates that people hold certain attitudes because they gain some psychological benefit from doing so. Attitudes toward different objects can serve different functions. Moreover, the theory postulates that attitudes are dynamic in that they can change as the context changes. The functional theory assumes that heterosexuals have one of two different types of motivations for their attitudes toward gay men and lesbians. More specifically, attitudes can serve an experiential function which helps heterosexual individuals make sense of their past interactions with homosexuals. Thus, people hold negative attitudes toward gay men and lesbians if their previous interactions with them were negative (Herek, 1987). Attitudes can only serve this function if the individual has had some previous contact with homosexuals. If a person never had such contact, homosexuals are seen as merely symbols. The functional approach argues that attitudes toward symbols serve a different function than attitudes based on previous experience. Such attitudes help one express important aspects of themselves and increase their self-esteem. This is done by affirming who one is (heterosexual) or who one is not (homosexuals). Furthermore, expressing who one is not may also be accomplished by distancing oneself from the attitude target or even derogating that group (Herek, 1987).

Allport (1954) argued that lack of contact with minority group members is also a basis for prejudice. He proposed the *contact hypothesis* which states that that knowledge

alone is not enough to change attitudes. Even if an individual is exposed to information about a minority group member, they will only accept those pieces of information that fit into their preexisting schemas. Allport (1954) argues that it is through voluntary interaction with a target person that people are able to modify their attitudes. Various studies show that contact with minority group members tends to lead to lower prejudice (Pettigrew & Tropp, 2006).

According to the *contact hypothesis*, under ideal circumstances, when a person interacts with a minority group member and the experience is positive, attitude change will occur on two levels. First, there will be a target-specific attitude change. That is, the preconceived assumptions about the target person that result from negative stereotypes are replaced with more positive ones. The second change occurs on a more general level. More specifically, new positive associations with the target person get extended to that person's group as a whole, and consequently, the overall attitude toward the group gets modified.

Allport (1954) specified four conditions needed to be satisfied in order for attitude change to occur as a result of contact: equal-status, common goals, intergroup cooperation, and institutional support. *Equal status* addresses the inter-group negative stereotypes concerning the perceived inferiority or superiority of one group over another. This perceived status is subjective and must be realistic. *Common goals* refer simply to the idea that for the interaction to be successful, the groups have to work on common goals. *Intergroup cooperation* condition postulates that groups have to cooperate in achieving their goals rather than compete against each other. Finally, *institutional support*

refers to the idea that policies and influential institutions must demonstrate commitment to integration and equality. These institutions must set clear examples in behavior and policy.

Although Allport (1954) listed the four conditions as indispensable for an interaction to result in attitude change, Pettigrew and Tropp (2006) argue that it is not necessary that all conditions be satisfied simultaneously for prejudice to be reduced. In their meta-analysis of contact studies, Pettigrew and Tropp (2006) found that mere contact can be enough to reduce bias. This effect is long lasting and generalizable to the target group and not just the target individual. They also state, however, that meeting multiple conditions enhance the bias reduction. The more conditions are present at the same time, the more likely the interaction will result in long lasting prejudice reduction.

Overall, this review of theories of prejudice suggests that prejudice has many roots, such as history of exploitation, stereotyping, cultural context, lack of contact, etc. However, the central theme of all these theories is that prejudice is a negative *attitude* held toward members of minority groups based on some characteristics that the group possesses.

CHAPTER TWO

ATTITUDES AS A MAJOR COMPONENT OF PREJUDICE

As previously mentioned, prejudice can be broadly defined as a negative attitude held toward members of some group based on specific characteristics such as race, gender, or sexual orientation. This definition postulates that an attitude is the underlying component of prejudice. The concept of attitude has been central to social psychology since its inception. Early social psychologists defined their field as a study of attitudes and throughout the history there has been a continued keen focus on attitudes (Thomas & Znaniecki, 1918). From the first stirrings of the discipline, social psychology theorists have believed that how we think and feel about objects or people strongly influences our behavior toward them. Attitudes represent aggregates of many bits of information; thus, they enable us to organize the volumes of information that we normally process into fewer units. Attitudes are pervasive, permeating all aspects of living. An attitude towards an object bespeaks what the object means to an individual and helps determine whether that person should approach or avoid that object. Attitudes aid us in organizing our world. They help guide us in interpersonal interactions, and thus, can potentially explain a host of social phenomena including prejudice and discrimination.

An attitude object can be virtually anything: a person, event, situation, abstract concept, or behaviors. “In general, anything that is discriminated or that becomes in some

sense an object of thought can serve as an attitude object” (Eagly & Chaiken, 1993, p. 5).

In the case of prejudice, the attitude object is another individual.

Definitions of Attitudes

Since the concept of attitudes has been reviewed many times, its definition has changed repeatedly. Early definitions described attitudes as predispositions toward responding to a particular object in a particular way. Such definitions focused on the relationship between attitudes and behavior. In 1935, Allport proposed a comprehensive definition of attitudes in which attitude was deemed “a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related” (p. 810). This definition explored the probability that a person would display a specific behavior in a particular situation. Recent definitions have become more specific by focusing on the evaluative nature of attitudes. Currently, most researchers agree with a definition similar to that proposed by Eagly and Chaiken (1993). They describe attitude as “a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (p. 1).

Origins of Attitudes

There is an ongoing debate about the origins of attitudes. As with most psychological phenomena, the question is whether attitudes are influenced by genetics (nature) or environmental or social factors (nurture). For a long time social psychologists perceived attitudes as learned or socially formed. Several theories explaining the influence of society or the environment on attitude formation have been proposed. Since

attitudes have been described as the major component of prejudice, many theories about the origins of prejudice overlap with the theories of the origins of attitudes.

Zajonc (1968) proposed the *mere exposure hypothesis* which states that a preference or bias for something can be created simply through repetition. He further argued that this effect does not require thought processes or cognitive mediation. Therefore, the *mere exposure effect* occurs subconsciously and does not require the person to recognize that the stimulus has been presented repeatedly. Although, in general, this theory has a lot of empirical support, it has some limitations. It seems like the strongest effect occurs when the stimulus is presented at an intermediate level of repetition. Very low or very high levels of repetition seem to weaken the effect. If a person is exposed to the stimuli not very often he or she may not make the connection between the two instances. On the other hand, when the stimulus is presented too often it is possible that the person will realize that the stimulus has already been presented. This, in turn, could attenuate the effect (Zajonc, 1968). The effect also depends on the initial attitude. That is, repeated exposure to a disliked object would increase disliking of that object.

Another theory attempting to explain the environmental or social factors influencing the formation of attitudes is known as the *principle of evaluative conditioning*. This principle postulates that people may start liking a particular stimulus because it has been associated with a positive mood or affect not necessarily elicited by the same stimulus. This idea is a paradigmatic example of *classical conditioning* which was discussed in Chapter 1. The difference between evaluative conditioning and classical

conditioning is that in classical conditioning the association between two independent stimuli occurs without conscious connection between them (Baeyens, Eelen, & Van den Bergh, 1990). Furthermore, unlike classical conditioning, evaluative conditioning is relatively stable, resistant to extinction, and it is an evaluation that is conditioned, not merely a non-evaluative association (Baeyens, Crombez, Van den Bergh, & Eelen, 1988).

Operant conditioning (see Chapter 1) is Skinner's (1957) theory which states that whether people like or dislike something depends on the frequency of positive or negative reinforcement for their behaviors. The reinforcement does not necessarily have to be experienced directly and it can be observed (e.g., observing other people getting reinforced for a particular behavior). The reinforcement may be material (receiving a reward for performing a behavior) or more psychologically based (being accepted in a group). Although this theory is very thorough and explains how the process of reinforcement occurs, it does not take into account other factors, or possible motivators that can have an influence on the reinforcement effect. Bem (1972) applied the theory of operant conditioning to his own theory of self-perception. Specifically, he argues that we infer our attitudes from our behaviors and the condition under which these behaviors occur, at least when our prior attitudes were weak or non-salient.

Social learning theory proposed by Bandura (1973), is another theory that attempts to explain the influence of the environment and society on the formation of attitudes. This theory argues that people learn simply through observation. Bandura (1973) proposed that people learn not only through reinforcement, like Skinner (1957) suggested, but also by observing and imitating others. This theory deals mainly with

learning behaviors but it can also be applied to attitude formation. As with behaviors, we form our attitudes based on the observation of other people. There seems to be a connection between Skinner's (1957) and Bandura's (1973) theories such that, in both theories, there is a form of reward or punishment. According to *operant conditioning theory*, the reinforcement is directly linked to the formation of attitude or behavior whereas according to the *social learning theory* people imitate attitudes or behaviors when they believe that it will be rewarding for them.

Although the idea that attitudes are formed through socialization received a lot of support in the literature, there is some evidence that certain attitudes show high heritability (Tesser & Martin, 1996). This suggests that there are some genetic components to the formation of attitudes. This is not to say that attitudes are not literally encoded in genes. Rather, they may be linked to certain heritable personality traits or abilities. For example, a genetic tendency to have an aversive response to those who are different from one's self can be a basis for prejudice. Hence, Whites would be averse to Blacks and vice versa. Such attitudes may not be very stable and can be modified by other factors (e.g. socialization).

The major theory postulating the genetic influence on attitudes is the *evolutionary theory*. According to this approach, we hold positive attitudes towards things that are good for us and ensure our survival and negative attitudes towards things that are potentially dangerous. This may explain why people generally perceive certain traits (such as smooth skin or shiny hair) as attractive. These traits are associated with health and therefore, are also associated with longer life span and fertility (in women). In other words, a woman

with a clean skin, shiny hair, and large hip to waist ratio will more likely to be perceived as attractive because she has the necessary traits to carry and give birth to a healthy child and therefore, ensure the survival of the family genes.

The formation of attitudes is neither influenced solely by nature nor solely by nurture. Rather, it is the combination of the two. It seems like the nature component is activated and can be modified by nurture. Therefore, to understand the influences on attitude formation it is important to look at both components and the interaction between them.

Tripartite Model of Attitudes

Katz & Stotland (1959), followed by Rosenberg et al. (1960), proposed a tripartite model of attitudes. This model suggests that attitudes are composed of three components: cognitive, affective, and behavioral. The cognitive component consists of thoughts and beliefs; the affective component involves feelings or emotions; and the behavioral component deals with intended actions toward an object (Eagly & Chaiken, 1998; Fazio & Olson, 2003). The three components of this model are not mutually exclusive. It has been suggested that each component arises from different types of learning experiences but they can be integrated together (Greenwald, 1968). An attitude can be comprised of a single component, a combination of any two components, or all three. It is also suggested that there may be an additional component, termed prescriptive. This component describes a person's beliefs as to what should be done about a particular attitude object. Some researchers argue that attitudes do not necessarily consist of these four components, but

rather, an evaluative summary is derived from their analysis (Cacioppo, Petty, & Geen, 1989).

Functional Perspective of Attitudes

The functional approach argues that people have attitudes because attitudes satisfy certain individualistic needs and allow for adaptation to the environment. Katz (1960) proposed that attitudes serve four major functions: object appraisal, value-expressive, ego-defensive, and social-adjustive.

The *object-appraisal* function (also referred to as the knowledge function) is considered the most basic function of attitudes. It states that an attitude serves as a frame of reference that helps individuals formulate opinions about objects. The environment is so complex that people cannot incorporate every piece of information received. The object-appraisal function helps summarize all incoming information into simple evaluations that allow for approach or avoidance of targets. The object-appraisal function is different from other functions in that it suggests that the mere holding of an attitude is useful. Thus, regardless of the other functions that attitudes may serve, every attitude serves an object-appraisal function (Fazio & Olson, 2003).

The *value-expressive* function allows people to express their values, preferences, and opinions. It helps individuals express their self-concept. The value expressive function allows an individual to give positive expressions of their central values and the type of person they perceive themselves to be. For example, a heterosexual individual may hold negative attitudes toward homosexuals because such attitudes are consistent with the beliefs and values closely related to their self-concept.

The *ego-defensive* function of attitudes helps people deal with inner psychological conflicts and ego insecurities. In other words, it serves as a defense mechanism that protects individuals from unpleasant truths about themselves. For example, negative attitudes toward homosexuals may serve an ego-defensive function for a heterosexual person when they experience psychological conflicts surrounding their sexuality or gender.

The *social-adjustive* function of attitudes means that attitudes allow people to distinguish themselves from others but also to identify with a specific group, gain social approval, and avoid disapproval. For example, a person may hold negative attitudes toward gay men and lesbians, not because they reflect their own beliefs and feelings, but because most of the members of their social group hold negative attitudes toward homosexuals. By holding attitudes that are consistent with their group, a member can easily fit in.

An attitude can serve one or more of the functions mentioned at the same time. For example, a negative attitude toward homosexuals may serve an ego-defensive function (the person may have some instability in his or her perception of self and by having a negative attitude they may feel better about themselves) and a social-adjustive function (it may help the person gain approval of his or her peers who may share similar attitudes). Furthermore, the same attitude may serve different functions for different people.

Properties of Attitudes

The properties of attitudes given copious coverage in literature include strength, polarity, and accessibility among several others. Krosnick & Petty (1995) define an attitude's *strength* as "the extent to which attitudes manifest the qualities of durability and impactfulness." The durability of an attitude describes its stability and resistance to change. Stability is the degree to which an attitude remains unchanged over an extended period of time, resistance is the ability of an attitude to withstand a persuasive attempt, and impactfulness is the level of influence it has on information processing and behavior (Krosnick & Petty, 1995). By this definition, a strong attitude is one that is stable over time, resistant to change, and has significant impact on information processing, judgment, and behavior.

The *polarity* of an attitude refers to the range of its evaluative continuum. Attitudes can be either unipolar or bipolar. Unipolar attitude structures indicate that a person holds either negative or positive beliefs about an attitude object, but rarely both. Bipolar structures, on the other hand, demonstrate that an individual may hold both negative and positive beliefs about the target. The same attitude can be represented as unipolar in one person and as bipolar in another (Pratkanis, 1989). This depends partly on the attitude object and the social environment. If a particular object is often discussed in an individual's environment and many opposing arguments are presented, then it may be represented as bipolar, since the individual possesses knowledge on both sides of the continuum. If the same attitude object is not discussed in the person's environment, then he or she may have unipolar attitudes that concur with their knowledge about the target.

The polarity property may also be represented in terms of its degree. Some people may have attitudes with higher degree of polarity, or extremity while other people's attitudes are closer to neutral.

When a person has both positive and negative evaluations of the same target, a state of tension referred to as *ambivalence*, may occur. It is important to note that this condition is different from having a neutral attitude. A neutral attitude is defined as possessing neither positive nor negative attitudes but a preponderance of evaluatively neutral beliefs and feelings. Two types of ambivalence have been identified. Within-dimension ambivalence occurs when an individual has both positive and negative evaluations within the same dimension of attitude, as in the case of a person having both negative and positive feelings (affective dimension) toward an object. Between-dimension ambivalence occurs when a person has conflicting evaluations between two or more dimensions (e.g., between affective and cognitive dimensions) (Fabrigar, MacDonald, & Wegner, 2005).

Accessibility of an attitude can be described as the strength of the link between evaluation and target object (Fazio, 1986). The stronger the link, the more accessible the attitude is. Strength of the association is typically measured in the time it takes for a person to express an attitude. An attitude that is expressed quickly is believed to be more accessible than one requiring time to express (Fabrigar, MacDonald, & Wegner, 2005; Fazio & Olson, 2003).

Another property of attitudes that has been proposed is *embeddedness* (Scott, 1969) which refers to the extent the attitudes are connected to other variables (e.g., religiosity). Some types of attitudes may have higher embeddedness and; therefore, be more strongly linked to some specific variables or linked to more other variables. In addition, attitudes that are more embedded are likely to be more accessible, strong, and resistant to change.

Explicit and Implicit Attitudes

The dual nature of attitudes has received a lot of attention in the literature in recent years (Bassili & Brown, 2005). Some researchers propose that people have explicit (consciously aware) and implicit (below conscious awareness) attitudes. They argue that a person may have different attitudes toward the same object depending on the situation, time, and available information. Early researchers argued that explicit and implicit attitudes are relatively separate constructs that can coexist independently of each other (Wilson, Lindsey, & Schooler, 2000). Implicit attitudes are described as being as unconscious, automatically activated upon exposure to an object, stable, resistant to change, and general in nature (Devine, 1989; Wilson, Lindsey, & Schooler, 2000). They may be based on previous experiences with the attitude object, some biological predisposition, or traumatic events (Bassili & Brown, 2005). Explicit attitudes, on the other hand are more cognitively based, more conscious and easier to control. They require more cognitive capacity to activate; therefore, can be controlled to some extent. They are not very stable or resistant to change and are more specific than implicit attitudes (Bassili & Brown, 2005; Devine, 1989).

The level of awareness of explicit and implicit attitudes has raised some controversy in psychological literature. Greenwald et al. (2002) argue that implicit attitudes are “introspectively unidentified (or inaccurately identified) traces of past experience that mediate favorable or unfavorable feeling, thought, or action toward social objects.” This definition suggests that people are not aware of their implicit attitudes. However, Fazio and Olson (2003) propose that, on some level, people are aware of the existence of implicit evaluations. They may not be aware of the valence of the implicit attitudes but they realize that they possess these evaluations.

If implicit and explicit attitudes are in fact two separate and independent constructs, it is possible that they differ in terms of their structure, properties, and functions. As previously discussed, Katz and Stotland (1959) proposed the tripartite model of attitudes. Since the interest in the dual nature of attitudes did not start until the last few decades, the tripartite model focused only on explicit attitudes. According to the model, explicit attitudes are understood to include behavioral, cognitive, affective components. Later, this model was expanded to also include the prescriptive component. Scant research has focused on examining the components of implicit attitudes. The cognitive, behavioral, and proscriptive components require individuals to consciously consider a target; consequently, these components appear to be more applicable to explicit attitudes than implicit ones. Traditional measures of implicit attitudes (e.g. Implicit Association Test) rely on activations of affective associations with target objects, indicating that implicit attitudes are comprised of affective components (Hofmann, Gawronski, Gschwendner, Le, & Schmitt, 2005). Current implicit attitude measures do

not allow researchers to determine whether or not implicit attitudes contain components other than the affective one. It may be the case that implicit attitudes are purely affective in nature.

Similarly, if the explicit and implicit attitudes are separate concepts, they may differ in the properties they possess. Recall that the major properties of attitudes include: strength, polarity, ambivalence, and accessibility. These properties were more thoroughly described earlier in this chapter.

Strength. Both explicit and implicit attitudes can be defined in terms of their strength. The school of thought that perceives explicit and implicit attitudes as separate argues that implicit attitudes are generally more stable and resistant to change than explicit ones. Implicit attitudes also tend to have a more direct impact on information processing and behavior than explicit ones. Consequently, this perspective argues that implicit attitudes are inherently stronger than their explicit counterparts.

Polarity. Although the notion of polarity of implicit attitudes has not been addressed in literature in great detail, it seems plausible to assume that polarity is a general characteristic of attitudes independent of whether they are implicit or explicit in nature. That is, an explicit attitude can be either unipolar (positive or negative evaluation, not both) or bipolar (both positive and negative beliefs) and so can implicit attitudes.

Ambivalence. Since implicit attitudes are currently thought to be only affective in nature (Hofmann, Gawronski, Gschwendner, Le, & Schmitt, 2005), it appears that they can only be ambivalent within the same dimension (affective dimension). Explicit attitudes, by contrast, can exhibit both within- and between-dimension ambivalence.

Accessibility. Explicit attitudes require retrieval of information from memory; therefore, they inherently take longer to activate than implicit attitudes which are activated automatically. Furthermore, implicit attitudes have a more direct link between target object and evaluation than explicit ones. Consequently, implicit attitudes can be considered more accessible than explicit ones.

As with structure and properties, there may also be differences between explicit and implicit attitudes in regards to their functions. Research on the functions of attitudes has typically focused on explicit attitudes. If one considers the four main functions (object-appraisal, value expressive, ego-defensive, and socio-adjustive) as applicable to attitudes in general, then it is reasonable to assume that explicit and implicit attitudes serve the same functions. However, it also seems plausible that implicit attitudes may serve functions other than the ones mentioned above. Another alternative is that that some of the four main functions are more applicable to explicit attitudes (e.g., value-expressive), while others apply to implicit attitudes (e.g., ego-defensive).

Object-appraisal. Since the object-appraisal function is the most basic function of attitudes, and it has been suggested that all attitudes serve this function, one can assume that that it is served by both types of attitudes. Regardless of whether the attitude is explicit or implicit, it serves as an evaluative summary of the information about an object.

Value-expressive. The value-expressive function appears to be more applicable to explicit attitudes than implicit ones. The attitude serving this function crystallizes the perception of self. In other words, by expressing certain attitudes, an individual validates

their beliefs. Since some researchers argue that people are unaware of the content of their implicit attitudes, the function does not necessarily allow affirmation of self-concept.

Ego-defensive. The ego-defensive function of attitudes serves as a defense mechanism for the self-concept. This notion seems to be more applicable to implicit attitudes than to explicit ones. People may hold negative attitudes toward objects that threaten their ego without consciously realizing that they do so. Defense mechanisms are typically inaccessible to consciousness. Therefore, if implicit attitudes are not consciously accessible, it is plausible that they may function as a protection of one's ego.

Socio-adjustive. The social-adjustive function of attitudes appears to be a function of primarily explicit attitudes. The desire to be accepted and fit in the group may lead people to express the attitude that is consistent with the one held by the group. This explicitly expressed attitude may not necessarily be equivalent to the one they implicitly hold.

It is important to note that since people can have both explicit and implicit attitudes about the same target, it is possible that each of these coexisting attitudes may serve different functions. For example, a person may have a positive explicit attitude toward homosexuals because they want to fit into a group that holds similar attitudes, while harboring a negative implicit attitude because that represents the individual's subconscious anxieties. In this situation, the explicit attitude serves a social-adjustive function while the implicit attitude serves an ego-defensive function.

Although early researchers viewed explicit and implicit attitudes as separate constructs, recently, there has been a shift in understanding of the explicit and implicit

attitudes. In particular, current literature suggests that explicit and implicit attitudes are linked and one can influence the other. Gawronski and Bodenhausen (2006) proposed the *associative-propositional evaluation* (APE) model of attitudes. Their model builds on other dual-process theories of cognitive functioning which differentiate between two distinct types of mental processes (Sloman, 1996; Smith & DeCoster, 2000). They argue that attitudes should be understood in terms of the underlying mental processes, which are associative processes for implicit attitudes and propositional processes for explicit attitudes.

Associative Processes. Associative processes are the basis of implicit attitudes and can be described as automatic affective reactions resulting from particular associations that are automatically activated upon encountering a stimulus object (Gawronski & Bodenhausen, 2006). This mental process does not require any motivation, cognitive resources, or intention to evaluate the target object (Cunningham, Raye, & Johnson, 2004). Most importantly, associative processes do not rely on accuracy of the evaluations. That is, they are activated regardless of whether they are considered valid or personally endorsed by the person. The main determinants of the activation of the affective reactions are feature similarity and spatio-temporal contiguity (Bassili & Brown, 2005; Smith & DeCoster, 2000). Furthermore, associative processes rely on the notion of pattern activation which argues that whether a particular reaction is activated depends on the fit between preexisting structure of the association in memory and the particular set of external stimuli (Gawronski & Bodenhausen, 2006). In other words,

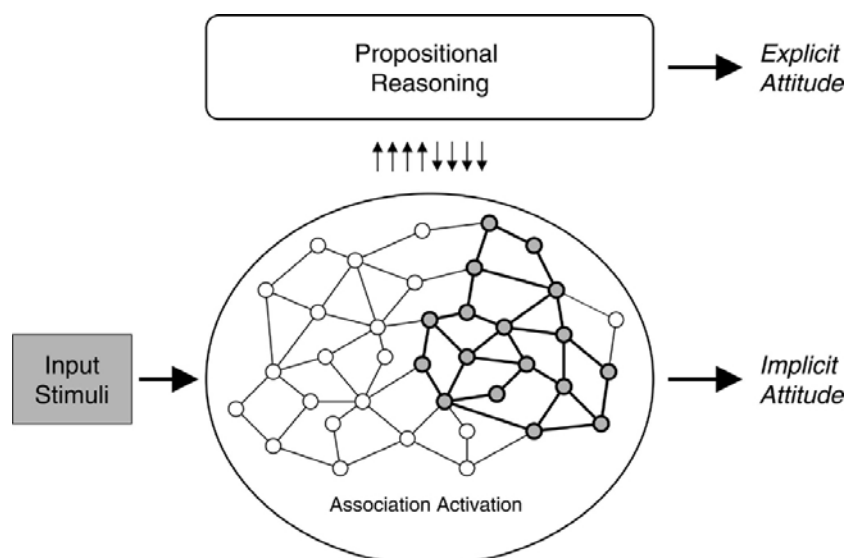
which affective reactions get activated depends on the particular context in which the stimulus is encountered.

Propositional Processes. Propositional processes are the basis of explicit attitudes and refer to evaluative judgments that are the result of inferences from any kind of propositional information that is considered relevant for a given evaluation (Gawrosnki & Bodenhausen, 2006). According to Strack and Deutsch (2004), these inferences occur in a reflective system. In particular, the reflective system takes information from the associative network and transforms them into propositions. The truth or validity of these propositions is then assessed with simple syllogistic inferences and propositional reasoning. This dependency on validity of the evaluations is what distinguishes associative and propositional processes. Recall that associative processes are activated automatically and do not rely on their truth or falsity.

It can be argued then, that the automatic affective reactions toward an object are typically used as a basis for evaluative judgments (Gawrosnki & Bodenhausen, 2006). However, in a situation where the affective reactions are rejected as invalid propositions, the evaluative judgment may occur without them. Whether a proposition is considered valid or not depends on their consistency with other propositions that are currently considered relevant to the evaluative judgment. If the affective reaction is considered valid, it will most likely be used as a basis for the judgment. If, on the other hand, the automatic affective reactions are not consistent with other propositions, it may be deemed invalid and rejected (Gawrosnki & Bodenhausen, 2006). For a schematic depiction of the APE model see Figure 1.

Propositional processes rely on the notion of cognitive consistency. Recall that the truth or falsity of propositions is determined based on syllogistic and logical principles. When two propositions are considered valid and one does not negate the other they result in cognitive consistency. Two propositions are considered inconsistent when both are regarded as true but one follows from the opposite of the other (Gawronski & Bodenhausen, 2006). Since consistency is defined in terms of the subjective truth value as perceived by a person, the inconsistency between propositions has to be resolved with propositional reasoning. In particular, the truth value of one proposition has to be changed or another proposition that resolves the inconsistency has to be found.

Figure 1. Schematic depiction of the associative-propositional model.



Source: Gawronski and Bodenhausen, 2006.

Early researchers argued that people may be able to suppress the effect of automatic affective reactions on evaluative judgment if they elaborate on the attitude

object (Devine, 1989; Fazio & Olson, 2003). Similarly, Wilson et al. (2000) proposed that cognitive elaboration may help people retrieve explicit attitudes from memory. Thus, if high level of cognitive elaboration allows people to suppress their automatic affective reactions and helps them retrieve explicit attitudes from memory, then the correlation between implicit and explicit attitude should decrease (Devine, 1989; Wegener & Petty, 1997). Several studies show that this is in fact the case (Florack, Scarabis, & Bless, 2001; Hofmann, Gawronski, Gschwendner, Le, & Schmitt, 2005).

Consistent with these findings, the APE model also predicts that the amount of cognitive elaboration moderates the relationship between implicit and explicit attitudes. However, the APE model postulates that, instead of influencing the ease of retrieval of explicit attitudes from memory, cognitive elaboration affects the depth of propositional thinking by moderating the number of relevant propositions that are being considered when making a judgment. In other words, the more one thinks about the attitude object, the more judgment-relevant propositions one is likely to consider. With more relevant propositions it is also more likely that some will be inconsistent with the automatic affective responses which may reduce the correlation between explicit and implicit attitudes (Gawronski & Bodenhausen, 2006). It follows from this that in situations where all examined propositions are consistent with the affective reactions and there is no question as to their validity, the correlation between explicit and implicit attitudes should actually increase.

Some researchers suggest that attitudes are not necessarily stored in memory and retrieved whenever a person encounters an attitude object but rather, they are formed on

the spot (Schwarz & Bohner, 2001; Wilson & Hodges, 1992). Although the APE model assumes the online construction of attitudes, it also postulates a difference in how associative and propositional attitudes are formed. That is, *propositional processes* are constructed online in the sense that the true or false values are assigned on the spot and situational changes may affect the perceived validity of the propositions. Similarly, the consistency of the propositions is also evaluated online. As for the *associative affective reactions*, they are created on the spot because they depend on the pattern of activation in the associative network and which affective reactions are activated depending on the context in which the attitude object is encountered.

Recall that early theories of attitudes regarded implicit attitudes as unconscious and explicit attitudes as conscious evaluations (Banaji, Lemm, & Carpenter, 2001; Greenwald & Banaji, 1995). The APE model deviates from this perspective in the sense that it argues that people are aware of their automatic affective reaction and rely on them when making judgments. Moreover, recall that these affective reactions are evaluated in terms of validity. Thus, if they are deemed invalid, people can reject them (Gawrosnki & Bodenhausen, 2006).

In summary, the APE model proposes that implicit and explicit attitudes are based on two mental processes: associative (for implicit) and propositional (for explicit). The main difference between the two is that propositional processes depend on the perceived truth value whereas associative processes are activated automatically upon encountering an attitude object. The automatic affective responses may influence the evaluative judgment if they are considered to be valid propositions. However, the propositional

processes may also operate independently of associative processes if the automatic affective reactions are deemed invalid or inconsistent with other propositions (Gawroski & Bodenhausen, 2006).

Both schools of thought, one that sees explicit and implicit attitudes as separate constructs and one that sees them as linked, point out important differences between the explicit and implicit attitudes. Thus, it is plausible that these two types of attitudes will differ in their correlates. Throughout the history of research on this topic, many different correlates of attitudes have been found. One predictor in particular, religiosity, has been linked to prejudicial attitudes. This study examines specific aspects of religiosity and how they relate to explicit and implicit attitudes toward African-Americans and homosexuals.

CHAPTER THREE

RELIGION AS A PSYCHOLOGICAL CONCEPT

Religion is a very important part of many individuals' lives. The majority of people in the world claim to have some religious beliefs (Gallup & Castelli, 1989; Hastings & Hastings, 1984). Religion is typically perceived as having a positive influence on people's lives. Each day, innumerable noble and positive things are being done in the name of religion. However, as Dennett (2006) points out, religion has its dangerous aspect. Highly religious people tend to harbor more prejudice than less religious individuals.

Researchers have been studying the relationship between religion and prejudice for over half a century. Early studies were not methodologically advanced and involved simply dividing people into church goers and non-church goers. These findings consistently found that people who attend church were more prejudiced than people who did not (Merton, 1940; Levinson & Sanford, 1944). Later studies showed that the relationship between church attendance and prejudice was more complicated. Some studies found a positive relation, some found a negative relation, and some found no relation. Such a conflicting body of research implies a complex relationship - some aspects of religiosity predict some kinds of prejudice for some kinds of people. This underscores the importance of a more in-depth examination of religion as a predictor of prejudice. As Allport (1954:444) put it:

The role of religion is paradoxical. It makes prejudice and it unmakes prejudice. While the creeds of the great religions are universalistic, all stressing brotherhood, the practice of these creeds is frequently divisive and brutal. The sublimity of religious ideals is offset by the horrors of persecution in the name of these same ideals. (...) Churchgoers are more prejudiced than the average; they are also less prejudiced than the average.

Definitions of Religion

Religion is a very difficult term to define. One of the main problems is that there is so much variation between religions in terms of practices and beliefs that it is virtually impossible to develop a clear and specific definition of religion. What one religion considers essential or fundamental, another one may explicitly deny (Schmidt, 2006). The term “religion” is very ambiguous, has multiple meanings, and covers a wide range of phenomena. Furthermore, there is an important distinction between theistic and non-theistic religions. In particular, theistic religions believe in a creator who made the universe whereas non-theistic religions teach that the universe has existed since the beginning of time without a supernatural creator (Fontana, 2003). Thus, many definitions of religion are not fully adequate or all encompassing.

One of the definitions of religion was proposed by E. B. Taylor who stated that religion is simply a “belief in spiritual beings” (Taylor, 1974). Although this definition is consistent with what many people consider to be the most important aspect of religion, it only applies to theistic religion. That is, religions such as Jainism or Buddhism which do not believe in a supreme being do not fit this definition. Thus, Taylor’s definition seems too narrow and exclusive (Schmidt, 2006). Similar problems can be seen with definitions proposed by Wallace (1966) and Argyle and

Beit-Hallahmi (1975). Wallace (1966) describes religion as a belief in “souls, supernatural beings, and supernatural forces” while Argyle and Beit-Hallahmi (1975) define it as “a system of beliefs in divine or superhuman power, and practices of worship or other rituals directed toward such a power.” Like Taylor’s (1974) definition, these two statements do not apply to religions such as Buddhism which denies the existence of a single soul or divine being.

What seems to be the common factor among all religions is the belief in a non-material or spiritual dimension. With this in mind, Schoeps (1967) proposed that religion is “the relationship between man and the superhuman power he believes in and feels himself to be dependent on (...) the theme of religion is redemption from the powers that prevent man from communicating with the divine.” Although this definition applies to a wider range of denominations, it also includes people who believes in the spiritual dimension but do not necessarily follow the teachings of a particular religion. Argyle and Beit-Hallahmi (1975) would not consider such individuals religious because they argue that religion involves practices or worship and other rituals.

Since none of the proposed definitions of religion encompass all of its aspects, many scientists believe that it is not possible to define religion in scientific terms (Nielsen, et al., 1988). The problem that scientists are faced with is that religion consists of esoteric and exoteric aspects. The exoteric side of religion is experienced by most people and it refers to generally accepted beliefs and dogmas. The esoteric side, on the other hand, is concerned with inner practices that are often available only

to an elite, such as priests. These inner practices and teachings can only be accessed through deep exploration and study of religion. Thus, scientists are typically confined to only the exoteric aspect of religion (Fontana, 2003).

Nielsen et al. (1988) argue that there appear to be several factors that seem necessary for a set of beliefs to be called religion. In particular, a religion should 1) believe in a spiritual dimension, 2) practice its beliefs through some sort of rituals, and 3) adhere to a set of ethical guidelines. One difficulty that arises from these three characteristics of religion is that some people may accept just the first one, others may accept just the second and third one, while others may accept all three. Fontana (2003) calls the first group spiritual, the second group religious, and the third group spiritual/religious.

Fontana's (2003) categorization of people into religious and spiritual calls for a clearer definition of the concept of spirituality. As with religion, spirituality is a very abstract term. The word "spirit" typically stands for some kind of energy, either physical or psychological. Thus, spirituality can be generally defined as a belief in this sort of energy. Spirituality can also be described as representing the degree to which one recognizes his or her spiritual nature which implies that human beings are more than just their physical bodies (Fontana, 2003).

Because of the issues described above, it is very difficult to define religion in very specific terms. Many religious studies use a broader definition of religion proposed by Geertz (1973) which states that religion is a worldview that gives meaning to people's lives through reference to higher power. This approach to

religion often includes narratives, symbols, and rituals and may be expressed by prayer, music, and art (Geertz, 1973).

Psychological Theories of Religion

Psychologists have been trying to explain religion from the beginning of the field. The psychological theories of religion vary greatly based on the particular approach that the theorist subscribed to. Several different psychological perspectives can be identified in the study of religion: psychoanalytic (Freud), analytic (Jung), biological (Hall), behavioral (Wells, Trout, Guthrie, Skinner, Bandura), and humanistic (James, Pratt, Fromm, Maslow).

Psychoanalytic Perspective. Freud, who is considered the father of psychoanalysis, examined religion in terms of how it is practiced by an average person rather than in the more philosophical terms. He proposes that religion should be examined in two aspects: religious beliefs as an illusion and religious behaviors as an obsessional neurosis (Forsyth, 2003). Freud postulates that aggression and hostility are harmful forces in many human relationships. Thus, to deal with these forces, people try to control human relationships through religion. In particular, religion promotes belief in God, who is a loving father but, like any father, also makes demands and prohibits certain behaviors. Freud argues that the sense of helplessness and dependency that people feel throughout their lives is responsible for the constant search for a protector. The child first turns to its mother and then to its father for protection. When the person reaches adulthood, they turn for protection to God, who becomes a substitute for a father. According to Freud, this constant search for a loving and caring figure is the formation of

religion. Consequently, religion is an illusion because it is based on a wish fulfillment and not evidence (Forsyth, 2003).

Freud (1959) also argues that religious behaviors are a form of obsessive-compulsive neurosis. In his psychoanalytic theory, Freud (1924) postulates that, during the phallic stage of development, the child develops a sexual desire for his mother, or the Oedipus complex. The father then becomes a threat and the child develops a desire to kill his father and have the mother to himself. This produces the feeling of guilt because the child cannot go on with a desire to kill someone he loves. The normal resolution of the Oedipus complex is for the child to repress the sexual desires for his mother and identification with the father. If however, the Oedipus complex is not resolved, the feelings of hostility and guilt are projected onto God when he becomes the surrogate father (Forsyth, 2003). Consequently, the constant unconscious hostility toward God is the obsessive component and the attempt to deal with the guilt through religious behaviors (e.g., prayers) is the compulsive component of the neurosis. This idea suggests that prejudice is a manifestation of a defense mechanism, projection, whereby hostility toward God is projected onto some other person or group.

Analytic Perspective. In his analytical theory of religion, Jung focused on personal experiences, rather than evidence, for the existence of God. He argues that the goal of the second half of life is to maintain psychological wholeness and religious outlook. By religious outlook he does not necessarily mean traditional or fundamentalist religious beliefs but rather a religious quest or individuation. For Jung, religious beliefs are a collection of dynamic forces or powers, which are archetypes of the collective

unconscious (Forsyth, 2003). Thus, religious symbols (i.e., God) are projections of the archetypes. This archetypal quality makes religious imagery psychologically real (Forsyth, 2003). Jung argues that religion and individuation are analogous in the sense that they both are concerned with the desire for rebirth or psychological wholeness.

Although Jung had a more positive attitude toward religion than did Freud, his theory was not concerned with the institution of church or traditional and orthodox religious beliefs. Jung believed that such institutional religion was actually an obstacle to direct experience of the divine power. Thus, his theory focused on the psychological value of religion. In particular, the power of the religious archetypes to bring about change and the feeling of wholeness in the individual (Forsyth, 2003).

Biological Perspective. Many religions recognize that there is a strong connection between bodily conditions and spiritual states. In fact, Stanley Hall (1882) observed that most conversion experiences occur around the time of puberty where many physiological changes and sexual maturation takes place. On this basis, he proposed that there are many similarities between religion and sexual love. In particular, both lead to a fanatical dedication to their objects of devotion, are expressed through music, dance and other ceremonies, and lead to feelings of ecstasy and happiness (Wulff, 1997). Furthermore, Hall (1882) argues that the religious development closely follows the development of the species. For example, he proposed that one can cultivate religious sentiments in an infant by caring for him with calmness and tranquility. This encourages the development of trust and love which is first directed toward the mother and later toward God (Wulff, 1997).

Behavioral Perspective. Early behaviorists examined religion in terms of its instinctual dispositional and evolutionary value. Wells (1917; 1921) proposed that religious belief is “a system of reflex arcs” (pp. 71-72) designed to satisfy the basic instinct of curiosity. Furthermore, belief has direct effects on biological well-being, thus it has an important survival value (Wulff, 1997). Wells (1921) argued that the evidence for the survival value of beliefs is the universal existence of religion among primitive tribes.

A more modern behaviorist approach to the study of religion is one based on the *stimulus-response association theory* propose by Guthrie (1952). According to the *stimulus-response association hypothesis*, the fundamental principle of learning is that a behavior that last occurred in the presence of a stimulus will occur again whenever that stimulus is present. The only necessary component of the stimulus-response association is contiguity. That is, both the stimulus and the response must occur together in time (Wulff, 1997). Rewards, Guthrie argues, are helpful because they somehow reinforce the stimulus-response association; however, they are not necessary for it to take place. Moreover, repeated behavior does not necessarily increase the strength of the stimulus-response association but rather increases the number of associations formed.

Vetter (1958) applied the *stimulus-response theory* to the study of religion. He argued that human beings respond to unpredictable situations with ritualistic behaviors. More specifically, belief is a way of explaining or rationalizing habitual behaviors that otherwise would be considered irrational. The more evidence

inconsistent with the behavior there is, the stronger the belief tends to be. For Vetter (1958), faith is when a strong belief is held despite evidence against it.

Vetter's (1958) ideas about habitual behaviors was largely based on the work of another behaviorist, B.F. Skinner (1948) who demonstrated that pigeons can be taught to associate stimuli with ritual behaviors. As for religions, Skinner saw it as means of controlling behaviors. Like Vetter, Skinner did not refer to priests favorably and argued that they use their religious beliefs and practices to establish and maintain their position of power. Unlike earlier behaviorists who developed theories of religion based on philosophical arguments, Skinner approached religious behaviors from the experimental perspective.

Skinner (1953) proposed the *theory of operant behaviors*, which essentially states that the probability of an occurrence of a behaviors will be increased if it the behaviors is reinforced by a stimulus. However, if there is no reinforcement, the occurrence of the behavior will gradually decline. Interestingly, there is no need for the behavior and the reinforcement to be related in any logical way. He calls such reinforcement adventitious and he demonstrated this phenomenon in a study with pigeons. He presented the birds with a reinforcing stimulus in equal intervals regardless of what the pigeons were doing. After a while, the birds started to exhibit superstitious behaviors whenever the stimulus was present. As with superstitions in humans, the pigeons may have linked the rewards with their actions even though no such connection actually existed. These ritual behaviors showed a very strong resistance to extinction (Skinner, 1953).

Thus, Skinner's (1953) approach suggests that religious behaviors occur because they have been reinforced by some stimuli. Faith, according to Skinner (1971), is people's way of explaining the reoccurrence of behaviors that were established by environmental stimuli without people's awareness. Terms like morality and sinfulness are not internal states but simply labels for behaviors that were shaped by the social environment. Specifically, a person is considered moral based on their history of reinforcement for their behaviors.

Humanistic Perspective. William James has been one of the most influential figures in the psychological study of religion. James distinguished between institutional religion and personal religion (James, 1961). Institutional religion refers to the religious group or organization, and plays an important part in a society's culture whereas personal religion, in which the individual has a mystical experience, can be experienced regardless of the culture. James was most interested in understanding personal religious experience. James believed that religious beliefs are a reflection of one's temperament. More specifically, he argues that there are two types of temperaments: the tender-minded and the tough-minded. The tender-minded, he argues, are characterized by rationalism, monistic beliefs, and religiousness. By contrast, tough-minded people are characterized by empiricism, pluralistic beliefs, skeptical and not religious (James, 1961).

For James, roots of every religion lay in personal experiences of its founders and religious beliefs of every individual originate from his or her personal experiences. Believers do not have faith because they see religious doctrines as rational but rather because they experienced something emotional and deeper than reason (James, 1961).

James proposed two main types of religious experiences and personalities: *healthy-minded religion* and the *morbid-minded religion*. The two types of religious experiences are fundamentally different in how they perceive the world and religious development. *Healthy-minded* people see nature as essentially good and they focus on the positive aspects of their environments whereas *morbid-minded* people are constantly aware of the evil in the world and their own incompleteness (Forsyth, 2003).

Pratt (1920), who was a student of William James, proposed a theory of religion that, on one hand, is a continuation of James's work and on the other hand postulates completely new ideas. Pratt's (1920) work was focused on the unconscious aspect of religious beliefs. What most distinguishes Pratt and James's theories is their view on religions conversion. Whereas James (1961) argues that conversion typically occurs when a person experiences a dramatic event, Pratt (1920) proposed that religious conversion occurs through a much more subtle process such as a desire to overcome old habits or gain new insight.

The more important aspect of Pratt's (1920) theory of religion is his distinction between mild and extreme mystic experience. By mystic experience he means the feeling of presence and contact with a being greater than oneself. Since this experience is with a divine person, it is also accompanied by an intense feeling of happiness (Pratt, 1920). The main difference between mild and extreme mystics lies in how they deal with periods when the presence of divine is not felt. Whereas for mild mystics the lack of presence of the divine is relatively easy to deal with, extreme mystics experience feelings of pain and

suffering. However, even though they experience more suffering, their joy and happiness when they feel the presence of the divine is much more intense than that of a mild mystic.

In his theory of religion, Pratt (1920) identified three types of beliefs: 1) primitive credulity, 2) intellectual belief and 3) emotional belief. The *primitive credulity* refers to the tendency to believe in something until some doubts arise. Although this form of belief is typically present in children, it is also a part of many adults' religiousness simply because they do not want to deal with the difficulty or unpleasantness of making a change. The *intellectual belief* is a type of faith that constantly tries to counter doubt with reason for belief. People with such a belief are able to accommodate the advances in knowledge into their belief system and still preserve the essential aspects of their religions (Wulff, 1997). Lastly, *emotional belief* is a belief based on the *feeling background* which Pratt (1920) describes as the area of the consciousness that is indistinct and is responsible for vague and unfocused feelings. This type of belief is what Pratt (1920) calls faith because it refers to the most inner religious experience.

A more recent psychologist, Gordon Allport made important contributions to the psychology of personality and his interest in the individual carried over to his theory of religion. In his book, *The Individual and His Religion*, Allport (1950) makes an observation that many people desire a spiritual life but they do not find it in institutional religion. Although people believe in God, many of them have mental reservations and doubts about their religions (Allport, 1950). Allport (1950) describes this need for spirituality as religious sentiment. In an average person such sentiment represents a personality trait but in a deeply religious individual it is categorized by Allport (1950) as

a “cardinal trait” that has a strong influence on all aspects of the individual’s thoughts and behaviors. The religious sentiment represents the subjective side of religion and it explains how a person incorporates religious doctrines, symbols, and values into their worldviews (Forsyth, 2003). Furthermore, since Allport (1950) sees religious sentiment as a personality trait, it is unique to each individual. Thus, this view is different from Freudian or Jungian approach in that it postulates that religion cannot be explained in terms of mental mechanisms common to all individuals (i.e., obsessional neurosis or collective unconscious).

A slightly different approach to religion, described as humanistic psychoanalysis, was taken by Erich Fromm (Forsyth, 2003). His theory of religion was focused more on describing the criteria for evaluating religious experience rather than on explaining the origins of religion. His basic view was that belief in God is useful as long as it promotes growth in the individual.

Fromm (1959) sees human nature as having two conflicting tendencies: progression which is the tendency toward greater self-awareness and independence, and regression which is a tendency toward reversing to the state of harmony with nature and dependence on mother figures. Thus, Fromm (1959) examined religion in terms of whether it promotes progression or regression. Moreover, he argued that religion should provide answers to the most fundamental problems of human existence which he identified as loneliness, powerlessness, and separateness (Forsyth, 2003). Based on this, he distinguished between two types of religious experience: *authoritarian*, which decreases or even reverses people’s growth and the development of love, reason, and

independence and *humanistic*, which encourages the individual to realize their own powers of love and reason rather than projecting it onto God.

The work of Allport and Fromm was very influential to Abraham Maslow whose theory of religion built on the ideas of his two predecessors. Maslow attempted to demonstrate the religious values are in fact human values. In essence, he proposed that the core or origin of religion is something he refers to as *peak-experience*. This peak-experience is personal illumination or revelation and is a different way of viewing reality. He calls this view *B-cognition* and argues that it has several important characteristics (Maslow, 1964). First, the object of the B-cognition has to be seen as having no real purpose to human concern. Second, B-cognition is self-validating in that it has no other purpose beyond the experience itself. Third, B-cognition involves being lost in time and space. Based on this, Maslow (1964) proposed that there are two kinds of religious personalities: peakers and non-peakers.

Peaker personalities, are essentially what Fromm called humanistic religion. It is a type of personality where religion is understood through peak-experience. In other words, a *peaker* discovers the truths about the world and God through his own experiences (Forsyth, 2003). *Non-peaker*, on the other hand, depends on the religious institutions to communicate the revelations of the peakers to him, for example, church attempts to communicate the experiences of priests (peakers) through masses and ceremonies. Since peakers experience religion in a much more personal way, such forms of religious beliefs to Maslow (1964) represent an authentic religion.

As it can be seen from the overview of the above mentioned theories, religion is an extremely complex and multidimensional phenomenon. The different components of religiosity tend to be either confounded or correlated with one another. This makes it very difficult to identify the relationship that this specific component has with some other variable (e.g., prejudice). Research on religion and its influence on other variables often show contradictory and inconsistent results (Laythe, Finkel, Bringle, & Kirkpatrick, 2002). The relationship between religion and prejudice involves the problems described above. Some aspects of religiosity tend to be related to prejudice while other aspects are uncorrelated. Furthermore, different components of religiosity may be related in opposite directions or different degrees with prejudice (Laythe, Finkel, Bringle, & Kirkpatrick, 2002).

CHAPTER FOUR

RELATIONSHIP BETWEEN RELIGIOUS BELIEFS AND PREJUDICE

As discussed earlier, many studies have shown a relationship between religious beliefs or actions and prejudice. Early studies utilized very simple measures of religiosity that typically assessed only overt religious behaviors (e.g., church attendance). It wasn't until recently that researchers started examining religion as a multi-dimensional construct. These studies have found mixed results. As suggested by Allport's (1954) paradox, some aspects of religious beliefs tend to be related to prejudice while other aspects are either unrelated or related in the opposite direction. Furthermore, very few studies looked at the relationship between religiosity and *implicit* attitudes. To better understand this complex relationship, researchers must continue studying these two concepts further.

Proscribed versus Non-Proscribed Prejudice

Before examining the relationship between religion and prejudice in more detail, it is important to consider the religion's stance on prejudice toward specific groups. That is, it is plausible to assume that if a church condemns prejudice against one group but promotes prejudice against another group, then highly religious people may, at least overtly, hold attitudes consistent with the church's teachings.

Batson Shoenrade, & Ventis (1993) argue that some prejudice (e.g., against African-Americans) is generally proscribed by most religions, however, prejudice against homosexuals is non-proscribed or, in some religions (e.g., Catholics), even prescribed. Duck and Hunsberger (1999) examined Batson et al.'s (1993) claims by studying students' perceptions of their church's teaching regarding prejudice. Their findings supported Batson's claims. Thus, the present project examines the relationship between aspects of religiosity and proscribed prejudice (against African-Americans) and non-proscribed prejudice (against homosexuals).

Components of Religious Beliefs

Religious Involvement. Researchers have been studying the relationship between religion and prejudice for over half a century. Early studies were not methodologically advanced and involved simply dividing people into church goers and non-church goers. In other words, early studies focused on religious involvement or overt behaviors. These findings consistently found that people who attend church are more prejudiced than people who do not (Merton, 1940; Levinson & Sanford, 1944). Later studies showed that the relationship between church attendance and prejudice was more complicated. More specifically, they showed that people who never attend church exhibited a low level of prejudice, people who attend church a couple of times a month were the most prejudiced, and people who attended church many times a month were the least prejudiced (Parry, 1949).

There is, however, limited empirical evidence for this curvilinear relationship between church attendance and prejudice and the available research has many

methodological weaknesses. First, most research does not distinguish between weakly religious people and non-religious people. Second, there is no standard as to what constitutes “high,” “moderate,” and “low” church attendance (Altemeyer, 1996). Thus, most researchers agree that “the general finding appears plain and linear: The more one goes to church, the more likely one will be prejudiced against a variety of others” (Altemeyer, 1996, p. 18). This positive relationship may be less pronounced with proscribed prejudice (e.g., against African-Americans) than with non-proscribed prejudice (e.g., against homosexuals). For example, Herek and Capitanio (1999) found a strong negative relationship between religious behaviors and attitudes toward gay males and lesbians.

Extrinsic and Intrinsic Religiosity. In the next several decades, researchers shifted away from simple measures of religiosity based on church attendance and faith commitment and began examining different components of religious beliefs. Among the first psychologists to identify distinct aspects of religiosity were Allport and Ross (1967) who argued that religious beliefs can be divided into intrinsic and extrinsic religiosity. According to Allport and Ross (1967), people with high intrinsic religious beliefs view God as loving and supportive, view each person as unique and special, and see religion as a search for truth. People with high extrinsic beliefs, on the other hand, view God as vindictive and punitive, view people in terms of social categories (e.g. sex, age, status), and see religion as a means to other ends. In other words, people with high extrinsic religiosity *use* their religion and people with high intrinsic religiosity *live* their religion.

This original conceptualization of extrinsic and intrinsic religious beliefs as separate ends of a spectrum was not supported by research. Thus, Allport and Ross (1967) reformulated their definition of the two constructs and they argued that very few people have purely extrinsic or purely intrinsic religious beliefs; rather, people fall somewhere in a space defined by the two dimensions. In other words, the two scales must be examined orthogonally, that is, people should be categorized into four groups based on the median split on the scales: consistently intrinsic, consistently extrinsic, indiscriminately pro (IP – high on both scales), and indiscriminately anti (IA – low on both scales) (Allport & Ross, 1967). After reanalyzing their data with this new categorization, Allport and Ross (Allport & Ross, 1967) concluded that consistently extrinsic people were more prejudiced on both direct and indirect measures of prejudice than any of the other three groups, and IP people were more prejudiced than the IA and consistently intrinsic people.

To further explore the relationship between extrinsic and intrinsic religiosity, Donahue (1985) performed a meta-analysis of 70 studies concerning these two components of religious beliefs. More specifically, Donahue was interested in the correlation and interaction between extrinsic and intrinsic beliefs. His meta-analysis revealed that 1) items from the two scales tend to load on two separate factors, 2) the two scales are related very differently to other measures of religiosity, 3) intrinsic scale tends to be uncorrelated with racial prejudice whereas extrinsic scale tends to have a positive relationship with racial prejudice, 4) the two scales do not tend to interact with one another when predicating other religious measures. Donahue (1985) concluded that

intrinsic scale is “uncorrelated, rather than negatively correlated with prejudice across most available measures. The extrinsic scale is positively correlated with prejudice but not nearly as strongly as Allport’s writings might have predicted” (p.405).

Many of the early studies that examined the relationship between extrinsic and intrinsic religiosity and prejudice used African-Americans as the target group. There are fewer sexual prejudice studies and their findings are unclear. Hunsberger and Jackson (2005) reviewed studies from 1999 to 2003 and concluded that 7 out of 9 studies showed a positive relationship between intrinsic religiosity and prejudice against gay males and lesbians. The relationship between extrinsic religiosity and sexual prejudice is more mixed. Hunsberger and Jackson (2005) found positive relationship in 4 out of 8 studies, negative relationship in 2 out of 8 studies, and no relationship in 2 out of 8 studies. These results tend to be opposite to what research has shown with racial prejudice. Thus, it is possible that the relationship of extrinsic and intrinsic religiosity and prejudice may depend on the target group. Duck and Hunsberger (1999) suggest that intrinsic religiosity should be negatively associated with proscribed prejudice (e.g., against African-Americans) and positively related to nonproscribed prejudice (e.g., against homosexuals). These mixed results stress the importance of examining intrinsic and extrinsic religiosity in more detail and with multiple targets in the same study.

Quest Religiosity. Intrinsic and extrinsic orientations have received a lot of attention from researchers and are often included in studies examining relationships between religious beliefs and other constructs. Batson (1991; 1991), however, argued that there is yet another aspect of religiosity that must be taken into account. His concept of

quest religiosity refers to the approach to religion that involves questioning, open-mindedness, and flexibility; as such, many studies have found it to be negatively correlated with proscribed and non-proscribed prejudice (Batson, Naifeh, & Pate, 1978; Duck & Hunsberger, 1999; McFarland, 1989). However, it is important to mention that several studies show mixed results with quest orientation and prejudice (Fisher, Derison, Polley, & Cadman, 1994). More studies are needed to clarify the relationship between quest and prejudice.

Fundamentalism. Some researchers suggest that religion should be examined not just in terms of the content of the beliefs, but also in terms of the way the beliefs are held. This approach identifies fundamentalism as a component of religious beliefs.

As early as 1902, William James argued that a rigid and dogmatic style of religious belief might be associated with bigotry and prejudice. Although early studies found support for the relationship between religious fundamentalism and prejudice, the definition of fundamentalism varied from study to study. In 1992, Altemeyer and Hunsberger proposed a definition that has now been widely accepted as the conceptualization of fundamentalism. They argue that fundamentalism is:

the belief that there is one set of religious teachings that clearly contains the fundamental, basic, intrinsic, essential, inerrant truth about humanity and deity; that this essential truth is fundamentally opposed by forces of evil which must be vigorously fought; that this truth must be followed today according to the fundamental, unchangeable practices of the past; and that those who believe and follow these fundamental teachings have a special relationship with the deity (p.118).

One of the most important aspects of this definition, and one that distinguishes it from other conceptualizations of fundamentalism, is that it is applicable to any religious denomination. Furthermore, fundamentalism has been consistently found to be positively related with proscribed and non-proscribed prejudice (Altemeyer & Hunsberger, 1992; Kirkpatrick, 1993). Since religious fundamentalism is conceptually opposite to religious quest, it is not surprising that the two constructs are typically negatively related (Altemeyer & Hunsberger, 1992).

When examining the effects of religious fundamentalism on prejudice, it is important to consider the link between fundamentalism and right-wing authoritarianism (RWA), which refers to high degree of submissiveness to authority, high degree of aggressiveness toward out-groups, and high degree of adherence to traditions and norms (Altemeyer & Hunsberger, 1992). People high on religious fundamentalism tend to also be high on RWA (Altemeyer & Hunsberger, 1992). It is possible that this is the case because both constructs are related to obedience to authority and belief in traditions and norms. The question that arises is whether it is fundamentalism or authoritarianism that is more related to prejudice.

To address this issue, Altemeyer and Hunsberger (1992) conducted a study in which they partialled out the effects of RWA from fundamentalism and found that the relation to prejudice dropped to non-significant levels. When the effect of fundamentalism was partialled out from RWA, the relationship with prejudice dropped only slightly. This led the researchers to conclude that fundamentalism is the religious

manifestation of right-wing authoritarianism (Hunsberger, 1995). In other words, fundamentalism is related to prejudice because people high in fundamentalism tend to also be high in RWA.

Right-wing authoritarianism tends to also be correlated with other components of religiosity. Duck and Hunsberger (1999) found that RWA was positively correlated with intrinsic religiosity and negatively correlated with extrinsic religiosity and quest religiosity. They suggest that RWA might be a moderator or a mediator of the relationship between the different components of religious beliefs and prejudice. Based on these findings, it seems necessary to include RWA as a control variable in this project.

Religious Maturity

One of the aspects of religious beliefs that has recently received a lot of attention from researchers is religious maturity. The origins of this concept can be traced to Allport (1950) and his description of mature religious sentiment. He was mostly concerned with motives behind people's beliefs and values.

Allport (1950) pointed out several origins or human needs that help to explain interpersonal differences in the religious sentiment. Among others, these include: organic desires, temperament, psychogenic desires, pursuit of meaning, and cultural conformity. The *organic desire* refers to the basic human needs such as food and shelter. Allport (1950) argues that people often use God to satisfy these basic needs (e.g., pray for food). Interpersonal differences come from the role that basic needs play in religious beliefs. For some people these needs may be the main motivation whereas for others they may be less so (Forsyth, 2003). Another reason for differences in religious sentiment between people

is *temperament* which accounts for some people preferring religion of thought and others preferring religion of experience. *Psychogenic desires*, in contrast to organic desires, refer to human needs to understand concepts such as truth and goodness. God is seen as the ultimate expression of these values. The organic and psychogenic desires are both expressions of a pursuit of some kind of a meaning that would bring all the desires together. According to Allport (1950), religion provides such meaning. Lastly, religion provides moral values that are the basis of many cultures' social and political systems. However, Allport (1950) argues that, although religion has some social and cultural functions, it plays a different role for each individual and it is not simply a way to maintain social stability and conformity as implied by Freud (1959).

These needs and desires are what differentiates people with mature versus people with immature religious sentiment. People with *immature* religious sentiment use religion to satisfy their basic needs whereas people with *mature* religious sentiment go beyond their needs and become functionally autonomous (Forsyth, 2003). In other words, *mature* religious sentiment is characterized by an approach to religion that is dynamic, open-minded, and able to maintain links between inconsistencies. By contrast, *immature* religion is self-serving and generally represents the negative stereotypes that people have about religion. It is important to note that for Allport (1950) religious maturity does not represent superiority of one set of beliefs over others. It represents the way religious doctrines and values are incorporated into the individual's worldview. Allport (1950) suggests that people with a mature religious sentiment are characterized by three

attributes: self-expansion which refers to the desires beyond the organic ones, self-objectification which is the ability to see oneself as others see us, and self-unification which refers to a philosophy of life that tries to unite the various desires into the expanding self (Forsyth, 2003).

Moreover, mature religious sentiment is well differentiated, rich, and complex. That is, it allows people to admit doubt in certain aspects of faith and it lets people differentiate between important and essential religious doctrines and those that are less important. Mature religious sentiment is also dynamic and changes as the person grows. It is not bound to the basic needs of human nature. Furthermore, mature religion directs one's behaviors and thoughts in a consistent way and it is able to bring about a real change in the individual (Allport, 1950; Forsyth, 2003).

Allport (1950) postulates that mature religious sentiment is related to good mental health. In particular, mature religion provides unified meaning to the person's life. It also provides people with the feeling of belongingness which is one of human's basic needs. According to Allport (1950) mature religious sentiment is superior to psychotherapy in that it gives people the feeling of being loved, something that psychotherapy has not been able to achieve. Moreover, mature religion helps to shape conscience because it provides people with the most basic moral values. Lastly, mature religion promotes what Allport (1950) refers to as "aspects of integration". These include: humor, long-range goals, relaxation, and self-objectification. This higher "aspect of integration" should also increase the acceptance of stigmatized groups.

Allport (1950) argues that normal religious development is based on two processes: *functional autonomy* and *proprie striving*. The general idea behind *functional autonomy* is that, according to Allport (1950), present motives are independent of the past. More specifically, people's motives grow to be autonomous of their origins. What this suggests is that adult motives cannot be explained based on the childhood needs. Although every behavior has a motive or a cause, when the person matures, these behaviors grow and become independent of their sources.

Although Allport (1950) acknowledged that childhood motives are primarily influenced by the fear of punishment and the concept of God resembles a projected father figure, he also states as the person matures so do these motives. That is, an adult person is no longer so much concerned with the wishes of the parents, but rather with the values the person holds. Thus, mature religious beliefs are motivated not by self interest but rather by a general search for meaning. As Allport (1950) states,

Immature religion, whether in adult or child, is largely concerned with magical thinking, self-justification, and creature comfort. Thus it betrays its sustaining motives still to be the drives and desires of the body. By contrast, mature religion is less of a servant, and more of a master, in the economy of life. No longer goaded and steered exclusively by impulse, fears, and wishes, it tends rather to control and direct these motives toward a goal that is no longer determined by mere self interest (p. 63).

The second process, *proprie striving*, is the more ego-involved and conscious type of motive. Allport (1950) uses the term *proprium* to describe the self as experienced by the individual. He proposed that the self has seven functions that develop over the

years and appropriate striving is the last, or the most mature, function. The last function, *proprie striving*, does not develop until twelve years old and it occurs when the person realizes that they are the proprietors of their lives, that they own and control their own future and destiny. This is also the time when people start to seek answers to the existential questions. For Allport (1950), this represents the highest form of maturity. It is important to note that these functions are not stages of development. Rather, Allport (1950) argues that they represent a natural way in which people mature.

Allport (1950) argues that for the values and motives that people strive for to be meaningful, they must come from transcendent sources. People need something that cannot be explained with empirical evidence. When people mature to the propiate striving level, they start seeking answers about their existence and the meaning of life. Many people refer to religion for these answers. Thus, as with mature personality, mature religious sentiment goes beyond the basic and rudimentary beliefs and refers to integrating religious beliefs as part of the self.

In summary, for Allport (1950) mature religious sentiment consists of six components: 1) strength of religious motivation and commitment, 2) complexity of thought regarding existential issues, 3) comprehensiveness of the beliefs, 4) heuristic quality, 5) directiveness and moral consequences, 6) an integral nature (Allport, 1950).

Originally, Allport (1950) developed the extrinsic/intrinsic scale as a measure of religious maturity. This scale however, was criticized for measuring two separate components of religious beliefs that are only slightly related to religious maturity. Dudley and Cruise (1990) propose that religious maturity, although related to extrinsic and

intrinsic orientations, is in itself an important aspect of religious beliefs. In support of this, their research shows that measures of religious maturity do not tend to be correlated with either extrinsic or intrinsic orientations scales (Dudley & Cruise, 1990).

A certain overlap can also be seen between the concept of religious maturity and quest religious orientations. Although these concepts may seem similar, they are only weakly related (Dudley & Cruise, 1990). The main distinctions are: 1) whereas quest religiosity is concerned with simply questioning religious beliefs, religious maturity is more concerned with clear answers rather than simply questioning religion, 2) religious maturity emphasizes open-mindedness whereas quest orientation emphasizes doubt and religious conflict, 3) whereas quest religiosity creates conflict between faith and doubt, religious maturity addresses the creative tension between commitment to one's religious beliefs and open-mindedness (Dudley & Cruise, 1990).

This project examines religious maturity as a separate construct that deals with the development of one's religious beliefs and not their content. Taking into consideration that mature religious orientation promotes open-mindedness and is concerned with integrating religious faith into one's self-concept, it is reasonable to assume that mature and immature religious beliefs may relate to prejudice differently. Furthermore, there may be moderating and mediating effects between religious maturity and other aspects of religious beliefs. Such an approach will further enhance the general knowledge about the relationship between religiosity and prejudice.

Religious History

A question that has not been previously addressed is whether the various ways religious beliefs can be developed are related to prejudice. More specifically, it is possible that the way one's religious beliefs are shaped will also influence the relationship between these beliefs and other constructs (e.g., prejudice). Researchers have proposed four possible sources of religious beliefs: genetic, neuropsychological, social, and experiential.

Several theorists proposed that, to some extent, religious beliefs may be heritable. For example, Jung (1938) argued that humans have an unconscious need to search for a deity. Similarly, Elkind (1970) proposed that cognitive development is, at least partially, inherited. Thus, some aspects of religious beliefs develop during mental growth of the individual. These genetic theories of religious beliefs do not argue that one is born to be a Catholic or Muslim. Rather, they postulate that people may have a hardwired predisposition to find meaning in our lives which may be accomplished by a belief in a higher power. A lot of support for the genetic perspective on the sources of religion comes from research on twins. These studies typically find that religiousness has a strong heritable component even when the twins are separated at birth (Bouchard, Lykken, McGue, Segal, & Tellegen, 1990). However, more recent studies do not find support for the heritable component of religious beliefs (Abrahamson, Baker, & Caspi, 2002) and more focus has been given to the social factors that influence people's attitudes towards religion.

Recently researchers have become interested in examining religious beliefs from a neuropsychological perspective. The basis for this approach is that religious experiences, like all experiences, ultimately start with and must be interpreted by the human brain. D'Aquili and Newberg (1999) argue that, although the areas of the brain function individually, the experience or reality that they produce collectively is called the mind. In other words, the brain is the physiological and objective aspect of neural activity whereas the mind is the psychological and subjective interpretation of this neural activity (d'Aquili & Newberg, 1999). Essentially, a certain pattern of neural activity in the brain can be interpreted by some people as a spiritual experience.

To test this notion, Newberg, D'Aquili, & Rause (2001) studied Tibetan Monks and Franciscan Nuns as they engaged in deep mediation. Using Single Photon Emission Computerized Tomography (SPECT) they showed that during the mediation, areas of the brain responsible for attention and concentration showed a dramatic increase in activity. In contrast, the parietal lobe, which is responsible for the perception of time and spatial orientation, showed virtually no activity. With little activity in the parietal lobe, it becomes difficult to distinguish between the external world and the physical self. Newberg, D'Aquili, & Rause (2001) argue that this may account for the feeling of "unity" or "mingling with God" (p.7).

It is important to note that, although neurotheology is a promising field, it is still a very new area of research. A lot of the current findings are based on people who engage in deep mediation. Thus, these findings may not explain the relationship between the brain and the mind in explaining the origins of religious experience in the average person.

Furthermore, the results of early research on neurotheology focus on the spiritual experience. Thus, it helps to understand the physiological origins of states that are interpreted as spiritual, but it does not provide an explanation as to the sources of people's religiousness except in so far as that religiousness entails spirituality. As such, this aspect of neurophysiological functioning may not be related to prejudice.

Many psychologists have also focused on the social and individual sources of religion. They argue that, although people like to think that they can choose whether to believe in something or not, their choices are dictated by their social environment. In fact, Batson, Schoenrade, & Ventis (1993) make a strong statement that most people are "actually living out a script written by society" when it comes to choosing whether to be religious or not (p. 27).

The idea that social environment can affect one's religiousness is associated with the concept of social influence. Generally speaking, social influence is a broad theoretical concept that states that how we think, feel, act, and experience is strongly influenced by others (Batson, Schoenrade, & Ventis, 1993). Thus, according to the notion of social influence, whether one becomes religious depends on the religiousness of his or her social environment.

Related to social influence are the concepts of social roles and social norms. Social roles are the patterns of behaviors that are expected from people holding certain positions in a society and social norms can be thought of as a script that defines these patterns (Batson, Schoenrade, & Ventis, 1993). People may have multiple social roles (e.g., one can have a role as a husband and a doctor) and these roles may sometimes

conflict with one another. Such conflict typically creates discomfort which only stresses the influential power of social roles. When the roles are in harmony, their influence is less clear because everything goes smoothly. Bem (1970) refers to this state as “nonconscious ideology.” In other words, when there is no conflict among the social roles, our awareness of their influence disappears.

A lot of the pressure to conform with the social norms comes from the fact that individuals live their lives in front of an audience of other people. Among those spectators, is the reference group, that is, those individuals whose opinion and approval is especially important. These reference groups explicitly and implicitly state the norms and patterns of behaviors in specific situations (Batson, Schoenrade, & Ventis, 1993). Thus, to gain the approval of the reference groups, one must play the social role and conform to their norms. As with social roles, people have many reference groups, each with a potentially different set of norms and with varying degrees of importance.

The *social learning theory* (Bandura, 1969) provides an explanation of how social influence works. The theory postulates that an individual learns his behaviors, attitudes, and beliefs (including religious beliefs) by modeling others. For example, a child who observes that his parents pray before each meal may learn that behavior and gradually start praying himself. This learning will be enhanced if that behavior is reinforced by parents. The social learning theory stresses the active role of the learner. The learner actively participates in the learning process by observing the consequences of the behaviors of others as well as his own. Kelman (1958) focused on this active role in the

learning process and he argues that there are three ways an individual can learn new attitudes and beliefs: compliance, identification, and internalization.

Compliance. An individual can learn to behave in a certain way simply to receive a reward or avoid punishment. For example, the child who learns to pray before each meal may perform that behavior simply because it is reinforced by the parents but without understanding what the prayer actually means. In this case, the child shows compliance (Batson, Schoenrade, & Ventis, 1993). It is important to note however, that such behavior is performed simply to receive the reward and it will gradually disappear if the reward is taken away.

Identification. Although compliance helps explain certain types of learned behaviors, when it comes to religion it is hard to argue that religious beliefs are learned simply to gain rewards. Kelman (1958) suggests that when individuals show compliance, they don't necessarily value what they do. However, when the individual identifies with the other person, the modeled behaviors become much more meaningful. In other words, because the individual values the other person, he tries to act, feel, and think like him. The main distinction between compliance and identification is that, unlike behaviors learned through compliance, behaviors learned through identification persist even without reinforcement as long as one admires and desires approval from the model with whom he identifies (Kelman, 1958).

Internalization. The most powerful form of social learning occurs when an individual internalizes the modeled attitudes and beliefs. In other words, the person does not simply try to imitate another individual but rather, transforms oneself and

incorporates the new attitudes, behaviors and beliefs into his personality. Internalized behaviors or attitudes become part of the individual's self and can exist without rewards or worrying about what admired others would say (Kelman, 1958).

Theories such as the one proposed by Bandura (1969), indicate that religious beliefs are gradually shaped from the individual's social environment. One's social environment is very complex and it includes parents, siblings, friends, teachers, and anyone whom the person has contact with. Thus, it becomes extremely difficult to assess the influence that environment as a whole has on religious beliefs. Furthermore, the strength of the influence may vary between the different components of the environment. For example, teachers may be more influential than neighbors. Since the relationship between religious history and prejudice is a relatively exploratory question, we believe the initial focus should be on the most influential aspect of one's environment, that is, family. More specifically, this project examines parents' emphasis on religion as a way of examining social history of religious beliefs.

Batson, Schoenrade, and Ventis (1993) suggest that religious beliefs may also be influenced through a religious experiences or personal transformation. The main problem in looking at personal religious experiences is that they are entirely subjective and come in many forms. To overcome this problem, James (1961) suggested that focus should be placed on the most dramatic and intense experiences people have because they provide the most information about the psychological processes that take place in the individuals. One thing that most religious experiences have in common is that they involve a change

in the way one behaves and sees the world. In other words, the individual's perception of the reality gets transformed.

Researchers argue that a religious experience is similar to a creative experience in that they both involve transformation of one's reality (Batson, Schoenrade, & Ventis, 1993). Thus, to understand the psychological processes involved in religious experience, we can look at the findings regarding the psychology of creativity. However, one important limitation of such an approach is that creativity is concerned with external reality, one's physical or social world, whereas a religious experience is more personal and concerned with the meaning of life and existence itself. Although this difference is important, it mostly deals with the content difference rather than the difference in processes (Batson, Schoenrade, & Ventis, 1993).

Batson, Schoenrade and Ventis (1993) list six psychological processes involved in the creative experience that may be applied to religious experiences as well: 1) reality is constructed in that the way people perceive their reality is based on their experiences, 2) the constructed reality is based on cognitive structures; that is, cognitive structures allow people to compare and differentiate their experiences which helps them construct the reality, 3) cognitive structures are hierarchically organized from the most concrete concepts to the most abstract ones, 4) creative structures can be improved through other experiences or creative thinking, 5) the creative process involves four stages: preparation, incubation, illumination, and verification, 6) these four stages may have a neuro-physiological basis since research has found the formation and maintenance of the cognitive structures happens in the right-hemisphere of the brain (Ornstein, 1972).

Applying these processes to religious experience, James (1961) suggested that religious experience follows a similar four stage sequence: 1) religious experiences are often rooted in personal *existential crisis*, 2) when the existential crisis cannot be resolved, the person may start to *self-surrender* their old way of thinking, 3) loosening one's connection with the old way of thinking may allow new cognitive structures, or *new vision*, to form, 4) if the new vision helps to deal with the existential question, the individual starts to *live the new vision*. Thus, in general, during these four stages, person's cognitive structures get reformulated to help deal with the existential questions (Batson, Schoenrade, & Ventis, 1993).

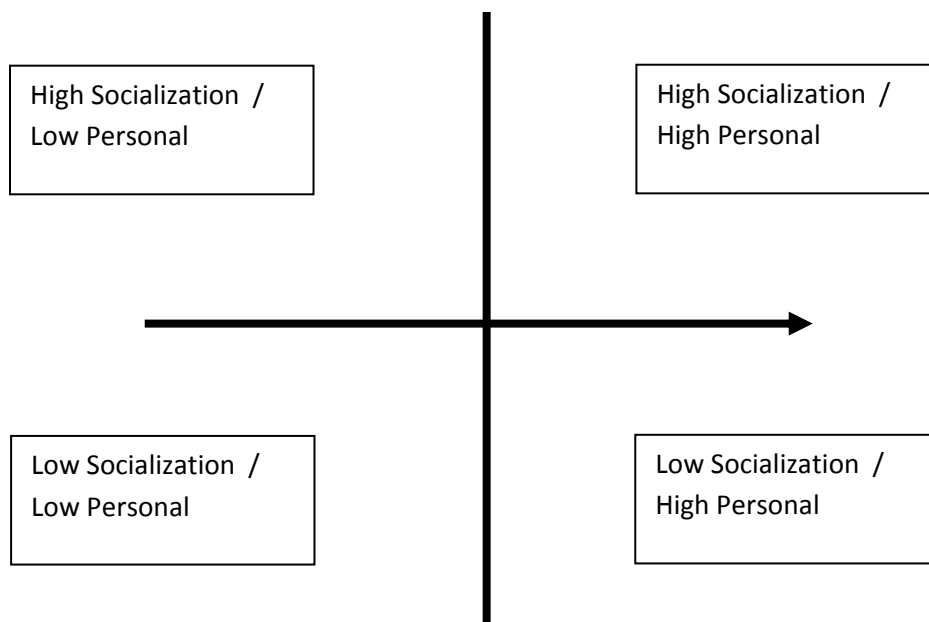
In summary, a religious experience may lead to transformation of one's worldview and religious beliefs. Beliefs based on such a source may differ from beliefs originating from socialization. Thus, it is possible that the relationship of religious experience to prejudice would also differ. There are some methodological difficulties with studying the sources of one's religious beliefs. The four explanations of the origins of religious beliefs (genetics, neuropsychology, socialization, and personal experiences) are mostly theoretical and empirical support for them is correlational at most. The primary concern from the psychological perspective is how does one measure the origins of someone's religious beliefs? Self-report measures may not necessarily tap into actual sources but rather they may tap *perceived* origins of one's religious beliefs.

When researchers talk about social and experiential bases of religious beliefs, they are really addressing one's social and personal history with religion rather than the actual source of their beliefs. In other words, it seems like the social and personal bases refer

more to the development of one's religious beliefs once they've been established but not necessarily explain the actual cause of these beliefs. Thus, in this project, I would like to look at social and personal history with religion as a possible correlate of prejudicial attitudes.

Most researchers talk about socialization and religious experiences as independent concepts. Such conceptualization of these two constructs does not provide a clear explanation of religious beliefs that are influenced by a combination of socialization and religious experience. In other words, it is possible that one's beliefs are influenced partially by social forces and partially by personal religious experience (Figure 2).

Figure 2. Possible combinations of social and personal influences on religious beliefs.



Virtually no research exists that examines the relationship between one's religious history and prejudicial attitudes. Considering that beliefs based on family religious

history may differ from beliefs based on religious experiences, it is reasonable to hypothesize that they would also be related differently to prejudice. Moreover, the history of one's religious beliefs may serve as a moderator of the relationship between the various components of religion and prejudice. For example, people with high family religious history and high extrinsic religiosity may be more prejudiced than people with high extrinsic religiosity but low family religious history. Similarly, there also may be a meditational effect between religious history and components of attitudes when predicting prejudice. Higher experiential religious history may lead to more intrinsic beliefs and thus, lack of relationship with prejudice. This area is worth examining in more detail to better decipher the relationship between religion and prejudice. Consequently, one of the aims of this project is to look at sources the social and experiential religious histories and how they relate to attitudes toward African-Americans and homosexual people as well as how they interact with the different components of religion in predicting prejudice.

CHAPTER FIVE

PURPOSE

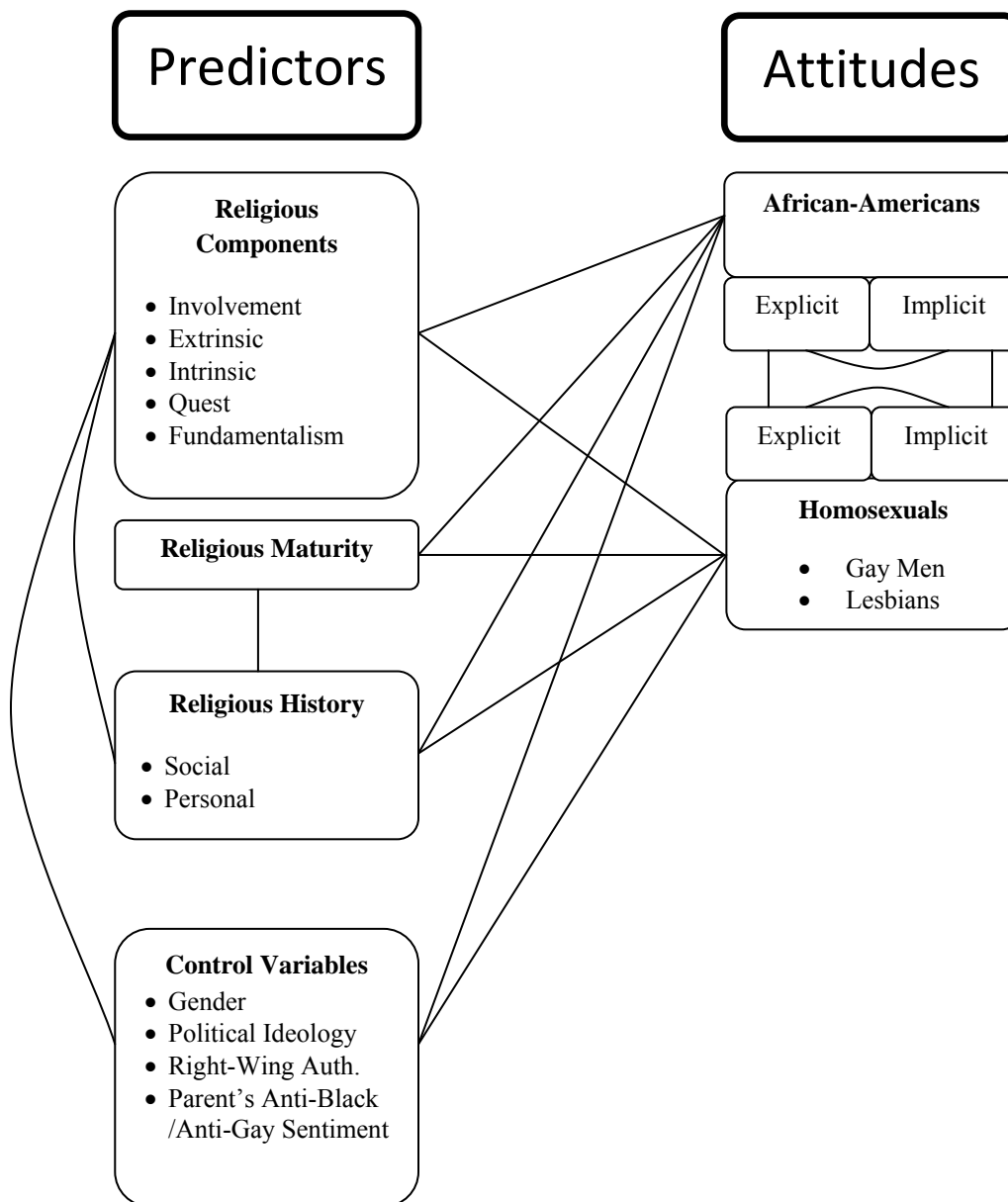
The main purpose of this project is to examine three specific aspects of religious beliefs (components, history, and maturity) and their relationship to prejudice. Previous research has typically focused only on the components of religious beliefs; however, religion is a complex, multi-dimensional concept and components of religious beliefs represent only a single dimension. Two dimensions that have not been studied are history and maturity of religious beliefs. It is possible that the different aspects of religious beliefs relate differently to prejudice. Thus, this study attempts to broaden the knowledge about the relationship between religion and prejudice by focusing on additional aspects of religion that have not been studied in a lot of detail. More specifically, this study examines religious involvement, extrinsic religiosity, intrinsic religiosity, religious quest, and religious fundamentalism. As for the history of religious beliefs, this research looks at family emphasis on religious beliefs and personal religious experiences. Finally, this project examines how the maturity of one's religious beliefs is related to prejudice.

The second purpose of this project is to examine how aspects of religion relate to attitudes toward two types of minority groups: proscribed and non-proscribed. As previously mentioned, most religions condemn racial prejudice but some openly express negative attitudes toward homosexuals. This difference between proscribed and non-proscribed prejudice may result in different patterns of relationships with religion. Thus,

it is important to examine these two types of prejudices to better understand the relationship between religion and attitudes toward minority groups.

An additional goal of this project is to clarify the relationship between aspects of religion and two types of attitudes: implicit and explicit. Researchers have identified these two types of attitudes as being related to one another while representing two different constructs. Consequently, it is possible that different aspects of religious beliefs will relate differently to the two types of attitudes. In order to clearly define the relationship between religious beliefs and prejudice, it is important to look at both implicit and explicit attitudes. A graphical representation of the variables and their relationships is presented in Figure 3.

Figure 3. Graphical model of the relationships between variables.



CHAPTER SIX

HYPOTHESES

This study looks at three aspects of religious beliefs and their relationships to implicit and explicit prejudice against African-Americans and homosexuals. As a result, there are several layers of hypotheses.

Layer 1 – Relationship of the individual aspects of religiosity to prejudice

Components of Religious Beliefs

As previously discussed, research has identified different patterns of relationships between the components of religiosity and prejudice. Thus, I expect that there will be differences in how religious involvement, extrinsic religiosity, intrinsic religiosity, quest, and fundamentalism relate to both implicit and explicit prejudices.

Religious Involvement

Hypothesis 1: Religious involvement will not be related to explicit racial prejudice but will be positively related with implicit racial prejudice.

Hypothesis 2: Religious involvement will be positively related to sexual prejudice. This relationship will be stronger for explicit than implicit attitudes.

Extrinsic/Intrinsic Religious Orientation

Hypothesis 3: Extrinsic religious orientation will be positively related to explicit and implicit racial and sexual prejudices.

Hypothesis 4: Intrinsic religious orientation will not be related to explicit or implicit racial or sexual prejudices.

Quest Religiosity

Hypothesis 5: Quest religiosity will be negatively related with explicit racial and sexual prejudice. There will not be a relationship between quest religiosity and implicit racial or sexual prejudices.

Fundamentalism

Hypothesis 6: Fundamentalism will be positively related with explicit and implicit racial and sexual prejudices.

Religious Maturity

The relationship between religious maturity and prejudice has not been extensively studied. However, based on the theoretical explanation of religious maturity, we state the following hypothesis:

Hypothesis 7: People with high religious maturity will be less prejudiced than people with low religious maturity. This difference will be more pronounced for African-Americans than homosexuals and for explicit than implicit attitudes.

Religious History

The proposed model of religious history suggests a possible combination of social and experiential histories. It is possible that different combinations of family emphasis and personal experience will be related to prejudicial attitudes. Furthermore, there may be a difference between the target groups; that is, different combination of family emphasis

and personal experiences may be related to the attitudes toward African-Americans than homosexuals.

Hypothesis 8: People with high social religious history will have higher explicit and implicit racial and sexual prejudice than people with low social religious history.

Hypothesis 9: People with high personal religious history will have lower explicit and implicit prejudice regardless of the target group.

Layer 2 – Relationships between aspects of religiosity when predicting prejudice

An interesting aspect of this project is the possibility of relationships between the three aspects of religiosity (components, maturity, and history) and prejudice. This area has not been previously examined.

Hypothesis 10: People with low social and high experiential history will have lower explicit sexual prejudice than people with high social and low experiential history. This effect will be less pronounced for African-Americans and implicit attitudes.

Hypothesis 11: People with low religious maturity will be higher on fundamentalism thus be more explicitly and implicitly prejudiced regardless of the target group.

Hypothesis 12: People who are high on religious maturity and low on fundamentalism will be less explicitly and implicitly prejudiced than people who are low on religious maturity and high on fundamentalism regardless of the target group.

Hypothesis 13: People with high social history will be higher on fundamentalism and thus more explicitly and implicitly prejudiced regardless of the target group.

Hypothesis 14: People with high experiential history will be higher on intrinsic religiosity and thus less prejudiced regardless of the target group.

Hypothesis 15: People with high social history will be higher on extrinsic religiosity and thus more explicitly prejudiced against homosexuals but not African-Americans. There will not be an effect for implicit attitudes.

Hypothesis 16: People with high experiential history will be higher on quest and thus less explicitly prejudiced against both target groups. There will be no effect for implicit attitudes.

Hypothesis 17: People who are high on extrinsic religiosity and low on intrinsic religiosity will be more explicitly and implicitly prejudiced against both target groups than people who are low on extrinsic religiosity and high on intrinsic religiosity.

CHAPTER SEVEN

METHODS

Participants

Participants were 288 (137 males and 151 females) undergraduate students from a midsize, urban, and culturally diverse Jesuit university. Nineteen participants were excluded because they did not complete the second part of the study. The final sample consisted of 269 participants (132 male and 137 females). The mean age of the sample was $M = 19.11$, $SD = 1.67$ ($M = 19.02$, $SD = 1.66$ for males and $M = 19.20$, $SD = 1.68$ for females). Ethnic/racial background of the sample was: 63.9% Caucasian/White, 4.5% African American/Black, 5.2% Asian American, 11.2% Middle Eastern/Indian, 8.6% Hispanic, 6.7% Bi-Cultural/Mixed. Participants' religious denomination was as follows: 50.2% Christian – Catholic, 24.9% Christian – Non-Catholic, 0.4% Jewish, 5.2% Muslim, 3% Hindu, 6.3% Agnostic, 5.9% Other.

Twenty three participants reported more than incidental homosexual experiences (11 males and 12 females) and 2 female participants did not indicate their sexual orientation therefore; these participants were excluded from all analyses involving explicit and implicit attitudes toward gay males and lesbians. The final sample for these analyses consisted of 244 participants (121 males and 123 females). In addition, 12 African-American students (2 males and 10 females) were excluded from all analyses

involving explicit and implicit attitudes toward African-Americans. The final sample for these analyses consisted of 257 participants (130 males and 127 females).

Materials

Measures of components of religious beliefs. *Religious involvement* was measured using a scale adapted from various established measures (see Appendix A). The items for the scale were selected from several measures of religious beliefs reviewed by Hood & Hill (1999). Participants were asked to indicate their level of agreement or disagreement with the items on a 1 (Strongly Disagree) to 5 (Strongly Agree) scale. The measure has been used in previous research and demonstrates acceptable reliability. In our study, the reliability for this measure was $\alpha = .86$. The appropriate items were reverse coded and the final religious involvement index was calculated by averaging the ratings for all items. Higher score indicates more religious behaviors/involvement.

The *extrinsic and intrinsic orientation* was measured using the Religious Orientation Scale (Allport and Ross, 1967; see Appendix B). The scale includes separate subscales for intrinsic and extrinsic orientations. Participants were asked to indicate their level of agreement or disagreement with the items on a 1 (Strongly Disagree) to 5 (Strongly Agree) scale. This measure is one of the most widely used extrinsic/intrinsic orientation measures and demonstrates adequate to excellent reliability, typically around $\alpha = .80$ (Hood & Hill, 1999). In our study, the reliability was $\alpha = .75$ for the extrinsic scale and $\alpha = .92$ for the intrinsic scale. The appropriate items were reversed coded and the extrinsic and intrinsic indexes were calculated by averaging the appropriate items. Higher score indicates more extrinsic or intrinsic religious orientation.

The *religious quest* was assessed using the Quest Scale (Batson & Scheonrade, 1991). The scale measures three aspects of quest religiosity: 1) readiness to face existential questions, 2) self-criticism and perceptions of religious doubts as positive, 3) openness to change (Batson & Shoenrade, 1991; see Appendix C). Participants were asked to indicate their level of agreement or disagreement with the items on a 1 (Strongly Disagree) to 5 (Strongly Agree) scale. Previous studies that used this measure reported acceptable reliability of around $\alpha = .75$ (Hood & Hill, 1999). In our study, the scale had a reliability of $\alpha = .83$. The appropriate items were reversed coded and the religious quest score was computed by averaging scores for all items. Higher score indicates more religious quest.

Religious fundamentalism was measured using the Religious Fundamentalism Scale (Altemeyer & Hunsberger, 1992). The scale has been developed to be non-denominational and free of doctrinal content (see Appendix D). Participants were asked to indicate their level of agreement or disagreement with the items on a -4 (Strongly Disagree) to +4 (Strongly Agree) scale. The measure has been often used in previous studies and demonstrates reliability of around .90 (Hood & Hill, 1999). In this study, the reliability of this scale was $\alpha = .93$. The appropriate items were reversed coded and the religious fundamentalism score was calculated by averaging scores for all items. Higher score indicates more religious fundamentalism.

Measures of religious history. The *social history* of religion was measured using the revised Religious Emphasis Scale (Altemeyer, 1988). The original RES measures the degree to which parents emphasize religious beliefs as one was growing up. The scale

was revised to assess not only family emphasis on religious beliefs but also emphasis of the immediate environment of the individual (see Appendix E). Participants were asked to indicate their level of agreement or disagreement with the items on a 1 (Strongly Disagree) to 5 (Strongly Agree) scale. The original RES measure demonstrates reliability of around $\alpha = .90$. In this study, the revised version had a reliability of $\alpha = .91$. The appropriate items were reversed coded and the social history index was calculated by averaging scores for all items. Higher score indicates more social religious history.

The *experiential history* was measured using the Religious Experience Episodes Measure (Rosegrant, 1976). The measure lists several religious experiences and asks participants to report whether they have encountered them on a scale from 0 (Your experience was not at all like the experience described) to 9 (Your experience was almost identical to the experience describe) (see Appendix F). The scale has been found to have acceptable reliability of around $\alpha = .73$. In our study, the reliability for this measure was $\alpha = .81$. The experiential history index was calculated by averaging scores for all items. Higher score indicates more experiential history.

Measure of religious maturity. Religious maturity was measured using the Religious Maturity Scale (Dudley & Cruise, 1990; see Appendix G). Participants were asked to indicate their level of agreement or disagreement with the items on a 1 (Strongly Disagree) to 5 (Strongly Agree) scale. The measure has been previously used in several studies and has a moderate reliability of around $\alpha = .68$ (Hill & Hood, 1999). In our study, this scale had a reliability of $\alpha = .78$. The appropriate items were reversed coded

and the religious maturity score was calculated by averaging scores for all items. Higher score indicates more religious maturity.

Measures of attitudes: The implicit attitudes were measured using three Implicit Association Tests, each adapted to measure implicit preference for the three target groups (African-Americans, gay men, and lesbians). The IAT has been widely used as a measure of implicit attitudes (Greenwald, McGhee, & Shwartz, 1989).

The IAT procedure involves a five step process. The first two steps introduce the attributes (bad vs. good words) and target concepts (pictures of heterosexual couples vs. pictures of homosexual couples). Each of the stimuli is assigned to a left or right response key. The third step combines the target and attribute such that specific type of targets and attributes are assigned to the same response key (e.g., heterosexual and good assigned to the left key vs. homosexual and bad assigned to the right key). The fourth and fifth steps are a replication of the second and third steps with the exception that the targets are reversed (e.g., homosexual and good assigned to the left key vs. heterosexual and bad assigned to the right key). The order of the paired trials was counterbalanced such that in one condition participants first saw the trials where heterosexual was paired with the word "bad" and homosexual was paired with the word "good," followed by trials in which homosexual was paired with the word "bad" and heterosexual was paired with the word "good." In the second condition, participants first saw trials wherein homosexual was paired with the word bad and heterosexual was paired with the word good, followed by trials where heterosexual was paired with the word bad and homosexual was paired

with the word "good" (Dasgupta & Rivera, 2006). A schematic depiction of the IAT is presented in Figure 4. The same procedure was followed for the other two IAT tests.

The scores on the IAT were calculated using the procedure outlined in Richeson & Shelton (2003) and Greenwald et al. (1989). Response times lower than 300ms were coded as 300ms and response times higher than 3000 were coded as 3000ms. The trimmed scores were then log-transformed to better resemble a normal distribution. Mean scores for each participant, for each block of trials, were calculated and then recoded as stereotypic or counter-stereotypic trials. Lastly, the final IAT bias scores were obtained by subtracting response time for stereotypic trials from the response time for counter-stereotypic trials. Higher IAT bias scores indicate more negative implicit attitudes toward the target group.

Explicit attitudes toward African-Americans were measured using the Symbolic Racism Scale (Henry & Sears, 2002; see Appendix H) which has often been used in previous research and demonstrates acceptable reliability. In our study, this scale had a reliability of $\alpha = .79$. The explicit attitude toward African-Americans index was calculated using the technique outlined by Henry & Sears (2002). The items on the scale have different numbers of response alternatives. To compensate for this, each of the items was recoded on a 0 to 1 scale. That is, for items with 3 response alternatives, the scores were recoded as 0, .5, and 1. For items with 4 response alternative, the scores were recoded as 0, .33, .66, and 1. The final index was computed by averaging the recoded scores. Higher score indicates more positive attitude toward African-Americans.

The explicit attitudes toward homosexuals were measured using the Modern Homophobia Scale (see Appendix I) which assesses people's attitudes toward gay males and lesbians separately (Raja & Stokes, 1998). Participants were asked to indicate their level of agreement or disagreement with the items on a 1 (Strongly Disagree) to 5 (Strongly Agree) scale. The measure has been previously used in other studies and demonstrates acceptable reliability. In our study, the scale had a reliability of $\alpha = .95$ for both the gay men and lesbians subscales. The appropriate items were reversed coded and the attitudes toward gay men and attitudes toward lesbians indexes were calculated by averaging scores for the correct items. Higher scores indicate more positive attitudes toward gay men or lesbians.

Control Measures. As previously mentioned, research has found a relationship between fundamentalism and right-wing authoritarianism. To control for the effect of right-wing authoritarianism, we included a short version of the Altemeyer and Hunsberger's (1992) Right-Wing Authoritarianism Scale (see Appendix J). This scale is one of the most often used scales of right-wing authoritarianism and demonstrates reliability of around $\alpha = .93$ (Hill & Hood, 1999). In our study, the short version had a reliability of $\alpha = .85$. The appropriate items were reversed coded and the right-wing authoritarianism score was calculated by averaging scores for all items. Higher score indicates more right-wing authoritarianism.

To isolate the effect of religiosity from general philosophy about morality, we included a *non-religious morality scale*. The measure includes 15 items adapted from the Secular Humanism Scale developed by Edwards et al. (2006) (see Appendix K). The

Secular Humanism Scale has been used in previous research and demonstrates acceptable reliability. It also tends to correlate negatively with various components of religious beliefs. The non-religious morality subscale used in this study had a reliability of $\alpha = .87$. The appropriate items were reversed coded and the non-religious morality index was calculated by averaging scores for all items. Lower score indicates more non-religious morality.

Figure 4. Schematic depiction of the IAT.

Step	1	2	3	4	5
Task	Target	Attribute	Target+attribute	Reversed target	Reversed target+attribute
Instructions	*Heterosexual Homosexual*	*Bad Good*	*Heterosexual *Bad Homosexual* Good*	*Homosexual Heterosexual*	*Homosexual *Bad Heterosexual* Good*
Sample Stimuli	*Picture of a heterosexual couple Picture of a homosexual couple*	*Poison Joy*	*Picture of a heterosexual couple *Joy Picture of a homosexual couple*	*Picture of a homosexual couple Picture of a heterosexual couple*	*Picture of a homosexual couple *Gift Picture of a heterosexual couple*
			Poison*		*War

To partial out the potential effects of parental prejudice against African-Americans and gay men and lesbians, we included measures of parents' anti-Black and anti-gay sentiments (see Appendix L). This was the first use of these scales. The reliability was $\alpha = .81$ for the Parents' Anti-Black Sentiments Scale and $\alpha = .85$ for the Parents' Anti-Gay Sentiments Scale.

The following demographic information was collected: age, sex, racial/ethnic background, sexual orientation, religious denomination, and political ideology (see Appendix M). Sexual orientation was assessed using Kinsey's (1948) Heterosexual-Homosexual Rating Scale which asks participants to report what type of sexual experiences they have had on a 7-point scale (0 - exclusively heterosexual 6 - exclusively homosexual). Participants who reported 0 (exclusively heterosexual experiences) or 1 (predominantly heterosexual experiences, only incidentally homosexual experiences) were classified as heterosexual. Political ideology was measured on a 1 (Liberal/Democrat) to 5 (Conservative/Republican) scale.

Procedure

The study employed a relatively large battery of measures. Due to the number of scales and time-consuming nature of the IAT, the study was conducted in two phases. The first phase was conducted online and included all of the religious and control scales, as well as, demographics. The second phase was conducted a few days later in the laboratory. It included the measures of explicit attitudes and the three IATs. To ensure that participants did not complete more than one IAT one after the other, the scales were

grouped in pairs. The explicit scale was always first followed by the IAT and the order of the target groups was counterbalanced.

CHAPTER EIGHT

RESULTS

Descriptive Information

Table 1 shows the descriptive statistics for all variables. Our sample reported strong positive explicit attitudes toward African-Americans, gay men, and lesbians. However, participants showed significant implicit anti-black, anti-gay, and anti-lesbian biases. Our sample showed levels significantly lower than the theoretical mid-point of the scales on religious fundamentalism, experiential religious history, parents' anti-Black sentiments, and parents' anti-gay sentiments. Participants had average levels of extrinsic religiosity, religious behaviors, intrinsic religiosity, religious quest, social religious history and levels significantly higher than the theoretical midpoint on the scales of religious maturity, non-religious morality, and right-wing authoritarianism. Participants reported a slightly liberal political orientation.

The correlations between all variables are presented in a multi-trait, multi-method matrix in Table 2. Explicit attitudes toward gay men have a strong positive relationship to explicit attitudes toward lesbians and both have moderate positive correlations with explicit attitudes toward African-Americans. Implicit anti-gay bias has a moderate positive correlation with implicit anti-Black and implicit anti-lesbian bias, however implicit anti-lesbian bias is not related to implicit anti-Black bias.

Explicit attitudes toward African-Americans are not related to implicit biases against any of the target groups. Explicit attitudes toward gay men and lesbians have a moderate negative relationship to implicit anti-gay and anti-lesbian biases¹.

¹ Explicit and implicit attitude measures are scored in the opposite direction. Higher score on the explicit attitude measures means more positive attitude (less prejudice) whereas higher score on the implicit attitude measure means more anti-group bias (or more prejudice).

Table 1

Descriptive statistics for all variables.

Variable	M	SD	t ¹	Min	Max
Explicit Attitudes – African-Americans	.60	.18	9.29**	.05	1.00
Explicit Attitudes – Gay Men	4.04	.85	20.12**	1.27	5.00
Explicit Attitudes – Lesbians	4.02	.79	21.32**	1.33	5.00
Implicit Attitudes – African-Americans ²	134.70	143.79	15.36**	-211.68	824.08
Implicit Attitudes – Gay Men ²	133.53	154.96	14.12**	-245.16	641.98
Implicit Attitudes – Lesbians ²	38.91	154.38	4.13**	-423.43	751.37
Religiosity – Behaviors/Involvement	2.96	1.18	-.61	1.00	5.00
Religiosity – Extrinsic Orientation	2.60	.61	-1.77	1.00	4.18
Religiosity – Intrinsic Orientation	2.88	1.06	-1.93	1.00	5.00
Religiosity – Quest	3.05	.73	1.09	1.17	4.92
Religiosity – Fundamentalism	-1.25	1.58	-12.93**	-4.00	4.00
Religiosity – Social History	3.07	1.04	1.08	1.00	5.00
Religiosity – Experiential History	3.85	1.51	-12.47**	.80	9.00
Religiosity – Maturity	3.40	.62	10.58**	1.56	4.67
Right-Wing Authoritarianism	1.10	.95	19.05**	-4.00	3.45
Non-Religious Morality	3.05	.23	3.81**	2.40	3.73
Parents' Anti-Black Sentiments	2.58	1.06	-6.26**	1.00	5.00
Parents' Anti-Gay Sentiments	2.78	1.11	-3.17*	1.00	5.00
Political Ideology	2.56	1.15	-6.28**	1.00	5.00

¹ Test of statistical difference from the theoretical mid-point of the scales

* p < .005; ** p < .001

² The scores on the IAT can take on negative numbers therefore, the SDs can be higher than the mean.

Table 2

Correlations between all variables.

	Explicit Attitudes – African Americans	Explicit Attitude – Gay Men	Explicit Attitude – Lesbians	Implicit Attitudes – African Americans	Implicit Attitudes – Gay Men	Implicit Attitudes - Lesbians	Religiosity – Behaviors/Involvement	Religiosity - Extrinsic	Religiosity - Intrinsic	Religiosity - Quest	Religiosity - Fundamentalism	Religiosity – Social History	Religiosity – Experiential History	Religious - Maturity	Right- Wing Authoritarianism	Non-Religious Morality	Parents' Anti-Black Sentiments	Parents' Anti-Gay Sentiments	Political Ideology	
Explicit Attitudes – African Americans	-																			
Explicit Attitudes – Gay Men	.34**	-																		
Explicit Attitudes – Lesbians	.34**	.86**	-																	
Implicit Attitudes – African-Americans	-.04	-.08	-.17**	-																
Implicit Attitudes – Gay Men	-.03	-.27**	-.25**	.24**	-															
Implicit Attitudes – Lesbians	-.07	-.30**	-.28**	.08	.26**	-														
Religiosity – Behaviors/Involvement	-.10	-.33**	-.34**	-.06	.18**	.22**	-													
Religiosity – Extrinsic Orientation	.02	-.18**	-.16**	.13*	.08	.14*	.24**	-												
Religiosity – Intrinsic Orientation	-.03	-.35**	-.41**	-.11	.21**	.18**	.76**	.23**	-											
Religiosity – Quest	.12	.15*	.19**	.06	-.04	-.02	-.15*	.27**	-.12*	-										
Religiosity – Fundamentalism	-.13*	-.53**	-.59**	-.01	.25**	.31**	.57**	.13*	.66**	-.37**	-									
Religiosity – Social History	-.03	-.19**	-.25**	-.07	.10	.14*	.57**	.14*	.57**	-.08	.42**	-								
Religiosity – Experiential History	-.07	-.14*	-.16*	-.07	.17**	.17**	.25**	.28**	.40**	.13*	.25**	.20**	-							
Religiosity – Maturity	.11	.18**	.15*	-.05	-.05	-.01	.20**	.35**	.26**	.41**	-.18**	.17**	.29**	-						
Right-Wing Authoritarianism	-.19**	-.38**	-.41**	.06	.19**	.21**	.29**	.27**	.44**	-.06	.46**	.29**	.33**	.14*	-					
Non-Religious Morality	.15*	.10**	.14*	.12	-.07	.04	-.26**	-.05	-.32**	.02	-.25**	-.23**	-.18**	-.13*	-.19**	-				
Parents' Anti-Black Sentiments	-.19**	-.27**	-.22**	.14*	.07	.06	.01	.14*	-.02	-.04	.05	-.01	.04	-.05	.06	-.01	-			
Parents' Anti-Gay Sentiments	-.20**	-.49**	-.41**	.09	.20**	.14*	.21**	.16*	.21**	-.10	.30**	.17**	.08	-.10	.16*	.05	.55**	-		
Political Ideology	-.37**	-.40**	-.40**	.02	.07	-.19*	.19*	.02	.22**	-.09	.17**	.10	.06	-.01	.21**	.08	.12	.12*	-	

* $p < .05$; ** $p < .01$

The correlation matrix shows that the components and aspects of religious beliefs are moderately inter-related. All components and aspects of religious beliefs except religious quest are also related to right-wing authoritarianism. Furthermore, people who are politically conservative tend to have higher levels of religious involvement, intrinsic orientation, and fundamentalism. People who have higher levels of non-religious morality tend to score lower on religious behaviors/involvement, intrinsic religiosity, fundamentalism, social religious history, experiential religious, and religious maturity.

The explicit attitudes toward African-Americans are negatively related to religious fundamentalism. The implicit anti-Black bias is positively related to extrinsic religiosity. The explicit attitudes toward gay men and lesbians are negatively correlated with religious involvement, extrinsic and intrinsic religious orientation, religious fundamentalism, social religious history, and experiential religious history and negatively correlated with religious quest and maturity. Implicit anti-gay and anti-lesbian biases are positively related to religious involvement, intrinsic orientation, religious fundamentalism, and experiential religious history. Implicit anti-lesbian bias is also positively correlated with extrinsic religiosity and social religious history. The explicit attitudes toward the three target groups are negatively related with right-wing authoritarianism and positively related to non-religious morality. The implicit anti-Black bias is positively related to right-wing authoritarianism and implicit anti-gay and anti-lesbian biases are positively correlated with both right-wing authoritarianism and non-religious morality.

Parents' anti-Black sentiments are negatively related with explicit attitudes toward the three target groups and positively correlated with implicit anti-black bias. Similarly, parents' anti-gay sentiments are negatively related with explicit attitude toward all target groups and positively related with implicit anti-gay and anti-lesbian biases.

Test of Hypotheses

Layer 1 Hypotheses

To test whether the different aspects of religious beliefs predict explicit and implicit attitudes about African-Americans, gay men, and lesbians, we ran two sets of six multiple regression analyses. For all six analyses in the first set, the predictors were religious involvement, extrinsic religiosity, intrinsic religiosity, quest religiosity, religious fundamentalism, social history, experiential history, and religious maturity. The criterion variable was either explicit or implicit prejudice against each of the three target groups. All six models were significant (see table 3). Aspects of religious beliefs were better predictors of explicit than implicit attitudes toward gay men and lesbian targets, but not for African Americans.

Table 3

Regression models predicting prejudice from aspects of religious beliefs without control measures.

Model	R ²	F
African-Americans – Explicit	.07	2.15*
African-Americans – Implicit	.06	2.01*
Gay Men – Explicit	.32	14.10***
Gay Men – Implicit	.08	2.59**
Lesbians – Explicit	.35	16.11***
Lesbians - Implicit	.15	5.26***

* p < .05; ** p < .01; *** p < .001

The second set of analyses included aspects of religious beliefs (religious involvement, extrinsic religiosity, intrinsic religiosity, quest religiosity, religious fundamentalism, social history, experiential history, and religious maturity) and the control measures (right-wing authoritarianism, non-religious morality, parent's anti-black or anti-homosexual sentiment, political ideology, and participant's sex) as predictors. The criterion was either explicit or implicit prejudice against each of the three target groups. All six models were significant (see table 4). Aspects of religious beliefs were better predictors of explicit than implicit attitudes toward the three target groups.

Table 4

Regression models predicting prejudice from aspects of religious beliefs with control measures

Model	R ²	F
African-Americans – Explicit	.24	5.412***
African-Americans – Implicit	.09	2.62**
Gay Men – Explicit	.62	26.55***
Gay Men – Implicit	.14	2.48**
Lesbians – Explicit	.53	17.79***
Lesbians - Implicit	.21	4.20***

* p < .05; ** p < .01; *** p < .001

For ease of comparison, results from the regression analyses *without* the control measures in the models are presented in Table 5 and the results from the regression analyses *with* the control measures in the models are presented in Table 6.

Table 5

Test of hypotheses 1 through 9 without the control variables in the models

Variable	Blacks - Explicit	Blacks - Implicit	Gay Men - Explicit	Gay Men - Implicit	Lesbian - Explicit	Lesbian - Implicit
Religiosity – Behaviors/Involvement	-.15	.19*	-.12*	.10	-.23***	.11
Religiosity – Extrinsic Orientation	-.01	.21**	-.16**	-.01	-.13*	.06
Religiosity – Intrinsic Orientation	.12	-.10	-.06	.06	-.11	-.20
Religiosity – Quest	.12	.01	-.08	.07	-.04	.12
Religiosity – Fundamentalism	-.07	.10	-.48***	.19*	-.51***	.43***
Religiosity – Maturity	.10	-.07	.19**	-.13	.14*	.03
Religiosity – Social History	-.02	-.02	.07	-.07	.01	-.02
Religiosity – Experiential History	-.12	-.07	.02	-.17*	.01	-.28**

* p < .05; ** p < .01; *** p < .001

Table 6

Test of hypotheses 1 through 9 with the control variables in the models

Variable	Blacks - Explicit	Blacks - Implicit	Gay Men - Explicit	Gay Men - Implicit	Lesbian - Explicit	Lesbian - Implicit
Religiosity – Behaviors/Involvement	-.13	.18*	-.11*	.04	-.20***	.12
Religiosity – Extrinsic Orientation	.02	.20**	-.14*	-.04	-.12*	.00
Religiosity – Intrinsic Orientation	.11	-.09	.01	.15	-.05	.11
Religiosity – Quest	.09	.04	-.04	.08	-.03	.08
Religiosity – Fundamentalism	.02	.10	-.33***	.14*	-.40***	.41***
Religiosity – Maturity	.10	-.09	.12*	-.12	.12*	.10
Religiosity – Social History	.01	-.05	.03	-.06	-.02	.05
Religiosity – Experiential History	-.11	-.07	.01	-.13*	.00	-.25**
Right-Wing Authoritarianism	-.08	.02	-.13*	.09	-.12*	.04
Non-Religious Morality	.18**	.10	-.01	.14*	-.01	.13
Anti-Black Sentiment	-.05	.03	-	-	-	-
Anti-Homosexual Sentiment	-	-	-.29***	.12	-.20***	.07
Political Ideology	-.35***	.01	-.22***	-.08	-.26***	.08
Sex	-.01	.11	.30***	-.07	.08	-.17**

* $p < .05$; ** $p < .01$; *** $p < .001$

The comparison of the results from the two sets of models (with and without the control measures) reveals that including control variables in the models did not change the pattern of results obtained for hypotheses 1 through 9. Therefore, these control variables can be excluded as alternative explanations. The results described below

represent the data from the analyses *with* the control measures in the models. The measures of the aspects of religious beliefs and the measures of explicit and implicit attitudes use different scale formats, therefore; for ease of interpretation, standardized betas are reported.

Hypothesis 1 stated that religious involvement would not be related to explicit racial prejudice but would be positively related with implicit racial prejudice. Consistent with this prediction, people with high level of religious involvement had more implicit anti-Black bias ($\beta = .18$, $t(248) = 2.28$, $p < .05$) and religious involvement was not related with explicit attitudes toward African-Americans ($\beta = -.13$, $t(248) = -1.36$, $p = .18$).

Hypothesis 2 predicted that religious involvement would be positively related to sexual prejudice and that this relationship would be stronger for explicit than implicit attitudes. This prediction was partially supported. That is, people with high religious involvement have more negative explicit attitudes toward gay men ($\beta = -.11$, $t(235) = -2.10$, $p < .05$) and lesbians ($\beta = -.20$, $t(235) = -3.30$, $p < .001$) than people with low religious involvement but religious involvement does not predict implicit anti-gay men bias ($\beta = .04$, $t(234) = .34$, $p = .74$) or anti-lesbians bias ($\beta = .12$, $t(234) = 1.12$, $p = .22$). A comparison of the partial correlations from the two regression analyses revealed that there is no difference in the relationship between religious involvement and explicit attitudes toward gay men and explicit attitudes toward lesbians ($t = 0.43$, $p = 0.33$).³

³ Partial correlations from the regression analyses were compared using the technique outlined by Cohen and Cohen (1983).

Hypothesis 3 stated that extrinsic religious orientation would be positively related to explicit and implicit racial and sexual prejudices. This prediction was supported for explicit attitudes toward gay men ($\beta = -.14$, $t(235) = -2.22$, $p < .05$) and lesbians ($\beta = -.12$, $t(235) = -2.02$, $p < .05$) but not African-Americans ($\beta = .02$, $t(248) = .25$, $p = .80$). That is, people with high extrinsic orientation have more negative attitudes toward gay men and lesbians but not Blacks. A comparison of the partial correlations for the extrinsic religiosity from the regression predicting explicit attitudes toward gay men and lesbians revealed that the relationship was stronger for gay men than for lesbians ($t = 1.69$, $p < .05$).

As for the implicit attitudes, hypothesis 3 was only supported for African-Americans ($\beta = .20$, $t(248) = 2.67$, $p < .01$) but not gay men ($\beta = -.04$, $t(234) = -.49$, $p = .62$) or lesbians ($\beta = .001$, $t(234) = .01$, $p = .99$). Specifically, people with high extrinsic religious orientation, have more implicit anti-Black bias but not anti-gay men bias or anti-lesbian bias.

Hypothesis 4 which stated that intrinsic religiosity will not predict explicit or implicit racial or sexual prejudice was supported. Intrinsic religiosity is not related to explicit or implicit attitudes toward African-Americans ($\beta = .11$, $t(248) = 1.64$, $p = .10$ for explicit attitudes; $\beta = -.09$, $t(248) = -.70$, $p = .48$ for implicit bias), gay men ($\beta = .01$, $t(235) = .08$, $p = .94$ for explicit attitudes; $\beta = .15$, $t(234) = 1.23$, $p = .22$ for implicit bias) or lesbians ($\beta = -.05$, $t(235) = -.59$, $p = .56$ for explicit attitudes; $\beta = -.11$, $t(234) = -1.63$, $p = .16$ for implicit bias).

Hypothesis 5 which stated that quest religiosity would be negatively related with explicit racial and sexual prejudice and that there would not be a relationship between quest religiosity and implicit racial or sexual prejudices was partially supported. As hypothesized, quest religiosity did not predict implicit attitudes toward any of the three target groups ($\beta = .04$, $t(248) = .52$, $p = .61$ for African-Americans; $\beta = .08$, $t(234) = 1.08$, $p = .28$ for gay men; $\beta = .08$, $t(234) = 1.07$, $p = .29$ for lesbians). However, our results show that quest religiosity did not predict explicit racial or sexual prejudices either ($\beta = .09$, $t(248) = 1.22$, $p = .23$ for African-Americans, $\beta = -.04$, $t(235) = -.71$, $p = .48$ for gay men, $\beta = -.03$, $t(235) = -.51$, $p = .61$ for lesbians).

Hypothesis 6 which stated that religious fundamentalism would be positively related with explicit and implicit racial and sexual prejudices was partially supported. Religious fundamentalism predicted explicit and implicit attitudes toward gay men ($\beta = -.33$, $t(235) = -4.64$, $p < .001$ for explicit attitudes and $\beta = .14$, $t(234) = 2.06$, $p < .05$ for implicit anti-gay bias) and lesbians ($\beta = -.40$, $t(235) = -4.96$, $p < .001$ for explicit attitudes and $\beta = .41$, $t(234) = 3.94$, $p < .001$ for implicit anti-lesbian bias). However, religious fundamentalism did not predict explicit or implicit attitudes toward African-Americans ($\beta = .02$, $t(248) = .20$, $p = .84$ for explicit attitudes and $\beta = .10$, $t(248) = .99$, $p = .32$ for implicit anti-Black bias). Specifically, people with high religious fundamentalism tend to be more explicitly and implicitly prejudiced against gay men and lesbians but not African-Americans.

A comparison of the partial correlation coefficients from the regression analyses revealed that religious fundamentalism is more strongly associated with explicit attitudes

toward gay men than implicit-anti gay bias ($t = 3.68, p < .001$). Religious fundamentalism is also more strongly related to explicit attitudes toward lesbians than implicit anti-gay men bias ($t = 7.54, p = .001$). However, there is no difference in the relationship between religious fundamentalism and explicit attitudes toward gay men and explicit attitudes toward lesbians ($t = 0.70, p = 0.24$) nor is there a difference between explicit attitudes toward gay men and implicit anti-lesbian bias ($t = .75, p = .77$). Similarly, there is no difference in the relationship between religious fundamentalism and explicit attitudes toward lesbians and implicit anti-lesbian bias ($t = 0.75, p = 0.23$).

Hypothesis 7 stated that people with high religious maturity would be less prejudiced than people with low religious maturity and that this difference would be more pronounced for African-Americans than homosexuals and for explicit than implicit attitudes. This prediction was partially supported. Religious maturity predicted explicit attitudes toward gay men ($\beta = .12, t(235) = 2.11, p < .05$) and lesbians ($\beta = .12, t(235) = 2.12, p < .05$) but not African-Americans ($\beta = .10, t(248) = 1.24, p = .22$). That is, people with high religious maturity have more positive explicit attitudes toward gay men and lesbians but not Blacks. Religious maturity did not predict implicit anti-Black, anti-gay men, or anti-lesbian biases ($\beta = -.09, t(248) = -1.04, p = .30$; $\beta = -.13, t(234) = -1.57, p = .12$; $\beta = .10, t(234) = 1.16, p = .25$ respectively). A comparison of the partial correlations from the regression analyses revealed that there is no difference in the relationship between religious maturity and explicit attitudes toward gay men and explicit attitudes toward lesbians ($t = .49, p = .64$).

Hypothesis 8 predicted that people with high social religious history will have higher explicit and implicit racial and sexual prejudice than people with low social religious history. This hypothesis was not supported. Social religious history did not predict explicit attitudes ($\beta = .03$, $t(235) = .54$, $p = .59$ for gay men; $\beta = -.02$, $t(235) = -.32$, $p = .75$ for lesbians; $\beta = .01$, $t(248) = .15$, $p = .88$ for African-Americans) or implicit anti-Black bias ($\beta = -.05$, $t(248) = -.67$, $p = .51$), anti-gay men bias ($\beta = -.06$, $t(234) = -.77$, $p = .44$), or anti-lesbian bias ($\beta = .05$, $t(234) = .64$, $p = .53$).

Hypothesis 9 which stated that people with high personal religious history would have lower explicit and implicit prejudice regardless of the target group was partially supported. Personal religious history predicts implicit anti-gay bias ($\beta = -.14$, $t(234) = -2.06$, $p < .05$) and anti-lesbian bias ($\beta = -.25$, $t(234) = -2.19$, $p < .05$) but not anti-Black bias ($\beta = -.07$, $t(248) = -.69$, $p = .49$). Specifically, people with high experiential religious history tend to be less implicitly prejudiced against gay men and lesbians but not Blacks. A comparison of the partial correlation coefficients from the regression analyses revealed that there is no difference in the relationship between personal religious history and implicit anti-gay bias and anti-lesbian bias ($t = 0.52$, $p = 0.30$)

Personal religious history did not predict explicit attitudes toward any of the three target groups ($\beta = -.07$, $t(248) = -1.03$, $p = .31$ for African-Americans; $\beta = .01$, $t(235) = .27$, $p = .79$ for gay men; $\beta = .001$, $t(235) = .02$, $p = .98$ for lesbians).

In summary, out of the nine hypotheses addressing the relationship between individuals components of religious beliefs and prejudice, two hypotheses were

supported, 6 hypotheses were partially supported, and 1 hypothesis was not supported (see Table 7).

Table 7

Summary of conclusions regarding hypotheses 1 through 9

Conclusion	Hypothesis								
	1	2	3	4	5	6	7	8	9
Support	X			X					
Partial Support		X	X		X	X	X		X
No Support								X	

Layer 2 Hypotheses

Layer 2 hypotheses involve relationships (moderational and meditational models) between aspects of religious beliefs when predicting prejudice. To test these hypotheses, we run one set of regression analyses without any control variables in the models and another set of regression analyses while controlling for all other aspects of religious beliefs and control variables. The findings described below represent the results *with* the control variables in the models.

Hypothesis 10 stated that there would be an interaction between social religious history and experiential religious history. To test this, we ran a series of regression analyses testing whether social and experiential religious histories interact to predict explicit and implicit racial and sexual prejudices.⁴ For ease of comparison, Table 8

⁴ Regression analysis involving interactions were computed using the method outlined by Aiken & West (1991). The continuous variables were centered and the main effect and interaction terms were entered into the model simultaneously in one step.

shows the standardized beta coefficients for the interactions with and without the control variables in the models.

Table 8

Standardized regression coefficients for models testing the social X experiential religious histories interactions with and without control variables

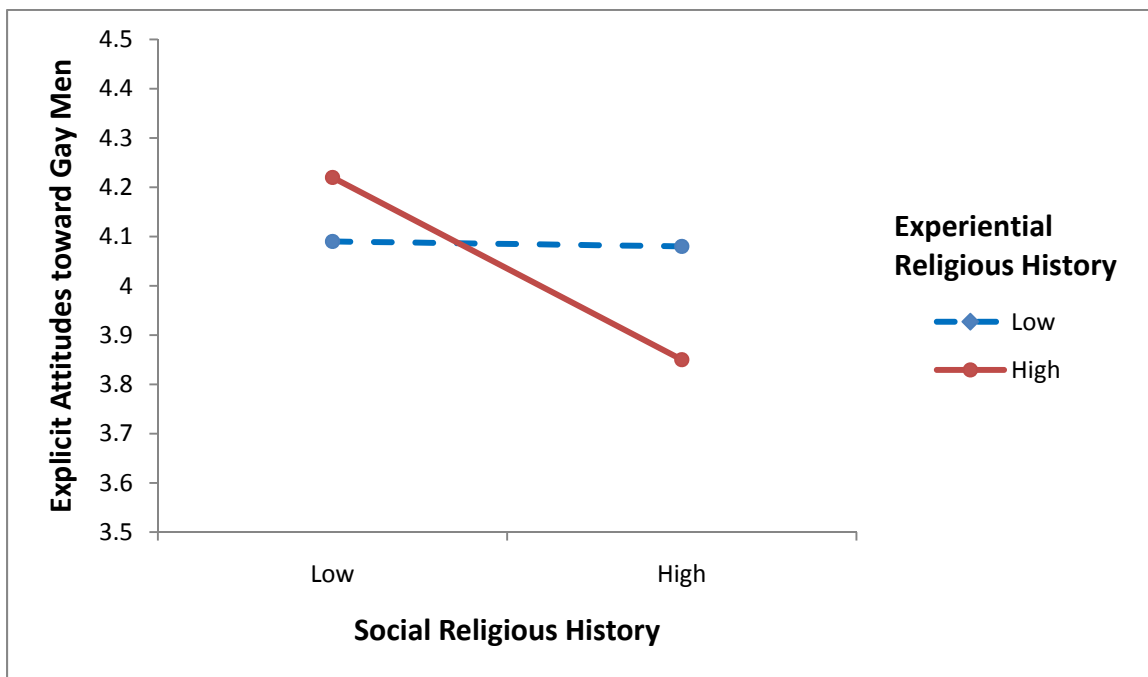
Model	Without Controls	With Controls
	β	β
African-Americans – Explicit	.04	.01
African-Americans – Implicit	.03	.01
Gay Men – Explicit	-.18**	-.12*
Gay Men – Implicit	.05	.02
Lesbians – Explicit	-.17*	-.14*
Lesbians - Implicit	.13*	.09

* $p < .05$; ** $p < .01$

Hypothesis 10 was partially supported. The model was significant for explicit attitudes toward gay men ($R^2 = .61$, $F(15,237) = 25.09$, $p < .001$). Specifically, there was no main effect of social religious history ($\beta = .05$, $t(240) = .85$, $p < .38$) or experiential religious history ($\beta = -.07$, $t(240) = -1.02$, $p = .31$) but the social X experiential religious histories interaction was significant ($\beta = -.12$, $t(240) = 2.45$, $p < .05$) (see Figure 5). Specifically, for people with low social religious history, there is no difference in the explicit attitudes toward gay man as a function of the experiential religious history ($\beta = .04$, $t(240) = .89$, $p = .38$). However, people with high social religious history have more

negative explicit attitudes toward gay men when they have high (versus low) experiential religious history ($\beta = -.16$, $t(240) = -2.77$, $p < .01$).

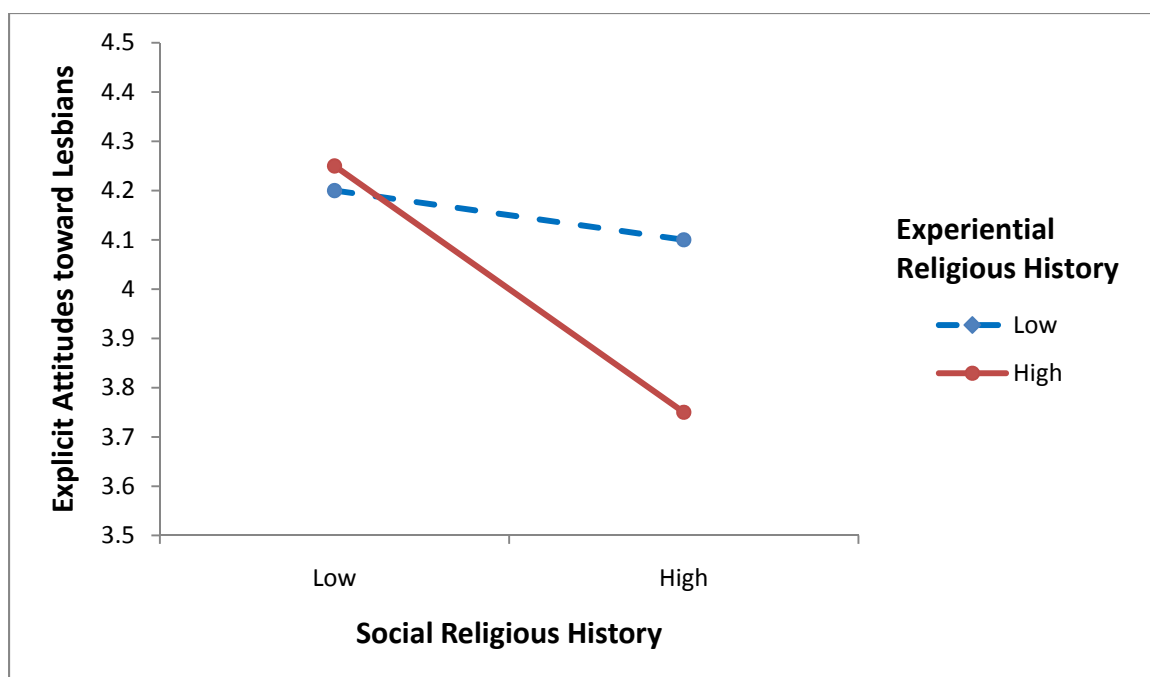
Figure 5. Social X Experiential Religious Histories Interaction Predicting Explicit Attitudes toward Gay Men.



The regression model with social X experiential interaction was also significant for explicit attitudes toward lesbians ($R^2 = .52$, $F(15,237) = 17.16$, $p < .001$). There was no main effect of social religious history ($\beta = -.07$, $t(237) = -1.45$, $p < .15$) or experiential religious history ($\beta = .01$, $t(237) = .25$, $p = .80$) but the social X experiential religious histories interaction was significant ($\beta = -.14$, $t(237) = -2.50$, $p < .05$) (see Figure 6). Specifically, for people with low social religious history, there is no difference in the explicit attitudes toward lesbians as a function of the experiential religious history ($\beta =$

.02, $t(240) = .38$, $p = .71$). However, people with high social religious history have more negative explicit attitudes toward lesbians when they have high (versus low) experiential religious history ($\beta = -.19$, $t(240) = -3.05$, $p < .01$).

Figure 6. Social X Experiential Religious Histories Interaction Predicting Explicit Attitudes toward Lesbians.



For implicit anti-lesbian bias, when controlling for other variables, the regression model was significant ($R^2 = .21$, $F(15, 236) = 4.24$, $p < .001$) and there was a main effect of experiential religious history such that people with high experiential religious history have more implicit anti-lesbian bias ($\beta = .18$, $t(236) = 2.66$, $p < .01$). However, there was no main effect of social religious history ($\beta = .09$, $t(236) = 1.25$, $p = .21$) and the social X experiential religious histories interaction was not significant ($\beta = .09$, $t(236) = 1.38$, $p =$

.17). It is important to note however, that the social X experiential religious histories interaction is significant when the regression analysis does not include the control variables in the model ($\beta = .13$, $t(240) = 2.04$, $p < .05$). This suggests that the effect of the social X experiential religious histories interactions might not be very strong and some control variables take up enough variance to make the interactions non-significant.

Although the model predicted explicit attitudes toward African-Americans ($R^2 = .25$, $F(15,238) = .507$, $p < .001$) and implicit anti-gay bias ($R^2 = .13$, $F(15,236) = 2.25$, $p < .01$), the social X experiential religious histories interactions were not significant ($\beta = .04$, $t(235) = .69$, $p = .49$ for explicit attitudes toward African-Americans and $\beta = .05$, $t(236) = .73$, $p = .47$ for implicit anti-gay men bias). The model did not predict implicit anti-Black bias ($R^2 = .09$, $F(15,238) = 1.59$, $p = .08$).

Hypothesis 11 stated that people with low religious maturity would be higher on fundamentalism and thus be more explicitly and implicitly prejudiced regardless of the target group. This prediction was partially supported. Specifically, religious fundamentalism was a mediator of the relationship between religious maturity and *explicit* attitudes toward gay men (see Figure 7) and lesbians (see Figure 8). That is, people who are low on religious maturity tend to be high on religious fundamentalism and thus, more *explicitly* prejudiced against gay men and lesbians.

Figure 7. Religious Fundamentalism as a Mediator of the Relationship Between Religious Maturity and Explicit Attitudes toward Gay Men.

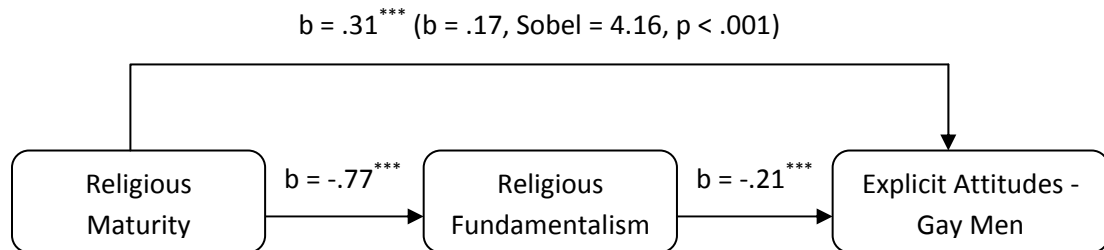
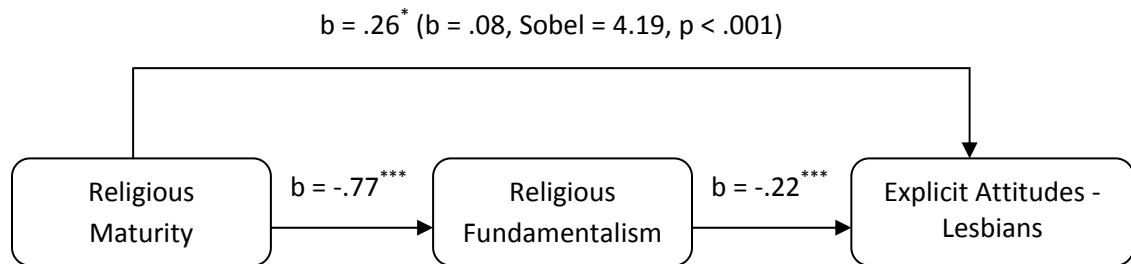


Figure 8. Religious Fundamentalism as a Mediator of the Relationship Between Religious Maturity and Explicit Attitudes toward Lesbians.



For *explicit* and *implicit* attitudes toward African-Americans, neither religious maturity nor religious fundamentalism were significant predictors ($\beta = .10$, $t(238) = 1.24$, $p = .22$; $\beta = .02$, $t(238) = .20$, $p = .84$ respectively for explicit attitudes and $\beta = -.09$, $t(238) = -1.04$, $p = .30$; $\beta = .10$, $t(238) = .99$, $p = .32$ respectively for implicit attitudes). Similarly, religious maturity did not predict *implicit* anti-gay bias ($\beta = -.03$, $t(224) = -.34$, $p = .73$) or anti-lesbian bias ($\beta = -.02$, $t(224) = -.29$, $p = .77$). Therefore, religious fundamentalism did not mediate the relationship between religious maturity and *implicit*

biases against gay men and lesbians and *explicit* and *implicit* attitudes toward African-Americans.

For comparison, the results of the tests of *hypothesis 11* without any control variables in the models are presented in Appendix N.

Hypothesis 12 stated that people who are high on religious maturity and low on fundamentalism would be less explicitly and implicitly prejudiced than people who are low on religious maturity and high on fundamentalism regardless of the target group. This prediction was not supported. The interaction between religious maturity and religious fundamentalism was not significant for all target groups ($\beta = -.05$, $t(239) = -.73$, $p = .47$ for explicit attitudes toward African-Americans; $\beta = -.13$, $t(239) = -1.82$, $p = .07$ for implicit anti-Black bias; $\beta = .04$, $t(225) = -.74$, $p = .46$ for explicit attitudes toward gay men; $\beta = -.06$, $t(224) = -.92$, $p = .36$ for implicit anti-gay bias; $\beta = -.06$, $t(225) = -1.09$, $p = .28$ for explicit attitudes toward lesbians; $\beta = .04$, $t(224) = .58$, $p = .56$ for implicit anti-lesbian bias). For ease of comparison, table 9 shows the standardized regression coefficients for the interactions from the regression models with and without the control variables.

Table 9

*Standardized regression coefficients for models testing religious maturity X
fundamentalism interactions with and without control variables*

Model	Without Controls	With Controls
	β	β
African-Americans – Explicit	-.07	-.05
African-Americans – Implicit	-.09	-.13
Gay Men – Explicit	-.05	-.04
Gay Men – Implicit	-.03	-.06
Lesbians – Explicit	-.06	-.06
Lesbians - Implicit	.07	.04

* $p < .05$; ** $p < .01$

Hypothesis 13 stated that people with high social religious history would be higher on fundamentalism and thus more explicitly and implicitly prejudiced regardless of the target group. This prediction was not supported. When controlling for other variables, social religious history did not predict explicit attitudes ($\beta = .01$, $t(239) = .16$, $p = .87$ for African-Americans; $\beta = .02$, $t(225) = .36$, $p = .72$ for gay men; $\beta = -.03$, $t(225) = -.47$, $p = .64$ for lesbians) or implicit attitudes ($\beta = -.05$, $t(239) = -.62$, $p = .54$ for African-Americans; $\beta = -.06$, $t(224) = -.75$, $p = .46$ for gay men; $\beta = .06$, $t(224) = .74$, $p = .46$ for lesbians). Therefore, religious fundamentalism did not mediate these relationships. It is worth nothing however, that when the control variables are not included in the analyses, the meditational models are significant for explicit attitudes toward gay men and for

explicit and implicit attitudes toward lesbians (see Appendix O). This suggests that another aspect of religious beliefs or some control variables are taking variance away from social religious history making it a non-significant predictor.

Hypothesis 14 stated that people with high experiential history would be higher on intrinsic religiosity and thus less prejudiced regardless of the target group. This prediction was not supported when other aspects of religious beliefs and control measures were included in the models. Specifically, neither experiential religious history nor intrinsic religiosity predicted explicit attitudes toward Blacks ($\beta = -.08$, $t(239) = -1.20$, $p = .23$; $\beta = .20$, $t(239) = 1.83$, $p = .07$ respectively), implicit anti-Black bias ($\beta = -.08$, $t(239) = -1.18$, $p = .24$; $\beta = -.11$, $t(239) = -.92$, $p = .36$ respectively), explicit attitudes toward gay men ($\beta = .02$, $t(225) = .43$, $p = .67$; $\beta = .01$, $t(225) = .13$, $p = .90$ respectively) or explicit attitudes toward lesbians ($\beta = -.01$, $t(225) = -.10$, $p = .92$; $\beta = -.05$, $t(225) = -.60$, $p = .55$ respectively). Experiential religious history did not predict implicit anti-lesbian bias ($\beta = .08$, $t(224) = 1.17$, $p = .25$) and intrinsic religious orientation did not predict implicit anti-gay bias ($\beta = .20$, $t(224) = 1.58$, $p = .12$). Therefore, there were no mediations.

It is worth noting however, that without any control measure in the models, intrinsic religious orientation was a mediator of the relationship between experiential religious history and explicit and implicit attitudes toward gay men and lesbians (see Appendix P). This suggests that the mediational model was not very strong and some other control variables take variance away from either the experiential religious history or intrinsic religiosity making them non-significant predictors.

Hypothesis 15 stated that people with high social religious history would be higher on extrinsic religiosity and thus more explicitly prejudiced against homosexuals but not African-Americans. There would not be an effect for implicit attitudes. This prediction was partially supported when controlling for other aspects of religious beliefs and control measures. There was not mediation for explicit attitudes toward any of the three target groups. Specifically, social religious history was not a significant predictor of explicit attitudes toward African-Americans ($\beta = .01$, $t(238) = .15$, $p = .88$), gay men ($\beta = .03$, $t(224) = .54$, $p = .59$) or lesbians ($\beta = -.02$, $t(224) = -.32$, $p = .75$).

As predicted, there was no mediation when predicting implicit attitudes toward any of the three target groups either. Specifically, social religious history was not a significant predictor of implicit attitudes toward African-Americans ($\beta = -.05$, $t(238) = -.67$, $p = .51$), gay men ($\beta = -.06$, $t(223) = -.77$, $p = .44$) or lesbians ($\beta = .05$, $t(223) = .64$, $p = .53$).

It is worth noting however, that when the control measures are not included in the models, there is a partial mediation for explicit attitudes toward gay men and lesbians (see Appendix Q). This suggests that some control variables take variance out of the social religious history making it a non-significant predictor.

Hypothesis 16 which stated that people with high experiential history will be higher on quest religiosity and thus less explicitly prejudiced against all three target groups but there will be no effect for implicit attitudes was partially supported. Quest religiosity is not a mediator of the relationship between experiential religious history and explicit and implicit attitudes toward any of the three target groups. Specifically, neither

experiential religious history nor quest religiosity were significant predictors of explicit attitudes toward African-Americans ($\beta = -.02$, $t(224) = -.32$, $p = .75$; $\beta = .03$, $t(224) = .35$, $p = .73$ respectively), implicit anti-Black bias ($\beta = -.09$, $t(224) = -1.18$, $p = .24$; $\beta = .14$, $t(224) = 1.79$, $p = .07$ respectively), explicit attitudes toward gay men ($\beta = .01$, $t(224) = .27$, $p = .79$; $\beta = -.04$, $t(224) = -.71$, $p = .48$ respectively), implicit anti-gay bias ($\beta = .13$, $t(223) = 1.71$, $p = .09$; $\beta = .08$, $t(223) = 1.08$, $p = .28$ respectively), explicit attitudes toward lesbians ($\beta = .001$, $t(224) = .02$, $p = .98$; $\beta = -.03$, $t(224) = -.51$, $p = .61$ respectively) or implicit anti-lesbian bias ($\beta = .11$, $t(223) = 1.63$, $p = .20$; $\beta = .08$, $t(223) = 1.07$, $p = .29$ respectively).

Hypothesis 17 stated that people who are high on extrinsic religiosity and low on intrinsic religiosity would be more explicitly and implicitly prejudiced than people who are low on extrinsic religiosity and high intrinsic religiosity regardless of the target group. This prediction was not supported. The interaction between extrinsic and intrinsic religiosities was not significant for all target groups ($\beta = .01$, $t(237) = .10$, $p = .92$ for explicit attitudes toward African-Americans; $\beta = .01$, $t(237) = .15$, $p = .88$ for implicit anti-Black bias; $\beta = -.04$, $t(223) = -.83$, $p = .41$ for explicit attitudes toward gay men; $\beta = -.11$, $t(222) = -1.51$, $p = .13$ for implicit anti-gay bias; $\beta = -.05$, $t(223) = -.97$, $p = .34$ for explicit attitudes toward lesbians; $\beta = .03$, $t(222) = .43$, $p = .67$ for implicit anti-lesbian bias). For ease of comparison, table 10 shows the standardized regression coefficients for the interactions from the regression models with and without the control variables.

Table 10

Standardized regression coefficients for models testing extrinsic X intrinsic interactions with and without control variables

Model	Without Controls	With Controls
	β	β
African-Americans – Explicit	-.01	.01
African-Americans – Implicit	-.05	.01
Gay Men – Explicit	-.05	-.04
Gay Men – Implicit	-.07	-.11
Lesbians – Explicit	-.05	-.05
Lesbians - Implicit	.03	.03

* $p < .05$; ** $p < .01$

In summary, out of the eight hypotheses addressing the moderating and mediating effects between components of religious beliefs when predicting prejudice, none of the hypotheses were fully supported, 4 hypotheses were partially supported, and 4 hypotheses were not supported (see Table 11).

Table 11

Summary of conclusions regarding hypotheses 10 through 17

Conclusion	Hypothesis							
	10	11	12	13	14	15	16	17
Support								
Partial Support	X	X				X	X	
No Support			X	X	X			X

CHAPTER NINE

DISCUSSION

Our sample reported positive explicit attitudes toward African-Americans, gay men and lesbians; however, the participants had negative implicit attitudes toward the three target groups. These findings appear to be consistent with the most current theories of prejudice (e.g., *integrated theory of prejudice*). These theories suggest broadly that prejudice is no longer associated with open and explicit hostility, but rather it is expressed in a more subtle, implicit fashion. This may explain why our sample expressed positive explicit but negative implicit attitudes toward the target groups, although, it is important to keep in mind that our sample included mostly undergraduate college students, a group with liberal leanings. A sample more representative of the general population might show slightly different results, especially when considering explicit attitudes toward the target groups.

Discussion of Hypotheses

Layer 1 Hypotheses

Our predictions concerning the relationship between religious involvement and explicit and implicit prejudice were partially supported, that is, for African-Americans people's religious involvement was positively related with implicit anti-Black bias but not related to explicit attitudes toward Blacks. The effect was opposite for gay men and lesbians. Specifically, people with high religious involvement had more negative explicit

attitudes toward gay men and lesbians but there was no relationship evident with implicit attitudes.

Previous research suggests that, in general, high religious involvement is associated with increased prejudice against minority groups (e.g., Altemeyer, 1996). However, these studies typically do not distinguish between proscribed and non-proscribed prejudices and between explicit and implicit attitudes. Batson et al. (1993) argued that prejudice against African-Americans is proscribed, that is, most religious institutions and authority figures openly condemn it. On the other hand, prejudice against gay men and lesbians is non-proscribed, that is, many religious institutions or religious authority figures do not oppose it and often have prejudicial attitudes toward these groups themselves (Duck & Hunsberger, 1999).

Consistent with this idea, participants in our sample were mostly Catholic and those who reported high religious involvement expressed explicit attitudes consistent with the teachings of their religions. Specifically, religious involvement did not predict explicit attitudes toward proscribed prejudice (against African-Americans) but was, however, related to non-proscribed prejudice (against gay men and lesbians). On the other hand, participants with high religious involvement had more implicit anti-Black bias (proscribed prejudice) but not anti-gay or anti-lesbian biases (non-proscribed prejudices).

One explanation of this effect could be that people with high religious involvement feel the need to follow the teachings of their religion and thus, express explicit attitudes that are consistent with these teachings; however, their implicit attitudes

may reflect views that are less influenced by the teachings of their religion. Thus, prejudice against African-Americans may be reflected solely in the implicit attitudes of people with high religious involvement because explicitly expressing such prejudice would create a state of dissonance between their attitudes and religious teachings. In the case of prejudice against gay men and lesbians, a like dissonance does not occur in explicit attitudes of religiously involved people because most religions do not condemn negative views toward homosexuality.

These ideas are also consistent with several theories that have been proposed as explanations of prejudice. If an individual engages in a number of religious behaviors (e.g., attends religious services) he or she will inevitably come in contact with people whom they might come to view as authority figures (or important reference groups). This scenario may lead to behavior modeling as proposed by the *social learning theory* (Bandura, 1969). Similarly, constant exposure to the similar arguments and religious edification regarding certain characteristics of a minority group may result in the formation of strong links between those descriptions and the group, a notion consistent with the *classical conditioning theory* (Pavlov, 1927). Furthermore, as proposed by the *operant conditioning theory* (Skinner, 1953), the social and personal rewards that the individual receives as a result of their conforming to teachings proposed by their religious authorities may serve to reinforce negative attitudes.

The hypothesis regarding extrinsic religious beliefs was partially supported, that is, people with high extrinsic orientation have more negative attitudes toward gay men and lesbians but not Blacks. We found the opposite effect for implicit attitudes. People

with high extrinsic religious orientation, have more implicit anti-Black bias but not anti-gay men or anti-lesbian biases.

Consistent with what Duck and Hunsberger (1999) and Hunsberger and Jackson (2005) proposed, these findings suggest that the relationship between extrinsic religious beliefs and prejudice depends on the type of attitudes (explicit or implicit) and the target group (proscribed or non-proscribed) involved. The original description of extrinsic religiosity proposed by Allport and Ross (1967) states that people with such religious orientation tend to see others in terms of social categories. This can potentially explain the difference in the relationship between extrinsic religiosity and explicit proscribed versus non-proscribed prejudices, wherein people with high extrinsic religious orientation may see others in terms of social categories if it is consistent with the views espoused by their religion. Specifically, people with a high extrinsic religious orientation often view gay men and lesbians in terms of social categories because their religion teaches that homosexual individuals belong to a separate social category, consequently, they express explicit attitudes consistent with this view. For African-Americans, on the other hand, there is no relationship between extrinsic religious orientation and explicit attitudes because, even though they represent a distinct social group, modern religious institutions and their authority figures condemn negative attitudes against this group.

The social identity theory (Tajfel & Turner, 1979) postulates that the mere categorization of people into groups may lead to prejudice. Since people who are high on extrinsic religiosity tend to see others in terms of categories rather than individuals, it is not surprising that this may lead to more prejudice.

The prediction regarding intrinsic religious beliefs was supported, that is, intrinsic religiosity is not related to explicit or implicit attitudes toward any of the three target groups. These findings are consistent with Donahue's (1985) meta-analysis of 70 studies examining the relationship between extrinsic and intrinsic religious orientation and prejudice. He concluded that intrinsic religious orientation is generally uncorrelated with prejudice. Donahue's conclusions echo Allport and Ross' (1967) original findings wherein individuals with high religious orientation exhibited lower levels of prejudice than people with either a low level of intrinsic or high level of extrinsic orientation.

Allport and Ross (1967) proposed that people with high intrinsic religious orientation view others as unique, finding truth and purpose in their religion. For such people, religion plays an important role in their lives because it provides answers to difficult questions and gives their lives meaning. According to the *social identity theory* (Tajfel & Turner, 1979), intrinsic religious orientation should not result in prejudice because people with high intrinsic religious orientation tend to see other people as unique rather than part of a social category; therefore, it is not unexpected that intrinsic religious orientation was not related to any type of prejudice in our study.

The hypothesis concerning quest religiosity was partially supported. Quest religiosity did not predict implicit attitudes toward any of the three target groups, however; it did not predict explicit racial or sexual prejudices either. Batson et al. (1978) argued that quest religiosity is associated with searching for answers to existential questions. There is some empirical evidence that suggests that there is a negative relationship between quest religious orientation and prejudice (e.g., Batson et al., 1978).

In this regard, our findings are not consistent with previous research. It is important to remember, however, that the mean score on the quest scale for our sample was not significantly different than the theoretical mid-point of the scale. This is not surprising considering the relative youth of our participants. It is possible that the participants in our sample had not yet reached the point where they ask existential questions. This could explain the lack of any relationship between quest religiosity and implicit or explicit proscribed or non-proscribed prejudice in our study.

The predictions regarding religious fundamentalism were partially supported. People with high religious fundamentalism tended to be more explicitly and implicitly prejudiced against gay men and lesbians but not African-Americans.

Our results are similar to findings from previous research on the relationship between explicit attitudes and fundamentalism. Out of all the aspects of religious beliefs, religious fundamentalism tends to show the most consistent negative relationship with prejudice. This relationship tends to also hold true across many different religious denominations (Altemeyer & Hunsberger, 1992). As McFarland (1989) points out "fundamentalism cloaks a general closed-minded, ethnocentric mindset, which is shown [...] as a general tendency to discriminate" (p. 333). It is that ethnocentric worldview that many (e.g., Altemeyer & Hunsberger, 1992) have proposed leads people with high degree of religious fundamentalism to be more prejudiced against minority groups. Furthermore, for fundamentalists, religion has a great importance in their lives and they tend to follow teaching of their religions very closely. It is not surprising then, that many highly

fundamental Christians cite the passage from *Romans 1:26-27*⁵ as the justification for their negative views of gay men and lesbians. This pervasiveness of ethnocentrism and close-mindedness could also be the reason for the relationship between fundamentalism and implicit anti-gay and anti-lesbian biases.

This finding about religious fundamentalism may also be explained with the *terror management theory* (Solomon, Greenberg, & Pyszczynski, 1991). Specifically, the theory states that people have a need for self-preservation which is constantly threatened by the awareness of the inevitability of our own mortality. People with strong, dogmatic, and fundamental beliefs, may have an elevated level of discomfort or fear, if, like Catholics, they are made aware of the inevitability of the own demise. To manage this discomfort, dogmatic people may choose cultural world views and beliefs, such as negative attitudes toward gay men and lesbians, to promote a feeling of stability and consistency because they may believe that gay men and lesbians pose a threat to their world views and thus indirectly to their own mortality.

In our study, fundamentalism was not related to either explicit or implicit attitudes toward African-Americans. Considering the large number of studies that found fundamentalism to be positively related to racial prejudice (e.g., Altemeyer & Hunsberger, 1992), why we did not find that relationship is puzzling. The demographic of our sample could potentially explain these results. Our participants were mostly young

⁵ Romans 1:26:27 from the King James Bible reads: "For this cause God gave them up unto vile affections: for even their women did change the natural use in to that which is against nature. And likewise also the men, leaving the natural use of the woman, burned in their lust one toward another, men with men working together that which is unseemly, and receiving in themselves that recompense of their error which was met."

Catholic college students from a major metropolitan city, a group that tends to be less religious (especially when it comes to fundamentalism), more politically liberal, and with a lot of exposure to ethnic diversity on campus. Altemeyer and Hunsberger (1992), also suggest that fundamentalists, by definition, believe and follow the teachings of their religions and since the Catholic religion condemns racial prejudice, these people should be, in fact, less prejudiced against African-Americans. This could also explain the difference in the relationship between proscribed and non-proscribed prejudice. If the Catholic religion condemns racial prejudice but often promotes sexual prejudice then it seems reasonable that people who have the strongest beliefs in the religious teachings would have less racial and more sexual prejudice.

The hypothesis regarding religious maturity was partially supported. People with high religious maturity had more positive explicit attitudes toward gay men and lesbians but not Blacks. Furthermore, religious maturity was more strongly related to explicit attitudes toward gay men than explicit attitudes toward lesbians. Religious maturity did not predict implicit anti-Black, anti-gay men, or anti-lesbian biases.

To our knowledge, there are no studies that examine the relationship between religious maturity and implicit or explicit prejudices. Our results, regarding the association between religious maturity and explicit attitudes toward gay men and lesbians, however, seem to be consistent with the general conceptualization of mature and immature religious sentiments. Allport (1950) characterized mature religious sentiment as an approach to religion that is dynamic and no longer motivated by childish reasons and fears. Unlike quest religiosity, which encourages doubt and religious conflict, mature

religious sentiment is concerned with seeking answers that address the tension between religious beliefs and open-mindedness. Thus, a person with mature religious sentiment should be able to understand and resolve the inconsistencies between religious teachings and lifestyles of some minority groups. Consistent with this idea, we found that people with high religious maturity had more positive explicit attitudes toward gay men and lesbians. African-Americans, on the other hand, may not create as big of an inconsistency which could explain lack of the relationship between religious maturity and racial prejudice.

As far as the difference in the relationship between religious maturity with explicit attitudes toward gay men and explicit attitudes toward lesbians, that may simply reflect the generally more positive attitudes held toward lesbians. As a person's religious faith matures, they tend to successfully resolve the conflict between religious teaching and open-mindedness and their attitudes toward homosexual people become more positive overall. However, the general discrepancy between attitudes toward gay men and attitudes toward lesbians remains.

We did not find a relationship between religious maturity and implicit attitudes toward any of the three target groups. One possible explanation of the lack of such relationship could be that, according to Allport (1950), the second step of religious development (propriate striving) is based on conscious processes. Therefore, this last step of religious development seems to be more related to explicit rather than implicit attitudes.

The predictions about social religious history were not supported. Social religious history did not predict explicit or implicit attitudes toward any of the three target groups. It is important to note however, that this lack of relationship is only evident when social religious history is included in the model with other aspects of religious beliefs. If considered by itself, social religious history is negatively correlated with explicit attitudes toward gay men and both explicit and implicit attitudes toward lesbians.

Table 2 shows a relatively strong positive relationship between social religious history and religious behaviors, intrinsic religiosity, and religious fundamentalism. The discrepancy in the relationship of social religious history and prejudice when considered by itself or with other aspects of religious beliefs suggests that the other components of religiosity take enough variance out of social religious history to make it a non-significant predictor.

The hypothesis regarding personal religious history was partially supported. People with high experiential religious history tend to be less implicitly prejudiced against gay men and lesbians but not Blacks. Personal religious history did not predict explicit attitudes toward any of the three target groups.

A person may have a religious experience when they are going through an existential crisis. Ultimately, these experiences lead to reformulation of one's worldview to help deal with the existential questions (Batson, Schoenrade, & Ventis, 1993). This suggests that reformulation of one's worldview would also include reformulation of how one views others. Since personal religious experiences affect the individual on a very deep and intimate level, they may affect automatic (or implicit) evaluations but not

necessarily explicit ones. This could potentially explain the negative relationship between experiential religious history and implicit anti-gay and anti-lesbians bias and lack of a relationship with explicit attitudes.

To isolate the effects of individual aspects of religious beliefs on prejudice, we controlled for several possible confounding variables (right-wing authoritarianism, parents' anti-gay and anti-Black sentiments, and non-religious morality). Although some of these variables predicted prejudicial attitudes, they did not alter the results obtained with religious beliefs. Consequently, these variables could not account for the pattern of results obtained with religious beliefs.

Layer 2 Hypotheses

Our prediction regarding an interaction between social religious history and experiential religious history was partially supported. We found that for people with low social religious history, there is no difference in the explicit attitudes toward gay man as a function of the experiential religious history but people with high social religious history have more negative explicit attitudes toward gay men when they have high (versus low) experiential religious history. Similarly, for people with low social religious history, there is no difference in the explicit attitudes toward lesbians as a function of the experiential religious history but people with high social religious history have more negative explicit attitudes toward lesbians when they have high (versus low) experiential religious history. However, the model did not predict explicit attitudes toward African-Americans, implicit anti-Black bias, or implicit anti-gay bias or anti-lesbian bias.

When social religious history and experiential religious history are considered as two separate constructs we find that social religious history is not related to prejudice and experiential religious history is negatively related to implicit attitudes toward gay men and lesbians. However, we proposed a model (see Figure 2) that suggests an interaction between the two sources of religious beliefs and our data shows partial support for this model. One possible explanation for this interaction could be that, when operating together, the two sources of religious beliefs effectively double their effect on sexual prejudice. Specifically, when people have a mostly experiential religious history, they may transform their world view relatively independently of other sources. In other words, their transformation involves their own interpretation of the experience that is based on their understanding of the world and their own values. Consequently, the reformulated implicit attitudes toward gay men and lesbians could be more positive. However, when people have personal religious experiences in addition to their rich social religious histories, they may see the two as connected. Therefore, rather than interpreting the religious experiences independently, they interpret them through their social religious histories. This could result in their reformulated attitudes being even more consistent with what they learned from their social religious histories.

This could also explain why there was no interaction for African-Americans. Our data shows that not only social religious history by itself but also parents' anti-Black sentiments were not significant predictors of attitudes toward Black. Since prejudice against African-Americans is proscribed, it is possible that, personal religious experiences do not affect these attitudes.

The hypothesis regarding the mediating effect of fundamentalism on the relationship between religious maturity and prejudice was partially supported, that is, this prediction was supported for explicit but not implicit attitudes. Specifically, religious fundamentalism was a mediator of the relationship between religious maturity and explicit attitudes toward gay men, and lesbians. People who are low on religious maturity tend to be high on religious fundamentalism and thus, more explicitly prejudiced against African Americans, gay men, and lesbians. Religious fundamentalism did not mediate the relationship between religious maturity and explicit attitudes toward African-Americans or implicit biases against the three target groups.

This mediational relationship between religious maturity and fundamentalism is consistent with Allport's (1950) conceptualization of mature religious sentiment and Altemeyer and Hunsberger's (1992) definition of fundamentalism. That is, *immature* religious sentiment has a lot in common with religious fundamentalism. Allport (1950) suggests that immature religion is static in the sense that it is concerned with satisfying basic human needs and does not allow for much flexibility or open-mindedness. People with immature religious sentiment tend to follow religious doctrines very closely because they cannot differentiate between essential doctrines and ones that are less important. Thus, it is not surprising that people with immature religious sentiment tend to also be high on religious fundamentalism which refers to a very rigid and dogmatic way religious beliefs are held. The mediating effect of fundamentalism on the relationship between religious maturity and explicit prejudice suggests that people with immature religious

beliefs tend to be more explicitly prejudiced because they also tend to be higher on religious fundamentalism.

Our prediction about the interaction between religious fundamentalism and religious maturity predicting prejudice was not supported. The interaction was not significant for all target groups for explicit or implicit attitudes. One possible explanation for the lack of interaction is that religious fundamentalism tends to be the strongest and most pervasive predictor of prejudice (e.g., Altemeyer & Hunsberger, 1992); therefore, the effect of religious fundamentalism may not fluctuate as a function of religious maturity.

The hypothesis regarding the mediational effect of fundamentalism on the relationship between social religious history and prejudice was not supported when control variables were included in the models. By itself, social religious history predicted explicit attitudes toward gay men and explicit and implicit attitudes toward lesbians and the mediational models without any control variables were significant. However, this effect goes away when other aspects of religious beliefs and control measures are in the models. This suggests that the effect of social religious history may not very strong and some other variable is taking variance away from social religious history.

Our prediction regarding the mediational effect of intrinsic religiosity on the relationship between experiential history and prejudice was not supported when controlling for other aspects of religious beliefs and control measures. By itself, intrinsic religious orientation was a mediator of the relationship between experiential religious history and explicit and implicit attitudes toward gay men and lesbians. However, this

effect went away when other variables were included in the model. This suggests that there may be some confounding variables that, when included in the model, take variance away from experiential religious history or intrinsic religious orientation.

The hypothesis about the mediational effect of extrinsic religiosity on the relationship between social religious history and prejudice was partially supported. As predicted, there was no mediation for implicit attitudes toward any of the three target groups. However, when controlling for other aspects of religious beliefs and control measures, there was not mediation when predicting explicit attitudes either. When considered by itself, social religious history is a significant predictor of explicit attitudes toward gay men and lesbians and there was partial mediation for these target groups. However, the effect of social religious history seems to be rather weak and it goes away when other control measures are in the models.

Our prediction regarding the mediational effect of quest religiosity on the relationship between experiential religious history and prejudice was partially supported. As expected, quest religiosity was not a predictor for implicit attitudes; however, contrary to our predictions, it was not a mediator for explicit attitudes either.

Our initial hypothesis regarding this mediational effect was based on the idea that people who have religious experiences may seek to try to understand them and therefore, question the religious aspect of these experiences. Our results suggest that people accept these experiences rather than question them which could explain this lack of mediational effect of quest religiosity on the relationship between experiential religious history and prejudice.

The hypothesis regarding the interaction between extrinsic and intrinsic religious beliefs was not supported. The interaction was not significant for explicit or implicit attitudes toward all target groups.

Initially, Allport and Ross (1967) thought of the extrinsic and intrinsic religiosities as separate constructs. Since they did not find any relationships of these two separate constructs with prejudice, they suggested that these aspects of religious beliefs should be considered together. Specifically, they argued that most people do not have purely intrinsic or purely extrinsic religious beliefs and therefore, we should look at the interaction of these two constructs. Despite this, the meta-analyses done by Donahue (1985) and Hunsberger and Jackson (2005) show that most researchers look at these constructs as two separate aspects of religious beliefs. Furthermore, these meta-analyses revealed that extrinsic and intrinsic religious beliefs do not interact with one another in predicting other aspects of religious beliefs (Donahue, 1985). Our data suggests that they do not interact in predicting explicit or implicit prejudice against African-Americans or gay men and lesbians either.

General Discussion

The pattern of results from our study demonstrates specific typologies for people with explicit or implicit, proscribed and non-proscribed prejudices. Individual aspects of religious beliefs do not seem to be related with explicit proscribed prejudice but people who are low on religious maturity tend to be high on religious fundamentalism and thus, more *explicitly* prejudiced against African Americans. People with higher level of

religious involvement and extrinsic religiosity, have higher levels of *implicit* proscribed prejudice.

People with higher levels of religious involvement, extrinsic religiosity, religious fundamentalism, lower religious maturity tend to have higher *explicit* prejudice against gay men and lesbians. People with higher religious fundamentalism tend to also have more *implicit* prejudice against gay men and lesbians. Furthermore, people with high social religious history have more negative *explicit* attitudes toward gay men and lesbians when they have high (versus low) experiential religious history. People who are low on religious maturity tend to be high on religious fundamentalism and thus, more *explicitly* prejudiced against gay men and lesbians. People with high experiential religious history tend to be higher on intrinsic religiosity and thus less *explicitly* and *implicitly* prejudiced against gay men and lesbians.

Proscribed versus Non-Proscribed Prejudice

One of the goals of this project was to better understand the patterns of relationships between religious beliefs and two types of prejudice: proscribed (African-Americans) and non-proscribed (gay men and lesbians). Our results indicated that there is, in fact, a considerable difference in which aspects of religious beliefs predict proscribed versus non-proscribed prejudices. This findings are consistent with Batson's (1993) claims about differences between proscribed and non-proscribed prejudices, as well as Duck and Hunsberger's (1999) findings which showed that people's attitudes toward minority groups tend to be similar to the teachings of their religions.

Specifically, in our study, we found that out of the individual components of religious beliefs, only religious involvement and extrinsic religious orientation were related to proscribed prejudice. People who engage in a host of religious behaviors and are more extrinsic in their religious orientation have more implicit but not explicit prejudice against African-Americans. All other aspects of religious beliefs were not significant predictors of proscribed prejudice. These findings support Batson's (1993) notion that people hold attitudes consistent with the teaching of their religions, that is, our sample included mostly Catholics and the Catholic Church condemns racial prejudice. Therefore, the more exposure people have to the teachings of their religion (e.g., through religious involvements) or more they use their religion for external causes (extrinsic religiosity) the more implicit, but not explicit, racial prejudice they tend to have.

The pattern of results is quite different for non-proscribed prejudice (against gay men and lesbians). Unlike in the proscribed prejudice situation, almost all aspects of religious beliefs (e.g., fundamentalism, extrinsic, involvement) were related to attitudes toward gay men and lesbians. Since the Church does not condemn sexual prejudice, and in some cases even encourages the practice, it is not surprising that people who adhere closely to the teachings of their religions also be more prejudiced against gay men and lesbians.

Implicit versus Explicit Attitudes

Another purpose of this study was to examine the relationship between aspects of religious beliefs and two types of attitudes: implicit and explicit. To our knowledge, very few studies have looked at this relationship. Overall, we found that more aspects of

religious beliefs are related to explicit than implicit prejudices for gay men and lesbians but not for African-Americans. One possible explanation of this pattern of results may be that explicit attitudes may be more influenced by the teachings of one's religion whereas implicit attitudes may be more independent. Our results regarding the relationship between religious involvement and racial prejudice support this idea. Specifically, people who have a lot of contact with the teachings of their religions tend to have more explicit but not implicit prejudice. In other words, their explicit prejudice is more consistent with the teaching of their religion whereas their implicit attitudes can be independent of religious dogma.

As proposed by Allport (1954), the effect of religious beliefs on prejudice is paradoxical. This research demonstrates which facets of religious beliefs are related to what kinds of prejudice and which facets of religious beliefs, as well as non-religious or secular morality, are related to non-prejudice, thereby providing at least a partial explanation of Allport's (1954) paradox. That is, attitudes toward targets like African-Americans, gay men, and lesbians may be ambivalent with some aspects of religious beliefs pulling toward and other aspects pulling away from prejudice. More research on ambivalent attitudes is needed.

Limitations and Future Directions

The current study expands our understanding of the relationship between the different aspects of religious beliefs and prejudice; however, it has limitations that must be considered.

First, in this study we examined attitudes toward only two groups (African-Americans and homosexuals). Although these minorities were selected to represent groups against which prejudice is either proscribed (African-Americans) or non-proscribed (gay men and lesbians), there are many other minorities that experience prejudice. As demonstrated in this study, the relationship between religious beliefs and prejudice vary depending on the target group. Therefore, future studies should examine the nature of this relationship for other minority groups.

Second, the sample in this study was limited to undergraduate students. This demographic tends to have more positive attitudes toward minorities than the general population. Moreover, younger people tend to also be less religious than their parents. Thus, it is possible that the relationship between religious beliefs and prejudice would differ in older than our college-aged sample.

As this study was conducted at a Jesuit university, and although the majority of our participants classified themselves as Catholics, it is possible that the values and principles of Jesuit education may influence attitudes toward other groups in ways different than members of other faiths. In our sample, we did not have enough participants from other religious denominations to be able to test for these differences. Research suggests that Baptist fundamentalists and Christians tend to be more prejudiced than Catholics - Non-Christians, Jews, or Protestants (Fisher, Derison, Polley, & Cadman, 1994), as a result, it is probable that the relationship between aspects of religious beliefs and prejudice would vary among different religious denominations. This should be examined in future research.

Third, this study focused only on religious beliefs as predictors of attitudes. Although we examined several moderational and mediational models, we did not look at other variables that can potentially affect the relationship between aspects of religious beliefs and prejudice. One variable that has consistently been found to be related to prejudice is contact with members of the minority groups. It is possible that such contact would mediate or moderate the relationship between various aspects of religiosity and attitudes. For example, people high on fundamentalism could avoid contact with minority group members and therefore be more prejudiced. Similarly, for people with high degree of contact with minorities, the relationship between the aspects of religious beliefs might be different than for people with little contact.

Fourth, we did not examine how the relationship between aspects of religious beliefs and prejudice differs as a function of the gender of the participants. Several studies found gender differences in prejudice (Herek, 1994). It is possible, therefore, that differences may exist between males and females regarding how religious beliefs relate to explicit and implicit proscribed and non-proscribed prejudices. Future studies should focus on these gender differences.

Fifth, in this study we assessed people's attitudes toward African-Americans. The data for this study was collected between late January and April of 2009, right after the inauguration of Barack Obama as the first African-American president of the United States. The historic election, coupled with the dramatic demographics limitations of our sample could explain the participants' strong positive attitudes toward African-Americans

as well as the lack of relationships between aspects of religious beliefs and attitudes toward Blacks that are typically found in this area of research.

In conclusion, the relationship between religious beliefs and prejudice is far more nuanced than initially proposed. This study helped clarify Allport's (1954) paradox that religion makes and unmakes prejudice. Greater understanding of the relationship between religion and prejudice may help promote greater tolerance of minority groups.

APPENDIX A
RELIGIOUS INVOLVEMENT SCALE

Please indicate your level of agreement or disagreement with the following items using the provided scale:

1	2	3	4	5
strongly				strongly
disagree				agree

1. If not prevented by unavoidable circumstances, I regularly attend religious service about one or more times a week.
2. I enjoy working in the activities of my place of worship
3. I am not a participant in activities at a place of worship.
4. I pray privately about one or more times a day.
5. I seldom or never contribute time or money to a church
6. In proportion to my income, I contribute a generous amount to my place of worship.

APPENDIX B
EXTRINSIC/INTRINSIC SCALE

Please indicate the extent to which you agree or disagree with each of the items by using the following scale:

1 2 3 4 5

Strongly Disagree

Strongly Agree

- 1) Although I believe in my religion, I feel there are many more Important things in my life.
- 2) It doesn't matter so much what I believe so long as I lead a moral life.
- 3) The primary purpose of prayer is to gain relief and protection.
- 4) The church is most important as a place to formulate good social relationships.
- 5) What religion offers me most is comfort when sorrows and misfortune strike.
- 6) I pray chiefly because I have been taught to pray.
- 7) Although I am a religious person I refuse to let religious considerations influence my everyday affairs.
- 8) A primary reason for my interest in religion is that my church is a congenial social activity.
- 9) Occasionally I find it necessary to compromise my religious beliefs in order to protect my social and economic well-being.
- 10) One reason for my being a church member is that such membership helps to establish a person in the community.
- 11) The purpose of prayer is to secure a happy and peaceful life.
- 12) Religion helps to keep my life balanced and steady in exactly the same way as my citizenship, friendships, and other memberships do.
- 1) It is Important for me to spend periods of time in private religious thought and meditation.
- 2) If not prevented by unavoidable circumstances, I attend church.
- 3) I try hard to carry my religion over into all my other dealings in life.
- 4) The prayers I say when I am alone carry as much meaning and personal emotion as those said by me during services.
- 5) Quite often I have been keenly aware of the presence of God or the Divine Being
- 6) I read literature about my faith (or church).
- 7) If I were to join a church group I would prefer to join a Bible study group rather than a social fellowship.
- 8) My religious beliefs are really what lie behind my whole approach to life.
- 9) Religion is especially important because it answers many questions about the meaning of life.

APPENDIX C
QUEST SCALE

Please indicate the extent to which you agree or disagree with each of the items by using the following scale:

1 2 3 4 5 6 7 8 9

Strongly Disagree

Strongly Agree

- 1) As I grow and change, I expect my religion also to grow and change.
- 2) I am constantly questioning my religious beliefs.
- 3) It might be said that I value my religious doubts and uncertainties
- 4) I was not very interested in religion until I began to ask questions about the meaning and purpose of my life. .
- 5) For me, doubting is an important part of what it means to be religious.
- 6) I do not expect my religious convictions to change in the next few years.
- 7) I find religious doubts upsetting,
- 8) I have been driven to ask religious questions out of a growing awareness of the tensions in my world and in my relation to my world.
- 9) My life experiences have led me to rethink my religious convictions.
- 10) There are many religious issues on which my views are still changing.
- 11) God wasn't very important to me until I began to ask questions about the meaning of my own life.
- 12) Questions are far more central to my religious experience than are answers.

APPENDIX D
RELIGIOUS FUNDAMENTALISM SCALE

This survey includes a number of statements about general religious opinions. You will probably find that you *agree* with some of the statements and *disagree* with others, to varying extents. Please indicate your reaction to each of the statements by marking your opinion to the left of each statement, according to the following scale:

Mark a: -4 if you *very strongly disagree* with the statement.

-3 if you *strongly disagree* with the statement.

-2 if you *moderately disagree* with the statement.

-1 if you *slightly disagree* with the statement.

Mark a: + 1 if you *slightly agree* with the statement.

+ 2 if you *moderately agree* with the statement.

+ 3 if you *strongly agree* with the statement.

+ 4 if you *very strongly agree* with the statement.

If you feel exactly and precisely *neutral* about a statement, mark a "0" next to it.

1. God has given mankind a complete, unfailing guide to happiness and salvation, which must be totally followed.
2. *All* of the religions in the world have flaws and wrong teachings.
3. Of all the people on this earth, one group has a special relationship with God because it believes the most in his revealed truths and tries the hardest to follow his laws,
4. The long-established traditions in religion show the best way to honor and serve God, and should never be compromised
5. Religion must admit all its past failings and adapt to modern life if it is to benefit humanity.
6. When you get right down to it, there are only two kinds of people in the world: the Righteous, who will be rewarded by God and the rest, who will not.
7. Different religions and philosophies have different versions of the truth and may be equally right in their own way.

8. The basic cause of evil in this world is Satan, who is still constantly and ferociously fighting against God.
9. It is more important to be a good person than to believe in God and the right religion.
10. No one religion is especially close to God, nor does God favor any particular group of believers.
11. God will punish most severely those who abandon his true religion.
12. No single book of religious writings contains all the important truths about life.
13. It is silly to think people can be divided into "the Good" and "the Evil." Everyone does some good, and some bad, things.
14. God's true followers must remember that he requires them to *constantly* fight Satan and Satan's allies on this earth.
15. Parents should encourage their children to study all religions without bias, then make up their own minds about what to believe.
16. There *is* a religion on this earth that teaches, without error, God's truth.
17. "Satan" is just the name people give to their own bad impulses. There really is *no such thing* as a diabolical "Prince of Darkness" who tempts us.
18. Whenever science and sacred scripture conflict, science must be wrong.
19. There is *no* body of teachings, or set of scriptures, which is completely without error.
20. To lead the best, most meaningful life, one must belong to the one, true religion.

APPENDIX E
RELIGIOUS EMPHASIS SCALE

Indicate how much your parents emphasized practicing the family religion while you were growing up using the following scale

- 0 = no emphasis was placed on the behavior
- 1 = a slight emphasis was placed on the behavior
- 2 = a mild emphasis was placed on the behavior
- 3 = a moderate emphasis was placed on the behavior
- 4 = a strong emphasis was placed on the behavior
- 5 = a very strong emphasis was placed on the behavior

- 1) Going to church; attending religious services.
- 2) Attending "Sunday school"; getting systematic religious instruction regularly.
- 3) Reviewing the teachings of the religion at home.
- 4) Praying before meals.
- 5) Reading Scripture or other religious material.
- 6) Praying before bedtime.
- 7) Discussing moral "do's" and "don'ts" in religious terms.
- 8) Observing religious holidays; celebrating events like Christmas in a religious way.
- 9) Being a good representative of the faith; acting the way a devout member of your religion would be expected to act.
- 10) Taking part in religious youth groups.

APPENDIX F
RELIGIOUS EXPERIENCE EPISODE MEASURE

Instructions: People sometimes have very moving and powerful experiences. It is hard to measure this sort of thing, especially since there can be many kinds of moving experiences. What I want you to do is compare your experience with the following descriptions of significant experiences that different people have had. Most of the descriptions use religious language. What I want you to decide is not whether you like the language used, but whether you think that your experience was moving and powerful in the same ways as the experience that the person was trying to describe.

Below each description are numbers running from 1 to 9. Please circle one number for each experience; the higher the number, the more similar it is to your experience.

1. Indicates that your experience was not at all like the experience described.
3. Indicates that your experience was vaguely similar to the experience described.
5. Indicates that your experience was similar to the experience described.
7. Indicates that your experience was quite similar to the experience described.
9. Indicates that your experience was almost identical to the experience described.

1) Once, a few weeks after I came to the woods, I thought that perhaps it was necessary to be near other people for a happy and healthy life. To be alone was somewhat unpleasant. But during a gentle rain, while I had these thoughts, I was suddenly aware of such a good society in nature, in the pattern of the drops and in every sight and sound around my house, that the fancy advantages of being near people seemed insignificant, and I haven't thought about them since. Every little pine needle expanded with sympathy and befriended me. I was so definitely aware of something akin to me that I thought no place could ever be strange to me again.

1 2 3 4 5 6 7 8 9

2) My mind, deeply under the influence of the thoughts and emotions called up by the reading and talk, was calm and peaceful. I was in a state of quiet, almost passive enjoyment, not actually thinking but letting thoughts and emotions flow by themselves through my mind. All at once, without any warning, I found myself wrapped in a flame colored cloud. For an instant I thought a great fire might be in the nearby city; the next moment I knew that the fire was within myself. Directly afterward I felt a sense of exultation, of immense joy and intellectual insight impossible to describe.

- 1 2 3 4 5 6 7 8 9
- 3) I have several times felt that I have enjoyed a period of communion with the divine. These meetings are unexpected but clear, and consist of the disappearance of the conventionalities that fill my life. Once it happened when from the top of a high mountain I looked over a rugged landscape extending to a long curve of ocean which reached the horizon. Another time it happened when from the same point I could see nothing beneath me but an endless expanse of white cloud. Above the windblown clouds a few high peaks, including the one I was on, seemed to be plunging about as if they were dragging their anchors. On these occasions I felt a temporary loss of my identity, and I realized that life was more significant than I had thought.

- 1 2 3 4 5 6 7 8 9
- 4) My thoughts went back to what they had been busy with for three years-the search for God. I wondered how I had ever come by the idea of God. And with this thought a glad desire for life arose in me. Everything in r.J.e became meaningful. I realized that I did not have to look farther. To acknowledge God and to live are one and the same thing. God is what life is.

- 1 2 3 4 5 6 7 8 9
- 5) I would suddenly feel the mood coming when I was at church, or with people, or reading, but only when my muscles were relaxed. It would irresistibly take over my mind and will, last what seemed like forever, and disappear in a way that resembled waking up from anesthesia. One reason that I disliked this kind of trance was that I could not describe it to myself; even now I can't find the right words. It involved the disappearance of space, time, feeling, and all the things that I call my self. As ordinary consciousness disappeared, the sense of underlying or essential consciousness grew stronger. At last nothing remained but a pure, absolute, abstract self.

- 1 2 3 4 5 6 7 8 9
- 6) I remember the night and almost every spot on the hilltop where my soul opened out and the inner and outer worlds rushed together. My own deep struggle was being answered by the unfathomable deep without, reaching beyond the stars. I stood alone with him who had made me, and all the beauty, love, and sorrow of

the world. I felt the union of my spirit with his. The ordinary sense of things around me faded, and for the moment nothing remained but an indescribable joy.

1 2 3 4 5 6 7 8 9

- 7) I felt something within me had broken on which my life had always rested, that I had nothing to hold on to, and that my life no longer had meaning. I felt forced to commit suicide. It wouldn't exactly be right to say I wished to kill myself, because the force which drew me away from life was more powerful and more general than any mere wish. It was a force like my old desire to live, but it moved me in the opposite direction. I was driven to die, and in spite of that I still hoped for something from life.

1 2 3 4 5 6 7 8 9

- 8) God is more real to me than any thought or thing or person. I feel God's presence and I feel it more as I live in closer harmony with his laws. I feel God in the sunshine or rain, and my feelings are best described as awe mixed with delirious restfulness.

1 2 3 4 5 6 7 8 9

- 9) The highest experiences I have had of the presence of God have been rare and brief-flashes of consciousness which have made me exclaim with surprise, or less intense moments of happiness and insight, only gradually passing away. I have severely questioned whether these moments were worthwhile, but I find that after every questioning, they stand out today as the most real experiences of my life.

1 2 3 4 5 6 7 8 9

- 10) I have never had such an immediate, powerful experience. I don't know what it was in that flower, what shape or secret, that made me see it in a limitless beauty. I will never enclose in a conception this power, this indescribable greatness, this uncontainable form, this ideal of a better world, which I felt but which nature has not made actual.

1 2 3 4 5 6 7 8 9

APPENDIX G
RELIGIOUS MATURITY SCALE

Here are some statements that show how some people feel about religion. Please indicate how much you agree or disagree with each by circling a number on a 5-point scale where 1 = strongly disagree and 5 = strongly agree.

- 1) My religious beliefs provide me with satisfying answers at this stage of my development, but I am prepared to alter them as new information becomes available.
- 2) I am happy with my present religion but wish to be open to new insights and ways of understanding the meaning of life.
- 3) As best as I can determine, my religion is true, but I recognize that I could be mistaken on some points.
- 4) Important questions about the meaning of life do not have simple or easy answers; therefore faith is a developmental process.
- 5) I could not commit myself to a religion unless I was certain that it is completely true.
- 6) I have struggled in trying to understand the problems of evil, suffering, and death that mark this world.
- 7) Churches should concentrate on proclaiming the gospel and not become involved in trying to change society through social or political action.
- 8) While we can never be quite sure that what we believe is absolutely true, it is worth acting on the probability that it may be.
- 9) I have found many religious questions to be difficult and complex so I am hesitant to be dogmatic or final in my assertions.
- 10) In my religion my relationships with other people are as fundamental as my relationship with God.
- 11) My religious beliefs are pretty much the same today as they were five years ago.

APPENDIX H

THE SYMBOLIC RACISM 2000 SCALE

1. It's really a matter of some people not trying hard enough; if blacks would only try harder they could be just as well off as whites. (1, strongly agree; 2, somewhat agree; 3, somewhat disagree; 4, strongly disagree)
2. Irish, Italian, Jewish, and many other minorities overcame prejudice and worked their way up. Blacks should do the same. (1, strongly agree; 2, somewhat agree; 3, somewhat disagree; 4, strongly disagree)
3. Some say that black leaders have been trying to push too fast. Others feel that they haven't pushed fast enough. What do you think? (1, trying to push too fast; 2, going too slowly; 3, moving at about the right speed)
4. How much of the racial tension that exists in the United States today do you think blacks are responsible for creating? (1, all of it; 2, most; 3, some; 4, not much at all)
5. How much discrimination against blacks do you feel there is in the United States today, limiting their chances to get ahead? (1, a lot; 2, some; 3, just a little; 4, none at all)
6. Generations of slavery and discrimination have created conditions that make it difficult for blacks to work their way out of the lower class. (1, strongly agree; 2, somewhat agree; 3, somewhat disagree; 4, strongly disagree)
7. Over the past few years, blacks have gotten less than they deserve. (1, strongly agree; 2, somewhat agree; 3, somewhat disagree; 4, strongly disagree)
8. Over the past few years, blacks have gotten more economically than they deserve. (1, strongly agree; 2, somewhat agree; 3, somewhat disagree; 4, strongly disagree)

APPENDIX I
MODERN HOMOPHOBIA SCALE

The following statements measure your attitudes towards **female sexuality**. Please indicate your level of agreement or disagreement. Please state your level of agreement by putting a number between 1 (strongly disagree) and 5 (strongly agree). If you neither agree nor disagree, please put 3 next to the statement.

- | 1 | 2 | 3 | 4 | 5 | |
|----------------------|---|---|---|-------------------|--|
| strongly
disagree | | | | strongly
agree | |
| _____ | | | | | 1. Employers should provide health care benefits to the partners of their lesbian employees. |
| _____ | | | | | 2. Teachers should try to reduce their student's prejudice towards lesbians. |
| _____ | | | | | 3. Lesbians who adopt children do not need to be monitored more closely than heterosexual parents. |
| _____ | | | | | 4. Lesbians should be allowed to be leaders in religious organizations. |
| _____ | | | | | 5. Lesbians are as capable as heterosexuals of forming long-term romantic relationships. |
| _____ | | | | | 6. School curricula should include positive discussion of lesbian topics. |
| _____ | | | | | 7. Marriages between two lesbians should be legal. |
| _____ | | | | | 8. Lesbians should not be allowed to join the military. |
| _____ | | | | | 9. I would not vote for a political candidate who was openly lesbian. |
| _____ | | | | | 10. Lesbians are incapable of being good parents. |
| _____ | | | | | 11. I am tired of hearing about lesbian's problems. |
| _____ | | | | | 12. I wouldn't mind going to a party that included lesbians. |
| _____ | | | | | 13. I wouldn't mind working with a lesbian. |
| _____ | | | | | 14. I am comfortable with the thought of two women being romantically involved. |
| _____ | | | | | 15. It's all right with me if I see two women holding hands. |
| _____ | | | | | 16. If my best female friend was dating a woman, it would not upset me. |
| _____ | | | | | 17. Movies that approve of female homosexuality bother me. |
| _____ | | | | | 18. I welcome new friends who are lesbian. |
| _____ | | | | | 19. I don't mind companies using openly lesbian celebrities to advertise their products. |
| _____ | | | | | 20. I would be sure to invite the same-sex partner of my lesbian friend to my party. |
| _____ | | | | | 21. I don't think it would negatively affect our relationship if I learned that one of my close relatives was a lesbian. |
| _____ | | | | | 22. Physicians and psychologists should strive to find a cure for female homosexuality. |
| _____ | | | | | 23. Lesbians should undergo therapy to change their sexual orientation. |
| _____ | | | | | 24. Female homosexuality is a psychological disease. |

APPENDIX J

SHORT VERSION OF THE RIGHT-WING AUTHORITARIANISM SCALE

Instructions: This survey is part of an investigation of general public opinion concerning a variety of social issues. You will probably find that you agree with some of the statements, and disagree with others, to varying extents. Please indicate your reaction to each statement by marking your opinion next to the statement, according to the following scale:

-4 if you very strongly disagree with the statement

-3 if you strongly disagree with the statement

-2 if you moderately disagree with the statement

-1 if you slightly disagree with the statement

+1 if you slightly agree with the statement

+2 if you moderately agree with the statement

+3 if you strongly agree with the statement

+4 if you very strongly agree with the statement

If you feel exactly and precisely neutral about a statement, mark a "0" next to it.

You may find that you sometimes have different reactions to different parts of a statement. For example, you might very strongly disagree (-4) with one idea in a statement, but slightly agree (+1) with another idea in the same item. When this happens, please combine your reactions and write down how you feel "on balance" (that is, a -3 in this example).

1. Our country needs a powerful leader, in order to destroy the radical and immoral currents prevailing in society today
2. Our country needs free thinkers, who will have the courage to stand up against traditional ways, even if this upsets many people.
3. The "old-fashioned ways" and "old-fashioned values" still show the best way to live.
4. Our society would be better off if we showed tolerance and understanding for untraditional values and opinions.
5. God's laws about abortion, pornography and marriage must be strictly followed before it is too late, violations must be punished.

6. The society needs to show openness towards people thinking differently, rather than a strong leader, the world is not particularly evil or dangerous.
7. It would be best if newspapers were censored so that people would not be able to get hold of destructive and disgusting material.
8. Many good people challenge the state, criticize the church and ignore “the normal way of living”.
9. Our forefathers ought to be honored more for the way they have built our society, at the same time we ought to put an end to those forces destroying it.
10. People ought to put less attention to the Bible and religion, instead they ought to develop their own moral standards.
11. There are many radical, immoral people trying to ruin things; the society ought to stop them.
12. It is better to accept bad literature than to censor it.
13. Facts show that we have to be harder against crime and sexual immorality, in order to uphold law and order.
14. The situation in the society of today would be improved if troublemakers were treated with reason and humanity.
15. If the society so wants, it is the duty of every true citizen to help eliminate the evil that poisons our country from within.

APPENDIX K
NON-RELIGIOUS MORALITY SCALE

Following is a list of statements designed to allow you to report, at least in part, a personal philosophy about morality. Please carefully read and think about the meaning of each statement and then indicate whether you agree or disagree with it according to this rating scale

1 – Strongly agree, 2 – Agree, 3 – Neither agree nor disagree, 4 – Disagree, 5 – Strongly disagree

- 1) Ultimately, each individual must take personal responsibility for his or her own actions and their consequences.
- 2) Despite cultural and individual differences, there is a basic commonality among all people that should serve as the basis of human rights
- 3) It is better to base one's views about morality and the meaning of life upon religion than upon one's own life experience and thinking
- 4) Principles of ethical behavior, such as not harming others, telling lies, or stealing, can be formed and followed independent of any religious teaching or divine commands.
- 5) If a person is not religious, he or she has no moral grounds for being truthful and compassionate toward others.
- 6) You can always rely on religious values and teachings to provide the correct answers to questions about ethics and morals.
- 7) People should rely on lessons from history and their powers of reasoning rather than on supernatural beings or forces to decide what actions are morally proper.
- 8) Codes and standards of ethical behavior should be judged on their ability to enhance human well-being and individual responsibility.
- 9) People should be committed to using critical thinking, factual evidence, and scientific methods of inquiry rather than faith and mysticism in seeking answers to important questions about morality.

- 10) If moral judgments were based solely on human experience and scientific research rather than on religious values, the world would descent into moral chaos.
- 11) Moral values and ethical behaviors can be based on human knowledge, experience, and reasoning without any religious basis or sanctions.
- 12) In seeking to answer moral questions, society should look to religious teachings rather than rational thinking and the methods of science.
- 13) Some religious doctrines are outdated and do not apply well to the moral issues that people face today
- 14) When making moral judgments, it is important for individuals to do what they believe is best for everyone involved, even if that means going against some doctrine of their religion.
- 15) The sacred writings of religions provide moral values that are better than any that could be devised by humans.

APPENDIX L

PARENT'S ANTI-BLACK AND ANTI-GAY SENTIMENTS SCALES

Please answer the following questions using this scale:

0 1 2 3 4 5

Not at all

Very much so

1. To what extent would you characterize your parents as holding prejudicial beliefs about African-Americans?
2. To what extent would you characterize your parents as encouraging inter-racial contact?
3. Do you think your parents would approve of you dating an African-American person?
4. Do you think your parents have a stereotypic view of African-Americans?

Please answer the following questions using this scale:

0 1 2 3 4 5

Not at all

Very much so

1. To what extent would you characterize your parents as holding prejudicial beliefs about homosexual people?
2. To what extent would you characterize your parents as encouraging contact with homosexual people?
3. Do you think your parents would approve of you being friends with a homosexual?
4. Do you think your parents have a stereotypic view of homosexuals?

APPENDIX M
DEMOGRAPHIC INFORMATION

You may skip any questions that you do not wish to answer.

1. Below is a list of sexual experiences that people may have. Please select one that best describes you:

- 0 - Exclusively heterosexual experiences with no homosexual experiences
- 1 - Predominantly heterosexual experiences, only incidentally homosexual experiences
- 2 - Predominantly heterosexual experiences, but more than incidentally homosexual experiences
- 3 - Equally heterosexual and homosexual experiences
- 4 - Predominantly homosexual experiences, but more than incidentally heterosexual experiences
- 5 - Predominantly homosexual experiences, only incidentally heterosexual experiences
- 6 - Exclusively homosexual experiences

2. How old are you? _____

3. What is your sex? 1 – male 2 – female

4. What is your ethnicity?

- | | |
|--|-----------------------------------|
| 1) African or African American | 10) Korean or Korean American |
| 2) American Indian | 11) Middle Eastern |
| 3) Caucasian (White or European descent) | 12) Asian Indian / Pakistani |
| 4) Mexican or Mexican American | 13) Filipino / Pacific Islander |
| 5) Puerto Rican | 14) Taiwanese |
| 6) Cuban or Cuban American | 15) Vietnamese |
| 7) Other Latin American / Caribbean | 16) Bi-Cultural / Mixed |
| 8) Chinese or Chinese American | 17) Other group (please specify): |
| 9) Japanese or Japanese American | |

5. What is your religious denomination?

- 1. Christian – Catholic
- 2. Christian – Non-Catholic
- 3. Jew
- 4. Muslim
- 5. Other _____

6. Please indicate your overall political ideology

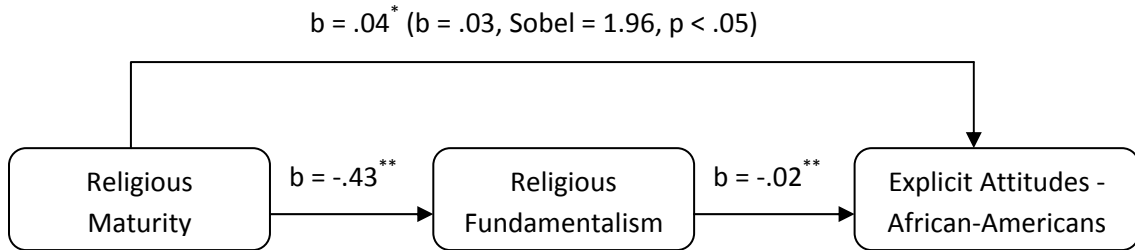
_____ _____ _____ _____

Democrat/Liberal In the middle Republican/Conservative

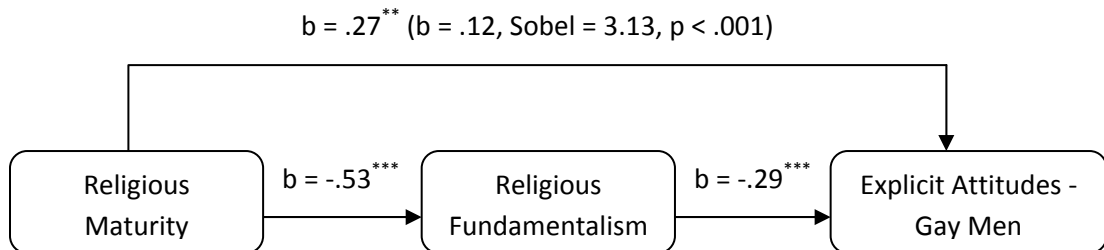
APPENDIX N

TEST OF HYPOTHESIS 11 WITHOUT CONTROL VARIABLES IN THE MODELS

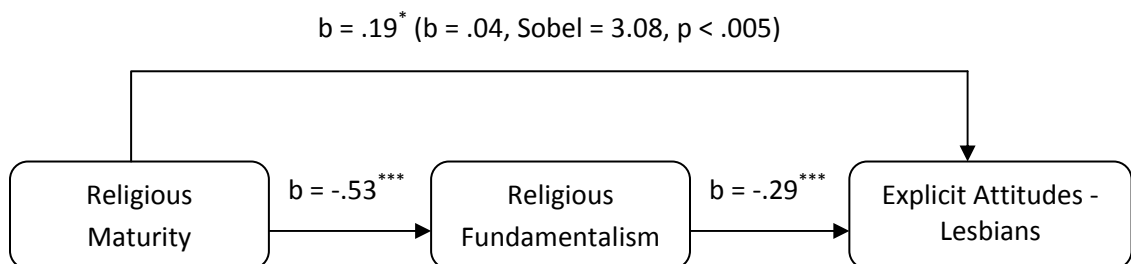
Religious Fundamentalism as a Mediator of the Relationship Between Religious Maturity and Explicit Attitudes toward African-Americans.



Religious Fundamentalism as a Mediator of the Relationship Between Religious Maturity and Explicit Attitudes toward Gay Men.



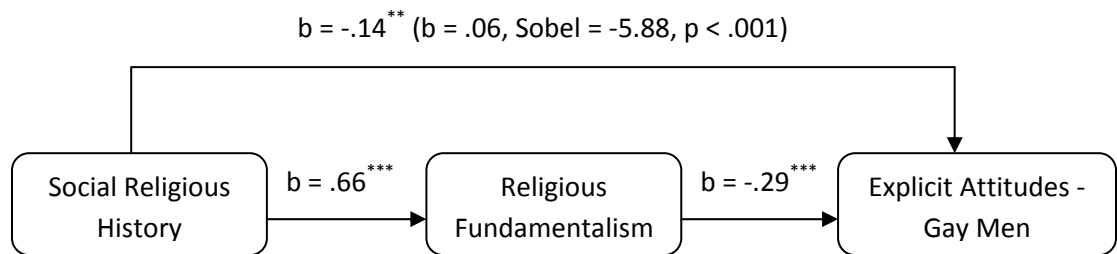
Religious Fundamentalism as a Mediator of the Relationship Between Religious Maturity and Explicit Attitudes toward Lesbians.



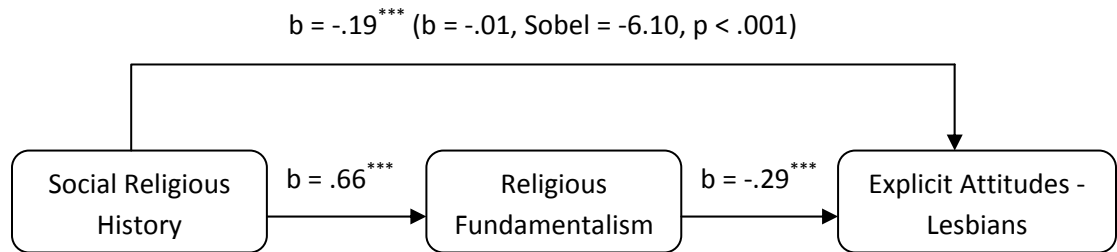
APPENDIX O

TEST OF HYPOTHESIS 13 WITHOUT CONTROL VARIABLES IN THE MODELS

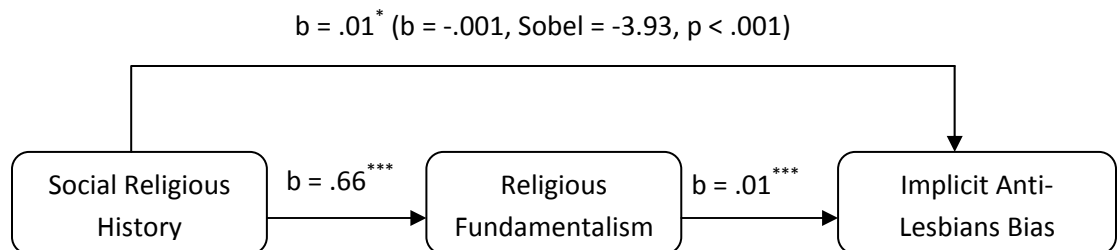
Religious Fundamentalism as a Mediator of the Relationship Between Social Religious History and Explicit Attitudes toward Gay Men.



Religious Fundamentalism as a Mediator of the Relationship Between Social Religious History and Explicit Attitudes toward Lesbians.



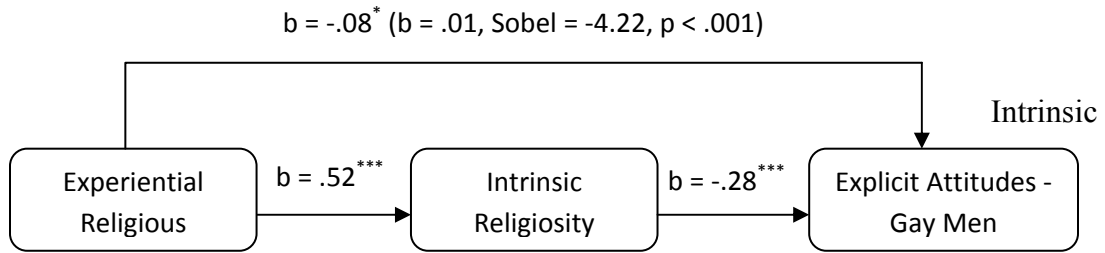
Religious Fundamentalism as a Mediator of the Relationship Between Social Religious History and Implicit Anti-Lesbian Bias.



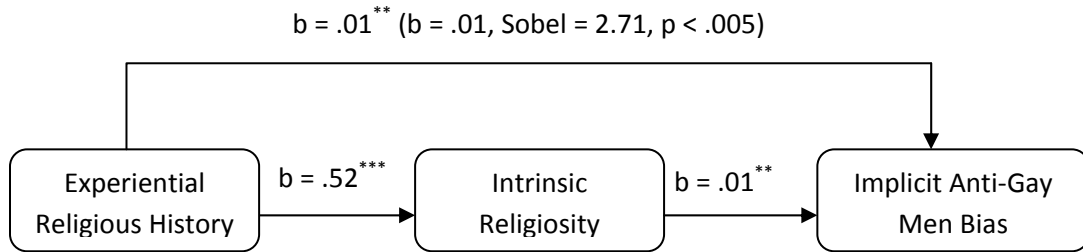
APPENDIX P

TEST OF HYPOTHESIS 14 WITHOUT CONTROL VARIABLES IN THE MODELS

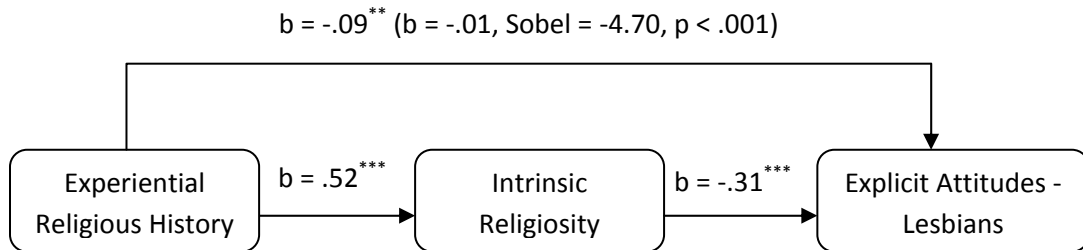
Intrinsic Religious Orientation as a Mediator of the Relationship Between Experiential Religious History and Explicit Attitudes toward Gay Men.



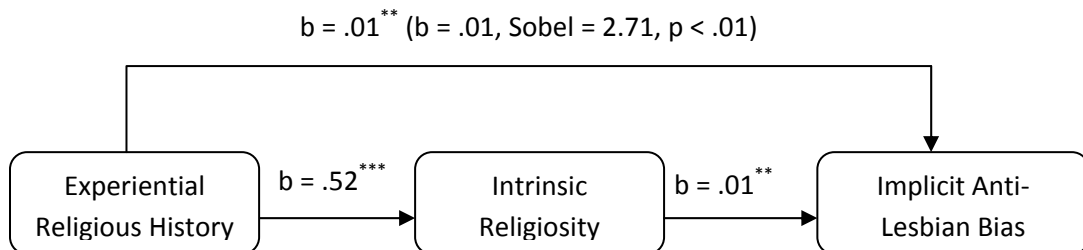
Religious Orientation as a Mediator of the Relationship Between Experiential Religious History and Implicit Anti-Gay Men Bias.



Intrinsic Religious Orientation as a Mediator of the Relationship Between Experiential Religious History and Explicit Attitudes toward Lesbians.



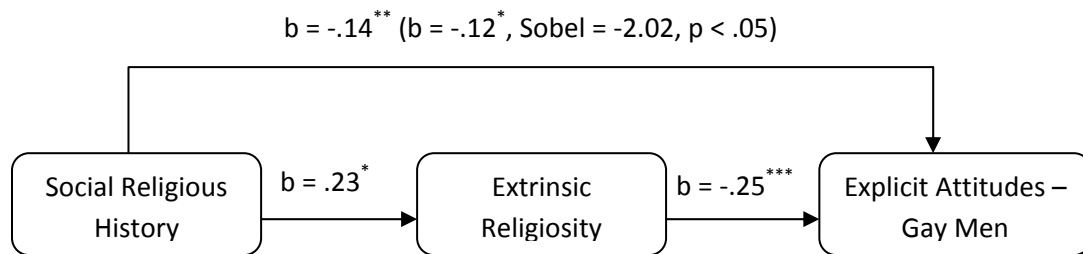
Intrinsic Religious Orientation as a Mediator of the Relationship Between Experiential Religious History and Implicit Anti-Lesbian Bias.



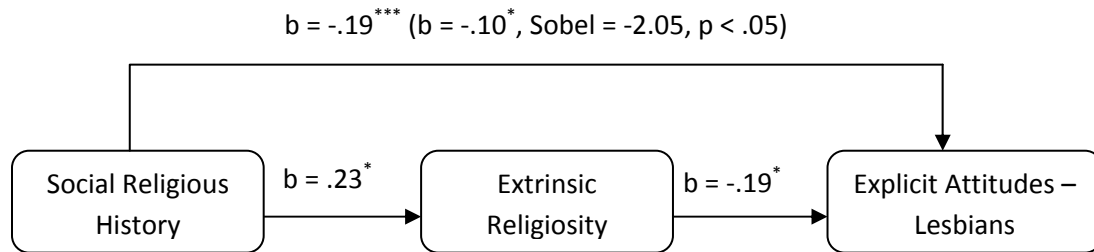
APPENDIX Q

TEST OF HYPOTHESIS 15 WITHOUT CONTROL VARIABLES IN THE MODELS

Extrinsic Religious Orientation as a Mediator of the Relationship Between Social Religious History and Explicit Attitudes toward Gay Men.



Extrinsic Religious Orientation as a Mediator of the Relationship Between Social Religious History and Explicit Attitudes toward Lesbians.



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