HOW DO RACE AND RELIGION IMPACT CHILDREN'S MORAL EXPECTATIONS OF OTHERS?

A Thesis

Presented to the Faculty of the Graduate School

of Cornell University

In Partial Fulfillment of the Requirements for the Degree of

Master of Arts

by

Cassidy Faith Wolfe

May 2021

Abstract

Religion and race are powerful social markers that impact children's moral evaluations and guide their affiliative preferences. Past research has found that children expect Christians to have good morals, and similarly, children associate kindness with White as opposed to Black people. However, no research yet has tested how children rank the two dimensions in their moral judgments. In the present study, we investigate how children would evaluate individuals when religion and race were pitted against each other and suggested different predictions about their moral behaviors. Five to 10-year-old children ($N = 72$) were presented with pairs of individuals matched in gender. One individual was White and the other one was Black. Children were told the White person is not a Christian, while the Black person is a Christian. Then, children were told a story depicting a moral action (e.g., picked up the trash on the ground and threw it away) and asked which one of the two individuals performed the action. Children's affiliative preferences were also assessed. The results suggested that the children expected the Black Christian to perform the moral action and in return exhibited more desire to affiliate with the Black Christian. In particular, relative to Non-Christian children, Christian children in this sample were more likely to choose the Black Christian as completing the moral action and tended to affiliate more with the Black Christian. Thus, 5- to 10-year-old children from this study prioritize religion over race when forming moral expectations, which may inform their affiliative choices.

Keywords: moral expectations, race, religion, affiliative preference

BIOGRAPHICAL SKETCH

Cassidy completed her bachelor's degree in Psychology from Cornell University. She also double minored in American Indian Indigenous Studies (AIIS) as well as Law & Society. Cassidy is a Christian and this sparked her curiosity in how two strong cultural markers (race and religion) influence children's moral evaluations of others and how this relates to their affiliation preferences. In her free time Cassidy enjoys spending time with family and her cat.

Dedicated to God, my husband (Steven Wolfe), my parents (Daniel and Sally Halford), my brother (Daniel Thomas Halford), my grandparents (Leon and Edith Hallam), my late grandparents (OJ and Anna Lee Halford) and my Grammy (Mariam Hallam). Their support and love allowed me to purse my Master's in Developmental Psychology.

I also thank and dedicate my thesis to the late Dr. Kogee Thomas, who always inspired me to continue to pursue my education.

ACKNOWLEDGEMENTS

I thank my advisor, Dr. Lin Bian, for encouraging me to pursue research that I am interested in and for guiding me throughout this year. Her guidance has been instrumental in helping me develop as a researcher.

I give special thanks to the Little Thinkers Lab members: Molly Tallberg, Reut Vraneski, Yuchen Tian, Lindsay Tuttle and Gabby Montiel, for their support and input on this study. I also thank the undergraduate research students: Sammy Troob, Stella Shiffrin, Anapaula Silva, Antoinette Fang, Sophie Barth, and Maria Reyes, for their help with participant recruitment, testing and data coding.

My sincerest thanks, to my secondary advisor, Dr. Tamar Kushnir, for supporting and teaching me the importance of staying true to yourself as a researcher and as a person. I am especially thankful to Dr. Katherine Kinzler for inspiring me to pursue research and for continuing to support me through my M.A. and ultimately to my PhD. I also express my gratitude to all the families and children who took part in this research and the Cornell Statistical Consulting Unit for advice on statistical methods.

I thank all family members (Halford, Hallam, Berryman, and Wolfe) for their continuous support and prayer. Their love and strength allowed me to pursue higher education.

Lastly, I thank God for opening the door to this opportunity. Due to many unforeseen circumstances, I was able to apply to this program after the application deadline. This is just one of many small reminders that everything happens for a reason and in His time.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

Introduction

How do children use cultural markers: race and religion, to form moral behavior expectations? Religion and race are powerful social group markers, which even young children use to analyze and comprehend their environment, but how these factors impact their moral expectations is not fully understood (Heiphetz et. al, 2013 and 2015; Baharloo et. al, in preparation). Children's moral expectations may also influence their decision about affiliation, prosocial behavior, reciprocity, and modeling behavior. Before addressing the broad relationship between cultural markers and moral expectations, it is crucial to first research whether children are more likely to use religion or race (i.e., Christianity or White) to evaluate other's morality when these two dimensions are pitted against each other. Would children use a religious identification or racial identification as the basis for expecting moral behaviors? Would children's expectations of others impact the child's social preferences towards that person? While previously published literature has put forth that children expect a Christian to be moral (Heiphetz et al., 2013 and 2015) and they also expect a White person to have good morals (e.g., Baharloo et al., in preparation), no research to the author's knowledge has tested these two factors of race and religion against each other.

Most research overlooks the complexity of our group memberships by focusing on only one cultural marker; whereas this study takes a novel approach to examine how race and religion impact children's moral expectations. This novel approach of this research project is significant in that it will deepen the understanding of the formation of moral expectations when both race and religion are pitted against each other (Overstreet et al., 2020; Lei & Rhodes, 2021). Ultimately, this study assesses whether one cultural marker (race or religion) proves to be a stronger marker towards forming moral expectations, or if both are equally critical. Additionally, these research findings may potentially further explain how children develop a sense of morality and how the role of race and religion impacts moral behavior.

In what follows, I provide a synthesis derived from previously published literature, which highlights key elements relating to the early-developing cognition based on race and religion and how these cultural markers impact children's moral behavior expectations. The compilation of findings and ideas is utilized to establish a robust framework, which serves as a stepping point to further explore the ideas laid forth in this study on the relationship of cultural markers (race and religion) and moral expectations/behavior.

Children's Reasoning About Race

It is well documented that White children as young as age 6 demonstrate a preference for White over Black individuals (Baron & Banaji, 2006; Dunham et al., 2006; Newheiser & Olson, 2012). For example, research by Kinzler and Spelke (2011) found White children by the age of 5 explicitly expressed social preferences for same race individuals. White children saw a movie of a White and Black individual smiling and offering two toys and were asked who they would rather be friends with. Children chose to be friends with the White individual (Kinzler & Spelke, 2011).

In line with the above literature showing White children's ingroup preferences, research has also suggested that White children attribute more positive traits to White children. This was observed in research using reconstructive memory and assigning traits using the Preschool Attitude Measure II (PRAM II), which highlights that White children prefer and associate more positive traits with White people (Bigler & Liben, 1993; Kowalski, 2003; Williams, Best & Boswell, 1975). The tendency to associate positive traits with White children has been found in implicit tasks as well (e.g., Dunham et al., 2006). Dunham et al. (2006) recruited a group of 6-year-olds and a group of 10-year-olds, primarily White, from largely homogeneous predominantly middle class private elementary schools in the New England area of the United States of America. The experiment included a child-friendly implicit association test (IAT). The IAT measures the strength of associations between

concepts. A response is easier and quicker to make when they align with one's stereotypes (Project Implicit, n.d.). In this study, children paired traits, with pictures of Black and White individuals, by clicking two large buttons. The IAT found participants were quicker to respond when White people were paired with positive words and Black people were paired with negative words, than vice versa. Overall, Dunham et al. (2006) highlights there is a preference for White over Black from the young age of 6 in White children.

The mounting evidence suggests that children prefer White to Black people and tend to associate good morals with White people. However, since most of the reviewed studies focus on White children, it is difficult to assess whether this association was a reflection of children's ingroup preference guiding them to favor ingroup members as opposed to outgroup individuals, or a general pro-White bias. To separate the two mechanisms, we turn to research on Black children's racial preferences, which suggests that Black children also exhibit this pro-White bias.

One of the fist studies to assess children's racial preference was Clark and Clark (1947). Black children ages 3 to 7 completed the doll task. Children were presented with four dolls: two were brown with black hair and two were white with blonde hair. The majority of children preferred the white doll and approximately two thirds of the children chose to play with the White doll. Children also selected the White doll over the Black doll as being the "nice" doll (Clark & Clark, 1947). Additional research has found that children from minority groups exhibit weaker ingroup favoritism (Aboud & Skerry, 1984). Aboud & Skerry (1984) provided a critical review on 37 studies on the attitudes of Black children who are living in countries where the primary population is White. Black children showed no preference (57%), own race preference (27%), and White preference (16%) (Aboud & Skerry, 1984). Furthermore, Shutts et al. (2011) explored South African children's racial preferences from ages 3-13 and found where the majority race is Black, children did not prefer their own race.

Also, the results concluded, Black, White, and multiracial children ages 4 - 9 from a diverse primary school favored White individuals. This research highlights the early-emerging pro-White bias in children from different racial background.

Corroborating previous works is research by Baharloo et al. (in prep.), which found that children, regardless of their racial identity, use race as an identifier when forming moral expectations. Researchers tested children ages 5-7 to investigate the development of racial stereotypes for warmth. In a forced choice paradigm, children were presented with a White or a Black person and asked to choose "who is nice." Children primarily identified the White person as nice. This research solidifies the postulation that children utilize race as an identifier for moral actions (Baharloo et al., in prep). Altogether, these studies demonstrate that children endorse a pro-White bias that they expect White people to be moral.

Children's Reasoning About Religion

Regarding children's preferences based on religion, researchers concluded that children ages 6 to 9 preferred peers who shared their own beliefs, including facts, preference, and ideology, but selectively attributed prosocial behavior to those who share religious ideology (Heiphetz et. al, 2014). Children were asked questions about their religious, factual, and opinion-based beliefs. The experimenter gave opposing beliefs to each character, one agreed with the participant and the other disagreed. Children were asked questions involving affiliation, good behavior, and bad behavior. Across all domains, children preferred to affiliate with peers who shared their beliefs, but selectively chose to attribute prosocial behaviors to peers of the same religion. Additional experiments tested beliefs versus behaviors and found children attributed more positive behavior with those who shared their religious beliefs even when the other character shared their meaningful behaviors.

Next, it is important to explore how children's religious preferences impact children's expectation of moral behavior. In Heiphetz et al. (2013), six- to eight-year-old children

viewed two characters that were paired with religious objects for either: Hinduism or Christianity. All characters were White and gender matched to participants. The religious symbols were explained to children by communicating a short story to each child. Children's explicit preferences were tested through questions that asked them to indicate their preference, conjecture who had performed good and bad behaviors, and answer control questions. Lastly, children completed the child IAT, categorizing good and bad words and the countenances of the characters. Overall, the researchers found children from their study, who were primarily Christian, exhibited an implicit pro-Christian preference and ascribed fewer bad behaviors to Christians (Heiphetz et al., 2013). These results were replicated in three following studies: children demonstrated implicit and explicit pro-Christian preferences, even when the stimuli involved comparing/contrasting Christians to Jewish people (Heiphetz et al., 2013).

The fact that both of these studies consisted of primarily Christian/theist samples makes it difficult to separate if this is a preference stemmed from ingroup favoritism or a general positivity about religious people. Next, we turn to research involving non-religious children. Heiphetz et al., (2015) provides empirical evidence that theist and non-theist children ages 5-6 were more likely to prefer the religious individuals, whereas children ages 9-10 had the same preferences as adults (theists preferring theists and non-theists preferring non-theists). Another piece of evidence also suggests that the preference for religious individuals is not simply driven by an ingroup bias. Heiphetz and Young (2019) found that religious children preferred religious members, even if these members were outgroup religious members, over non-religious members. Children ages 6 to 8 participated in this study. Participant's religions were as follows: 49% Christian, 6% Jewish, 20% non-religious, 13% other. During the experiment children's religious beliefs were elicited. Children indicated which of the three belief options was closest to their own belief: Christian, Jewish,

non-religious. Children were then shown three White characters matched in age, gender, and attractiveness. Children were then told each person's belief: Christian, Jewish, or non-religious. Religious participants found the religious characters to be more similar to them than the non-religious character and more likeable than the non-religious character. Non-religious children did not exhibit this same dichotomy; their preferences were not significantly different between Christian, Jewish, and non-religious characters (Heiphetz & Young, 2019). This research solidifies that younger children have a preference for Christian/religious individuals and expect them to be moral.

Intersectionality of Race and Religion

The research reviewed above has provided evidence that Christian children ages 6 to 8 expect a Christian to have good morals, and similarly, White children at the age of 5 and Black children at the age of 3 associate kindness with White as opposed to Black people. However, no research yet has tested how children rank the two dimensions in their moral judgments. The significance of intersectionality in research is exemplified by research on children's ingroup cultural evaluations in India (Dunham et al., 2013). Researchers concluded higher caste and lower caste children preferred higher caste, while lower caste Muslim children and higher caste Hindu children had strong ingroup preferences (i.e., children preferred their own religious members). While this study did not directly compare/contrast caste and religion against one another, it shows there is a significant need for intersectional research on children (Dunham et al., 2013).

Similarly, research by Perszyk et al. (2019) found that 4-year-old children had a pro-White bias when race and gender varied. Children were shown stimuli that varied in race (White and Black) and gender (male and female). This racial bias was stronger in males than in females. Additionally, children's responses to Black boys were less positive than they were to Black girls, White boys or girls (Perszyk et al., 2019). Given that children must process

and examine multiple factors in everyday life, investigating these intersections of cultural markers (i.e., caste, race, religion) is vital in order to begin to understand how children process their world (Lei and Rhodes, 2021; Dunham et al., 2013; Perszyk et al., 2019)

This present study investigated whether children use race and religion to form moral expectations of others. This research is important as it lays the foundation to explore if children associate morality with religion. This will allow researchers to better analyze the impact of two cultural markers: race and religion, which have normally been intertwined in research on children's moral stereotypes.

The Present Study

The present research consisted of children ages 5-10. This age range was chosen since (1) children at age 5 are able to comprehend and make judgements on race and religion and (2) using a wide age range allows us to document the development of children's moral expectations based on religion and race. Children were told a short story about a moral action and presented with images of two people, who are varied in race and religion to assess preferential selection. Children were subsequently asked to choose who they thought completed the moral action in the story. After each moral action story, in order to assess children's attitudes towards both people, children were asked four affiliation preference questions about the two people.

The primary goal was to assess if children formed moral expectations based off of race or religion. There are three possibilities: (1) if children prioritize race over religion, children would have a tendency to choose White targets (Non-Christian) as more moral, (2) if children prioritize religion over race, children would have a tendency to choose the Christian targets (Black) as more moral, and (3) if race and religion are equal markers, then children would be equally likely to choose the two targets. We also examined whether religion or race inform children's affiliative choices. In addition, we wanted to explore how children's own

identities (race and religion) impacted their moral expectations and affiliations. This research further explains whether children utilize race or religion to form moral expectations and begins to investigate how that impacts a child's prosocial behavior.

Methods

Participants

Seventy-two 5 to 10-year-old children (36 girls, mean age = 7.9) participated this study. Participants were recruited from the lab database. Five additional children were tested but excluded: 2 failed both direction tests (see below), 2 were excluded at the request of the parent, and 1 did not complete the experiment.

Parents were asked to provide the child's race and religion. For the purpose of this study as the majority of children were primarily White and Christian, children were categorized as either Non-White or White and Non-Christian or Christian. Those who chose not to answer race or religion are listed as N/A. The racial demographics of the children are as follows: 56.94% (41/72) White, 37.70% (27/72) Non-White, and 5.55% (4/72) N/A. The religious demographics of the children are as follows: 48.61% (35/72) Christian, 44.44% (32/72) Non-Christian, and 6.94% (5/72) N/A. Breaking down the religious demographics further for 44.44% of Non-Christians: 5.55% (4/72) were Jewish, 5.55% (4/72) were Muslim, 0% were Buddhist, 8.33% (6/72) were Hindu, 23.61% (17/72) were Non-religious/Atheist/Agnostic, and 1.38% (1/72) was other. The median household income was $120,000. Eighty-seven percent of the parents had at least a Bachelor's degree or higher.

Participant's family income is notably high as the average family income in America is around $66,000 (I., 2021). As mentioned above, participants were primarily White and Christian. All of this should be taken into consideration when analyzing the results of this study.

Procedure

All data collection was conducted online via Zoom meetings with participants. Experimenters shared their screen via Zoom with participants to show the experiment presented on Qualtrics. Children first participated in a warm-up session adapted from Sheskin

and Keil (2018), in which they answered two questions about the location of circles and triangles (e.g., Where is the red circle? Is the red circle on the left or right?). The warm-up session served to make children feel comfortable answering questions over video and to ensure that they understood the difference between left and right on their screen. Two children who failed both questions were excluded from data analyses, as it was impossible to know who they were choosing throughout the experiment.

Next, children were asked, "Do you know who a Christian is?" and provided a description of Christians: "Christians believe in Jesus, they also go to Church, celebrate Easter, read the Bible and pray." This was to ensure that all children (religious and non-religious) would know the basic principles of Christianity prior to this experiment. Children then proceeded to the main phase of the experiment consisting of four blocks.

In each block, children were shown two individuals of the same gender, one person was White and one was Black (Figure 1). In total, there were four sets of picture stimuli, two pairings presented women and the other two presented men. The pictures used in this experiment were adopted from the Chicago face database (Ma et al., 2015) and matched in perceived happiness, attraction, or age. Then children were told the White person is not a Christian while the Black person is a Christian. To ensure children knew the religious affiliation of each person, there was a cross in the picture with the Christian and the cross with an X over it for the Non-Christian (Figure 1).

After seeing the two pictures in each block, children received two measures assessing their moral expectations and affiliative preferences. In the *moral expectation* measure, children were told a story about a person performing a moral action. For example, children were told: "Yesterday, there was trash on the ground, one of these two people picked up the trash and threw it away. Who do you think picked up the trash?" To camouflage the purpose of our study, participants were asked to choose the person on the left or the person on the

right. Across the experiment, there were four different stories: picking up trash, baking brownies for a sad person, holding open a door, and returning someone's missing toy (Figure 2). Children's responses were coded as 0 when the Non-Christian was selected, 1 when the Christian was chosen, and no score if the child skipped or chose both the Non-Christian and the Christian.

Each story was followed by four *affiliative preference* questions. The four affiliation questions included: "Who will you share your toys with? Who will you be friends with? Who will you invite to your party? Who will you share food with?" Again, participants were asked to choose the person on the left or the person on the right. Children's responses were coded as 0 when the Non-Christian was selected, 1 when the Christian was chosen, and no score if the child skipped or chose both the Non-Christian and the Christian.

Across participants, it was randomized, whether the Christian individual was on the left or right, as well as the pairing between the set of pictures and the moral expectation story. The order of the moral expectation stories and affiliation questions were also randomized by Qualtrics; but the story always preceded the affiliation questions (Figure 2). There was a total of 4 different survey options to ensure picture randomization and picture and story pairing.

At the end of the study, participants were debriefed. The debriefing protocol included stating a disclaimer to the children. Children were told, "I wanted to tell you something important. Remember the questions we were talking about before? If you like, you can be friends with everyone, regardless of their race, gender, or religion. That's the most important thing--everyone can be friends with each other. Do you understand? Good! I wanted to make sure you understand because it's very important." Participants were then thanked for their time and asked if they had any additional questions. All participants were rewarded a $5 Amazon gift card for their participation.

Results

The primary goal of the present study was to examine how children in our study would evaluate individuals when religion and race were pitted against each other and suggested different predictions about their moral behaviors. We are also interested in examining how religion and race inform children's affiliative choices. In addition for exploratory analysis, we tested whether children's own identity (racial or religious) moderates these effects.

Moral Expectations

To address the primary question, we wanted to establish if children expected the Black Christian over the White Non-Christian as more likely to complete the moral action. To assess this question, we calculated the proportion of trials that children chose Black Christians and ran a one-sample t test comparing these responses against chance (0.5). Children were more likely to select Christians as performing the moral action than the Non-Christians ($M = 0.70$, $SD = 0.30$, $t = 5.79$, $p < 0.001$) (Figure 3).

For exploratory analysis, we submitted children's choice in each story to a general mixed effect logistic regression model (glmer) with children's race (Non-White and White) and religion (Christian and Non-Christian), age (continuous) and gender (boys vs. girls) as the fixed effects, and block (trash, door, toy, brownie) and participant as random intercepts (Table 1). We did not include an interaction between race and religion due to having a small sample size that was primarily White and Christian. This analysis revealed that religion was significant, Christian children ($M = 0.77$, $SD = 0.40$) were more likely than Non-Christian children ($M = 0.58$, $SD = 0.48$) to predict the Christian individuals as performing the moral action ($\beta = 0.21$, $z = 2.36$ $p = 0.017$) (Figure 4). There was no significance in race, White children ($M = 0.72$, $SD = 0.45$) and Non-White children ($M = 0.64$, $SD = 0.47$) were equally likely to choose Black Christians as doing moral actions ($\beta = 0.10$, $z = 1.08$, $p = 0.789$)

(Figure 5). There was no significance in age ($\beta = 0.03$, $z = 0.15$, $p = 0.881$) or gender ($\beta = 0.08$, $z = -1.57$, $p = 0.112$), children regardless of age or gender chose the Black Christian as completing the moral action (Table 1).

Table 1.

Descriptive statistics of moral expectations for the Black Christian.

Variables	β	z	p
Religion	0.21	2.36	0.017**
Race	0.10	1.08	0.789
Age	0.03	0.15	0.881
Gender	0.08	-1.57	0.112

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

Affiliation Questions

To address the primary question, we calculated an average score across the four blocks for each participant, and examined whether children preferred to affiliate with the Black Christian over the White Non-Christian. We ran a t test and compared children's Black Christian affiliation responses against chance (0.5). The analyses revealed that children's tendency to affiliate with the Black Christian was above chance ($M = 0.60$, and $SD = 0.25$, $t = 3.23$, $p = .002$) (Figure 6). We also aimed to explore whether there was a relationship between children expecting the Black Christian to be moral and children choosing to affiliate with the Black Christian. The Pearson correlation test showed that, children who expected Christians to be more moral also expressed strong intention to affiliate with Christians, $r = .675$, $p = 0.028$.

For exploratory analysis, we submitted children's responses to a linear mixed effect model (lmer) with participant's race (Non-White and White), religion (Christian and Non-Christian), age (continuous), and gender (boys vs. girls) as the fixed effects, and block (trash, door, toy, brownie) and participant as random intercepts (Table 2). We did not include an interaction between race and religion due to having a small sample size. Religion was marginally significant, Christian (M = 0.66, SD = 0.30) were slightly more likely than Non-Christian (M = 0.55, SD = 0.33) to affiliate with the Black Christian (β = 0.20, df = 56.81, p = 0.097) (Figure 7). Children's race was also not significant, White children (M = 0.62, SD = 0.30) and Non-White (M = 0.59, SD = 0.33) were again equally likely to affiliate with the Black Christian (β = 0.05, df = 57.39, p = 0.656) (Figure 8). There was no significance in age (β = 0.06, df = 57.79, p = 0.677) or gender (β = 0.07, df = 57.11, p = 0.451) in children's affiliative preferences (Table 2).

Table 2.

Descriptive statistics of affiliation preferences for the Black Christian.

Variables	β	df	p
Religion	0.20	56.81	0.097
Race	0.05	57.39	0.656
Age	0.06	57.79	0.677
Gender	0.07	57.11	0.451

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

Discussion

The goal of the study was to find whether children in our sample would use race or religion to form moral expectations of others. The present study found that children between the ages of 5 and 10 from our sample were more likely to choose the Black Christian as completing the moral action and in turn were more likely to choose to affiliate with the Christian. While participants' own race did not impact their decision to choose the Black Christian, participants' religious beliefs, (specifically being Christian) made them significantly more likely to choose the Black Christian for the moral action story and was marginally significant in their affiliative preferences. Furthermore, this research shows that religion overrides the bias (typically associated with Black people) as children from this sample, who were primarily White and/or Christian: 1) chose the Black Christian as more moral and 2) chose to affiliate more with the Black Christian.

To our knowledge, as this is the first intersectional research on this topic of race, religion and moral expectation, it is important to note that further research is needed to better understand and elaborate on these findings. Interdisciplinary research is critical to fully understand how children perceive and interact with others in the world (Lei and Rhodes, 2021; Dunham et al., 2013; Jaxon et al., 2019). This study lays the foundation to further explore the interaction of religion and race on children's behaviors and interactions with others. Overall, this research solidifies that religion is a stronger cultural marker than race in forming children's moral expectations of others. While religion may not be as visible as race, children use religion to form expectations of others, and this relates to their interactions with others.

It should be highlighted that the participants in the study were primarily children from a small liberal town. Due to these factors, the children who participated in our study may be taught to not prioritize race, which can negate their likelihood to choose individuals based off

of race. Additionally, children's motivation for expecting the Christian to be more moral may be rooted in the belief that religion equals morality, meaning children may expect certain behavior of religious members and not racial members (Norenzayan, 2014; Cottrell et al., 2007). Research has found adults have a higher moral expectation for religious people (Norenzayan, 2014; Gervais et al., 2011; Gervais at al., 2017). This means not only do adults trust religious members more, but this moral expectation and trust is not shared with atheists (Edgell et al., 2006; Gervais et al., 2011; Gervais at al., 2017; Norenzayan, 2014). In fact, research has found there to be a strong association with secular people and immoral actions (Gervais et al., 2017). Further research has also found distrust of atheists can be abated if adults are reminded that secular people follow rules as well (Gervais & Norenzayan, 2012). While secular people do follow rules, there does seem to be a notable difference between choosing to follow rules and having to follow rules. Religious people choose to follow additional religious rules and all people, secular and religious included, must follow societal rules. This is the distinction that may lead people to associate religion with morality. Of course, the topic of whether religion equals morality is highly debated, but for the purpose of this study it may aid in explaining children's moral expectations. While adults expect moral behavior from religious people, children may share this same ideology as well. While this current study does not directly explore this phenomenon, it does pave the way for this to be addressed in future research.

In the same vein of thought, children may also have been motivated to affiliate more with the religious individual due expectations of trusting the religious member to help them in the future. In order to investigate this, research should explore the reasoning behind human cooperation, as it may be related to the formation of stereotypes and moral expectations. Various authors have postulated the contribution or degree thereof in which evolution and the

environment have impacted the development of cooperation and collaboration (Tomasello et al., 2012; Tomasello & Gonzalez-Cabrera, 2017).

For example, the interdependence hypothesis by Tomasello et al. (2012) proposes that humans have a unique type of collaboration, which they believe derives from mutualistic collaboration (i.e., mutual cooperation is critical for survival). As life evolved to group life, there was more competition, therefore cultural norms, conventions, and other labels became used to distinguish groups to discern who to trust and expect help from (Tomasello et al., 2012). In this study, children chose which group they believed would be more moral, based off of either: race or religion. Who children view as more moral, may be due to evolutionary reasons of trusting certain members more than members to be nicer and more likely to help them (Tomasello et al., 2012; Tomasello and Gonzalez-Cabrera, 2017). If this is the case, these stereotypes are derived from perception and expectation, based on evolutionary survival rationale for competition/survival needs in the past, and not necessarily steadfast and universal truths (Tomasello et al., 2012; Tomasello and Gonzalez-Cabrera, 2017. Therefore, understanding the motivation behind children's moral expectations and affiliative decisions, will provide valuable insight to potential mitigate these biases.

Limitations and Future Directions

It should be noted that this study has two notable limitations. The first, labeling the actor as "Christian" and "Not a Christian" may have influenced children's preferences and desire to not affiliate with someone who is the "not" of something. The second being the study unintentionally highlighted Christianity. At the beginning of the study, children's current knowledge of Christianity was assessed. This was accomplished by asking participants if they knew who a Christian is and then all children were told several facts about Christians. While this was done to assess participant's knowledge and to provide all participant's with an equal understanding of Christianity, highlighting Christianity and then

showing them a “Christian” and “not a Christian,” may have influenced children’s responses. Future research needs to be done to address these limitations to be able to more conclusively assess the interaction between race, religion, and children’s moral expectations.

Similarly, future research needs to explore if this study’s findings hold true for all religious members or only for Christians. It is important to replicate this study and to include other religions in place of the Christian: Jewish, Hindu, Muslim, or even testing “religious” characters and “non-religious” characters. This would again assess if children find a particular religion as more moral or expect any religious member to be more moral. Second, research should investigate the same paradigm, but use descriptions/behaviors of each person’s actions (either religious or non-religious), instead of labelling each person as a “Christian” and “not a Christian” to ensure this did not impact children’s preference in this study. This would also allow for the removal of the visual cross and the cross with the x from the stimuli as this may have also biased children’s responses. Third, future research will manipulate the race (White vs. Black) and the religious background (Christian vs. Non-Christian) of the actors. This further exploration will aid in solidifying the impact of race and religion on children’s moral expectations of others. Lastly, due to the circumstances of this year (2020-2021), testing was completed online over Zoom. In the future, it would be important to replicate this study with a few minor changes (in person testing and religion description).

Furthermore, as this study found that participant’s race did not significantly impact their moral expectations, further research should be done on the interaction between race and moral expectation, especially as participant’s religion was found to be a significant factor in choosing the Christian in the moral action story, but race was not a significant factor. Also, it is important to note that prior research found there is a White preference even amongst people who are not White (Aboud & Skerry, 1984; Shutts et. al, 2011). Yet, this study

discovered that children found the Black Christian to be more moral and choose to affiliate more with the Black Christian regardless of their own race (Figure 9 and Figure 10). This may be due to not having a large enough diverse sample, as the majority of participants were White and Christian (Table 3). Therefore, it is important to explore how/why religion overrode this prior White preference and to explore testing more participants of multiple races and religions.

Future research can explore the mechanisms that influence children's prosocial behavior, reciprocity, and can lead to behavior modeling. Using the same paradigm of race versus religion, it would be interesting to explore if children's expectations of an actor being 'more moral' and nicer to them influences the child's prosocial behavior towards that person. This research would investigate if children are nicer for altruistic reasons or if their prosocial behavior is motivated for egocentric/selfish reasons. After establishing the nature of prosocial behavior, research can investigate if children would expect the race or religious actor to also be nicer to in-group and/or out-group members. Would children expect the racial or religious member to be nicer to all people or are moral expectations confined by cultural markers (i.e., would children expect religious/racial members to be nicer only to their same group members)?

A secondary avenue of interest is examining whether children's moral evaluations of others influences who they model their behavior after. Using the same paradigm of race versus religion, this research would delve into the real-world application of children's moral evaluations. If they view one actor as nicer, will they then follow that person's actions? Furthermore, how would age factor into these decisions? Would there be a developmental difference between younger children and older children? This study will further assess the connection between moral expectations and modeling behavior. Through these experiments,

morality may prove to be a strong cultural marker and may even prove to be an equal cultural marker to race and language.

Lastly, there are multiple broader research goals to assess the intersection of race and religion with children's moral expectations. When race and religion are pitted against each other, will children from other cultures, use one over the other to form moral evaluations? This experiment consists of American children, but American children grow up in a very diverse environment. Therefore, researching other cultures is critical to understand if race and morality or religion and morality is as strongly connected in other cultures as they are in the United States of America. A secondary direction of interest is to test out-group religion against race for both American children and children around the world to assess how different nationalities may impact children's moral evaluations of others. This is particularly of interest in countries where one religion is dominant. Would other religious members outside of the main religion be viewed as less moral? Or would being a member of any religion invoke a higher moral expectation? Would outgroup religious members be expected to act outside of the ingroup moral domain? This would investigate whether moral actions are also more likely to be universally defined or group specific, and/or if group specific how truly different are the details? This line of research is significant, as there are multiple religions and it is important to understand how children perceive and factor this information into their moral evaluations.

Conclusion

This study demonstrates that 5 to 10-year-old children from this sample use religion when pitted against race to form moral expectations of others. Furthermore, this study demonstrates that these children's moral expectations of others are related to children's affiliative choices. Lastly, this study begins to suggest that religion might be a more powerful cultural marker than race in children's moral expectations and affiliation decisions. Future

work can include more diverse samples to provide a more comprehensive investigation on these topics.

REFERENCES

Aboud, F.E., & Skerry, S.A. (1984). The development of ethnic attitudes: a critical review. *Journal of Cross-Cultural Psychology*, 15, 3–34.

Baharloo, Bian, & Xu (in preparation).

Baron, A.S., & Banaji, M.R. (2006). The development of implicit attitudes: evidence of race evaluations from ages 6, 10, and adulthood. *Psychological Science*, 17, 53–58. doi: 10.1111/j.1467-9280.2005.01664.x

Bigler, R.S., & Liben, L.S. (1993). A cognitive-developmental approach to racial stereotyping and reconstructive memory in Euro-American children. *Child Development,* 64, 1507– 1518. doi: 10.2307/1131549

Clark, K. B., & Clark, M. P. (1947). Racial identification and preference in Negro children. In T. M. Newcomb & E. L. Hartley (Eds.), Readings in social psychology (pp. 169 – 178). New York: Holt.

Cottrell, C. A., Neuberg, S. L., & LI, N. P. (2007). What do people desire in others? *J Pers Soc Psychol*. 92(2):208-31. doi: 10.1037/0022-3514.92.2.208.

Dunham, Y., Baron, A.S., & Banaji, M.R. (2006). From American city to Japanese village: a cross-cultural investigation of implicit race attitudes. *Child Development,* 77, 1268–1281.

Dunham, Y., Srinivasan, M., Dotsch, R., & Barner, D. (2013). Religion insulates ingroup evaluations: the development of intergroup attitudes in India. *Developmental Science*, 1-9. doi: 10.1111/desc.12105

Edgell, P., Gerteis, J., & Hartmann, D. (2006). Atheists As "Other": Moral Boundaries and Cultural Membership in American Society. *American Sociological Review*, *71*(2), 211–234. doi: 10.1177/000312240607100203

Gervais, W. M., Shariff, A. F., & Norenzayan, A. (2011). Do You Believe in Atheists? Distrust Is Central to Anti-Atheist Prejudice. *Journal of Personality and Social Psychology*, *101*(6), 1189–1206. doi: 10.1037/a0025882

Gervais, W. M., & Norenzayan, A. (2012). Reminders of Secular Authority Reduce Believers' Distrust of Atheists. *Psychological Science*, *23*(5), 483–491. doi: 10.1177/0956797611429711

Gervais, W., Xygalatas, D., McKay, R., Van Elk, M., Butchel, E.E., Averyard, M., Schiavone, S.R., Dar-Nimrod, I., Svedholm-Häkkinen, A.M., Riekki, T., Klocová, E.K., Ramsay, J.E., & Bulbulia, J. *(2017)* Global evidence of extreme intuitive moral prejudice against atheists. *Nature Human Behavior,* 1**(**0151), 1-6. doi: 10.1038/s41562-017-0151

Heiphetz, L., Spelke, E.S., & Banaji, M.R. (2013). Patterns of Implicit and Explicit Attitudes in Children and Adults: Tests in the Domain of Religion. *Journal of Experimental Psychology: General*, 142(3), 864-879.

Heiphetz, L., Spelke, E. S., & Banaji, M. R. (2014). The formation of belief-based social preferences. *Social Cognition*, 32(1), 22–47.

Heiphetz, L., Spelke, E.S., & Young, L.L (2015). In the name of God: How children and adults judge agents who act for religious versus secular reason. *Cognition*, 144, 134-149. doi; 10.1016/j.cognition.2015.07.017

Heiphetz, L., & Young, L. L. (2019). Children's and adults' affectionate generosity toward members of different religious groups. *American Behavioral Scientist*, 63(14), 1910–1937. doi: 10.1177/0002764219850870

I. (2021, March 02). Median household income In January 2021. Retrieved April 24, 2021, from https://seekingalpha.com/article/4410626-median-household-income-lower-in-january-2021

Kinzler, K. D., & Spelke, E. S. (2011). Do infants show social preferences for people differing in race? *Cognition*, *119*(1), 1–9. doi: 10.1016/j.cognition.2010.10.019

Kowalski, K. (2003). The emergence of ethnic and racial attitudes in preschool-aged children. *Journal of Social Psychology*, 143, 677–690. doi: 10.1080/00224540309600424

Lei, R., & Rhodes, M. (2021, January 25). Why Social Cognitive Development Research Needs Intersectionality. doi: 10.31234/osf.io/ecdy8

Ma, Correll, & Wittenbrink (2015). The Chicago Face Database: A Free Stimulus Set of Faces and Norming Data. *Behavior Research Methods*, 47, 1122-1135. doi: 10.3758/s13428-014-0532-5

Newheiser, A., & Olson, K. R. (2012). White and Black American children's implicit intergroup bias. *Journal of Experimental Social Psychology*, 48, 264–270. doi: 10.1037/t03782-000

Norenzayan, A. (2014). Does religion make people moral? *Behavior*, 151, 365-384. doi: 10.1163/1568539X-00003139

Overstreet, NM, Rosenthal, L, Case, KA. (2020). Intersectionality as a Radical Framework for Transforming our Disciplines, Social Issues, and the World. *Journal of Social Issues*. 2020; 76: 779– 795. doi: 10.1111/josi.12414

Perszyk, D. R., Lei, R. F., Bodenhausen, G. V., Richeson, J. A., & Waxman, S. R. (2019). Bias at the Intersection of Race and Gender: Evidence from Preschool-Aged Children. *Developmental Science*, *22*(3). doi: 10.1111/desc.12788

Project Implicit. (n.d.). Retrieved March 17, 2021, from https://implicit.harvard.edu/implicit/faqs.html#faq2

Sheskin, M., & Keil, F. (2018, December 30). TheChildLab.com A Video Chat Platform for Developmental Research. doi: 10.31234/osf.io/rn7w5

Shutts, K., Kinzler, K. D., Katz, R. C., Tredoux, C., & Spelke, E. S. (2011). Race preferences in children: Insights from South Africa. *Developmental Science*, 14, 1283–1291. doi: 10.1111/j.1467-7687.2011.01072.x

Tomasello, M., Melis, A. P., Tennie, C., Wyman, E., & Herrmann, E. (2012). Two key steps in the evolution of cooperation: The interdependence hypothesis. *Current Anthropology*, 53(6), 673– 692.

Tomasello, M., Gonzalez-Cabrera, I. (2017). The Role of Ontogeny in the Evolution of Human Cooperation. *Hum Nat,* 28, 274–288. 10.1007/s12110-017-9291-1

Williams, J.E., Best, D.L., & Boswell, D.A. (1975). The measurement of children's racial attitudes in the early school years. *Child Development*, 46, 494–500. doi: 10.2307/1128147

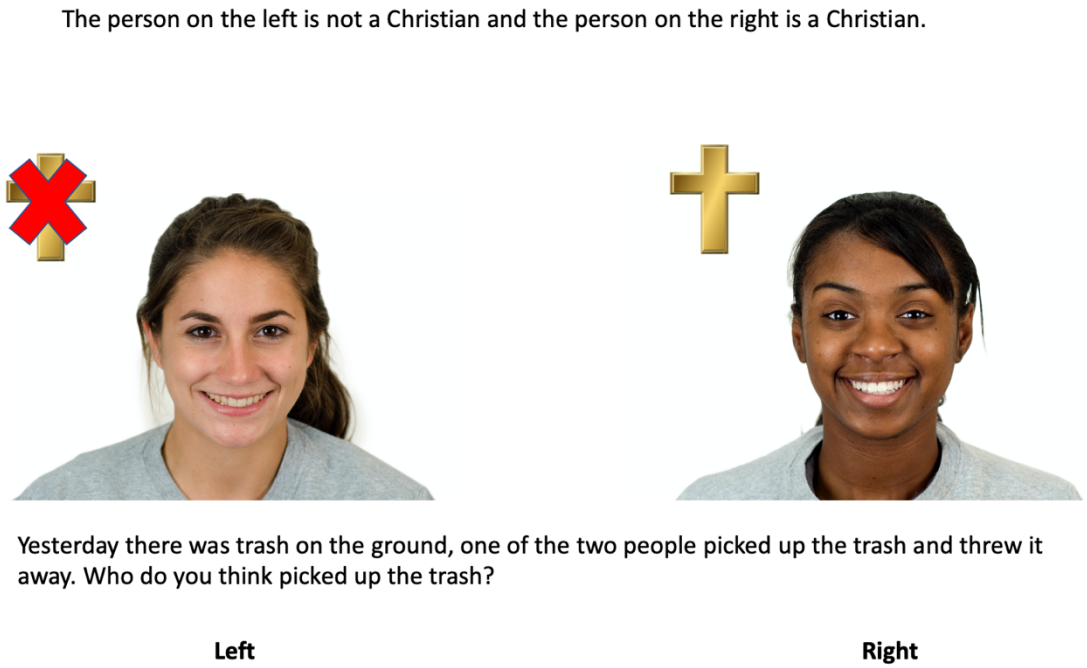

Figure 1. An example of the women stimuli presented during the experiment. The images are taken from the Chicago face database (Ma et al., 2015). Images were present for both the moral expectation story and affiliation questions.

Story 1
Yesterday there was trash on the ground, one of the two people picked up the trash and threw it away. Who do you think picked up the trash?

Story 2
Yesterday someone was walking out of a store carrying big boxes and one of the two people helped hold the door open for this person. Who do you think held the door open?

Story 3
Yesterday someone dropped their toy and one of the two people, picked up the toy and gave it back to the owner. Who do you think picked up the toy?

Story 4
Yesterday someone was sad. To make this person feel better one of the two people baked that person brownies. Who do you think baked brownies?

Figure 2. The script of the moral expectation stories. The order presentation was randomized across participants.

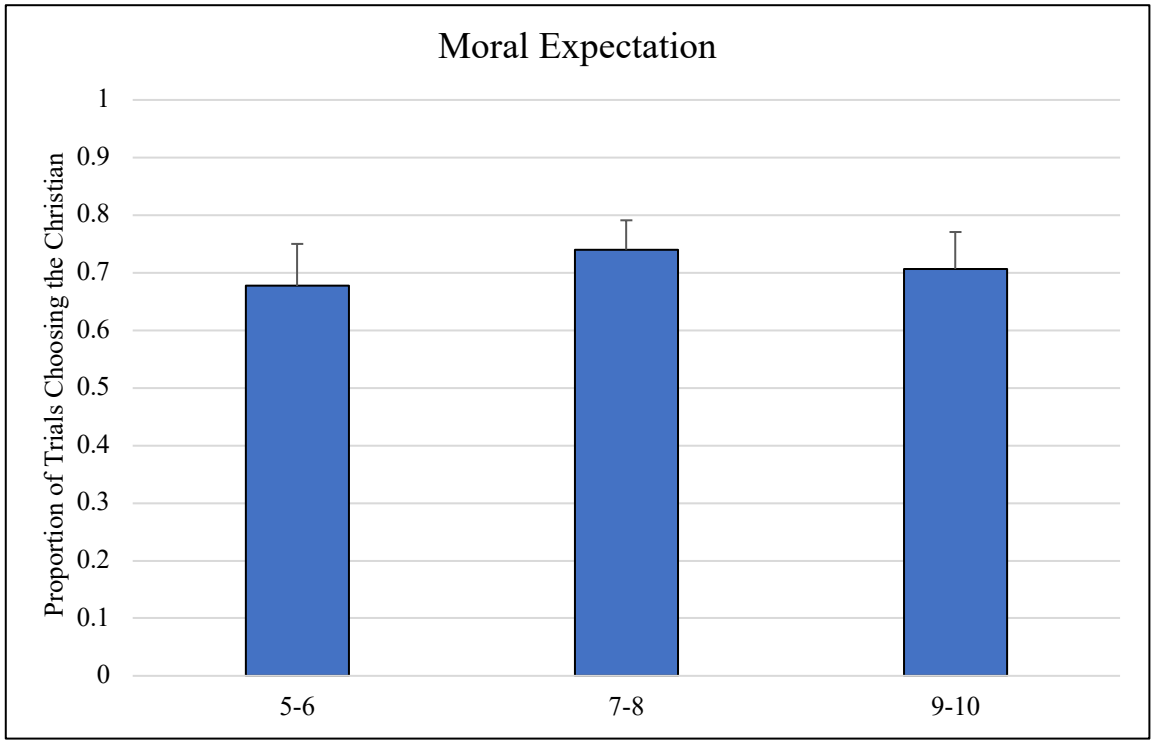

Figure 3. This chart presents the average amount that each age group chose the Black Christian as completing the moral action. Responses were averaged to fit on a 1-point scale. Error bars represent the standard error of the mean.

Figure 4. This chart shows the average amount that each religion (Non-Christian and Christian) chose the Black Christian as completing the moral action. Responses were averaged to fit on a 1-point scale. Error bars represent the standard error of the mean.

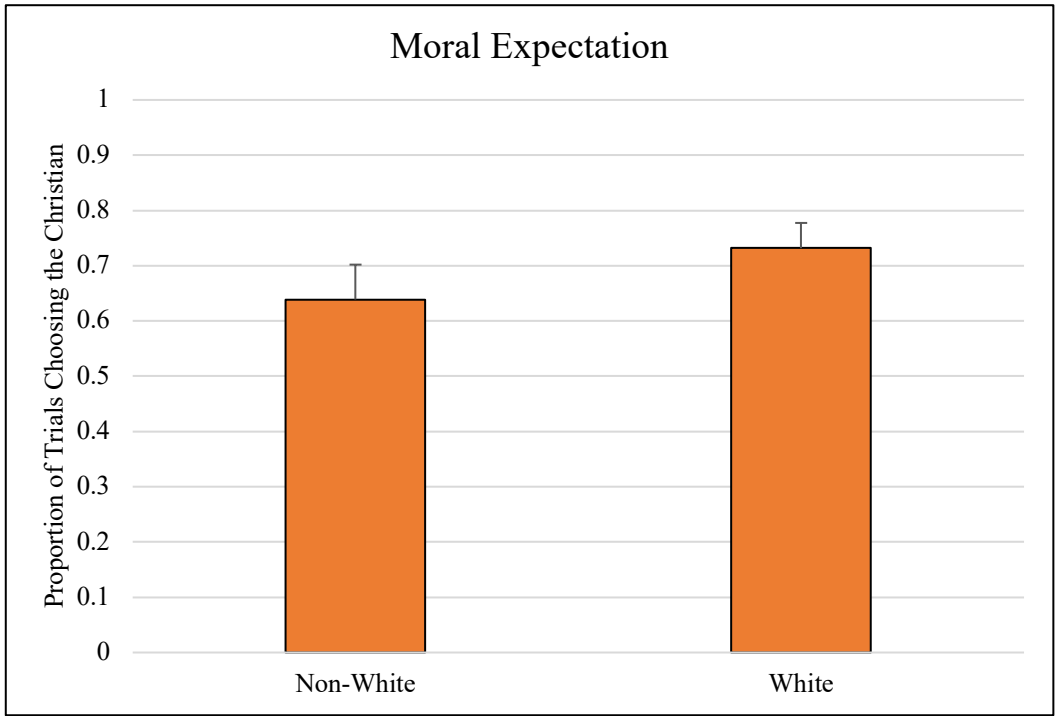

Figure 5. This chart shows the average amount that each race (Non-White and White) chose the Black Christian as completing the moral action. Responses were averaged to fit on a 1-point scale. Error bars represent the standard error of the mean.

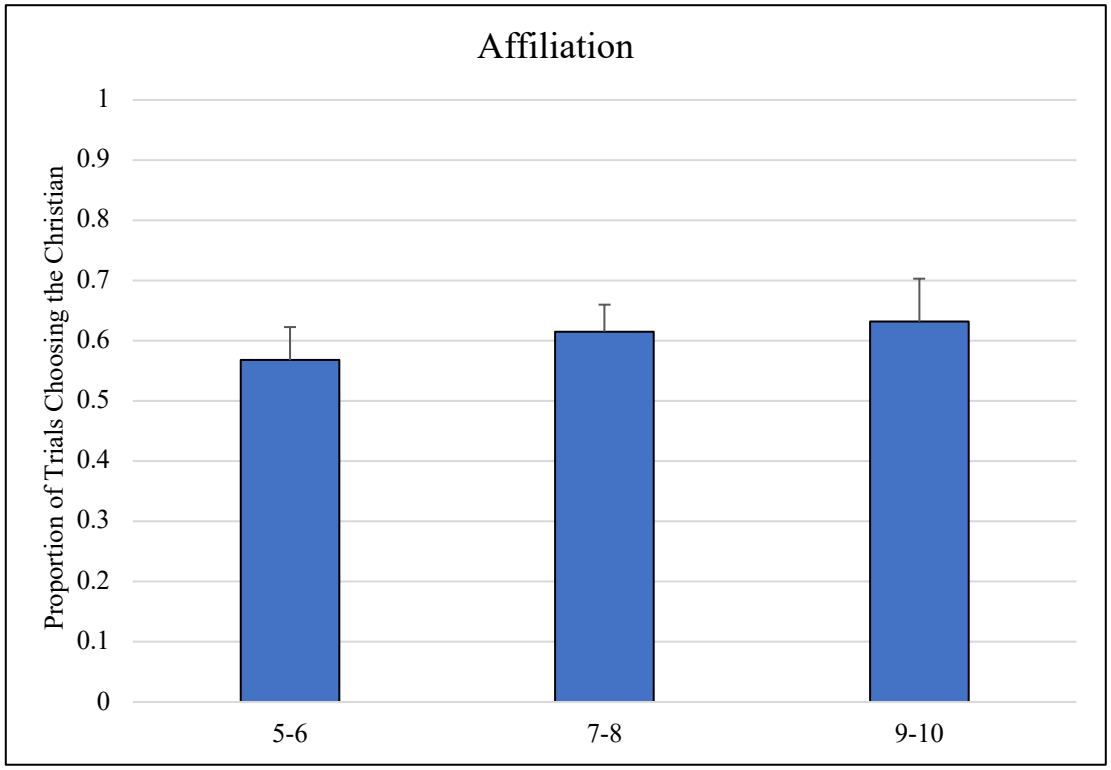

Figure 6. This chart shows the average amount that each age group chose to affiliate with the Black Christian. Responses were averaged to fit on a 1-point scale. Error bars represent the standard error of the mean.

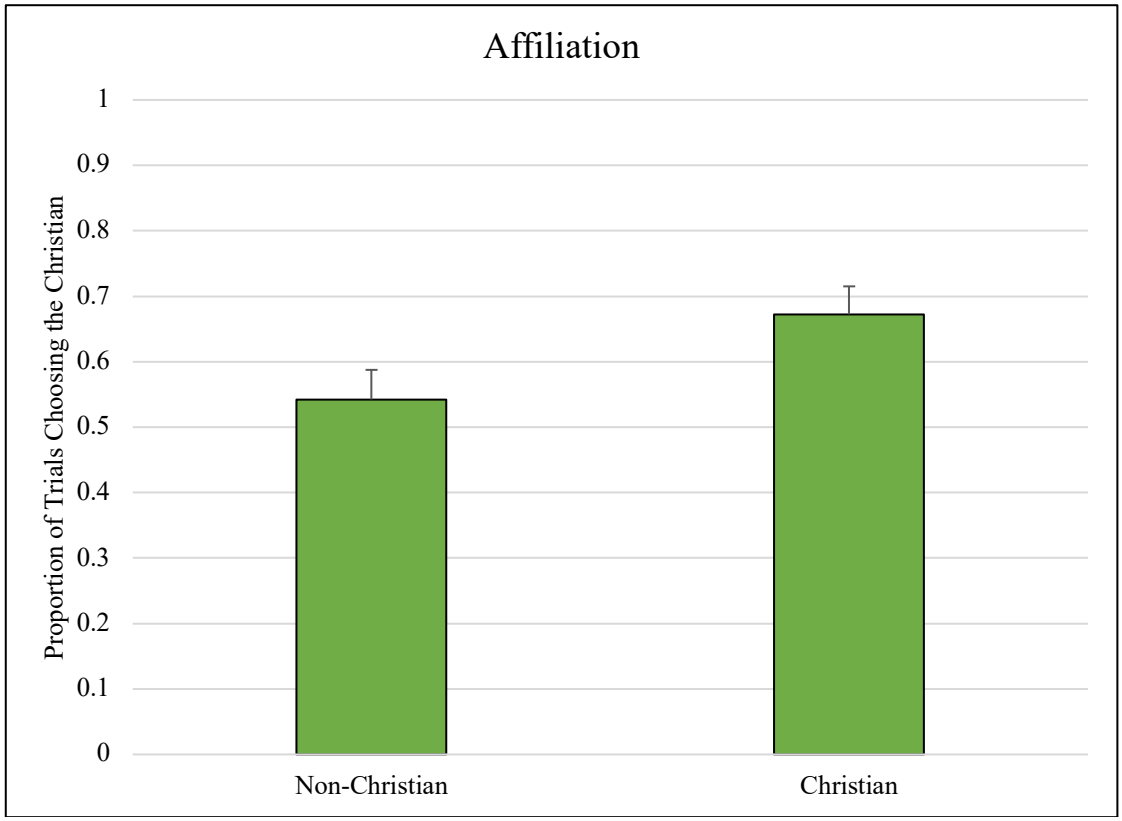

Figure 7. This chart shows the average amount that each religion (Non-Christian and Christian) chose to affiliate with the Black Christian. Responses were averaged to fit on a 1-point scale. Error bars represent the standard error of the mean.

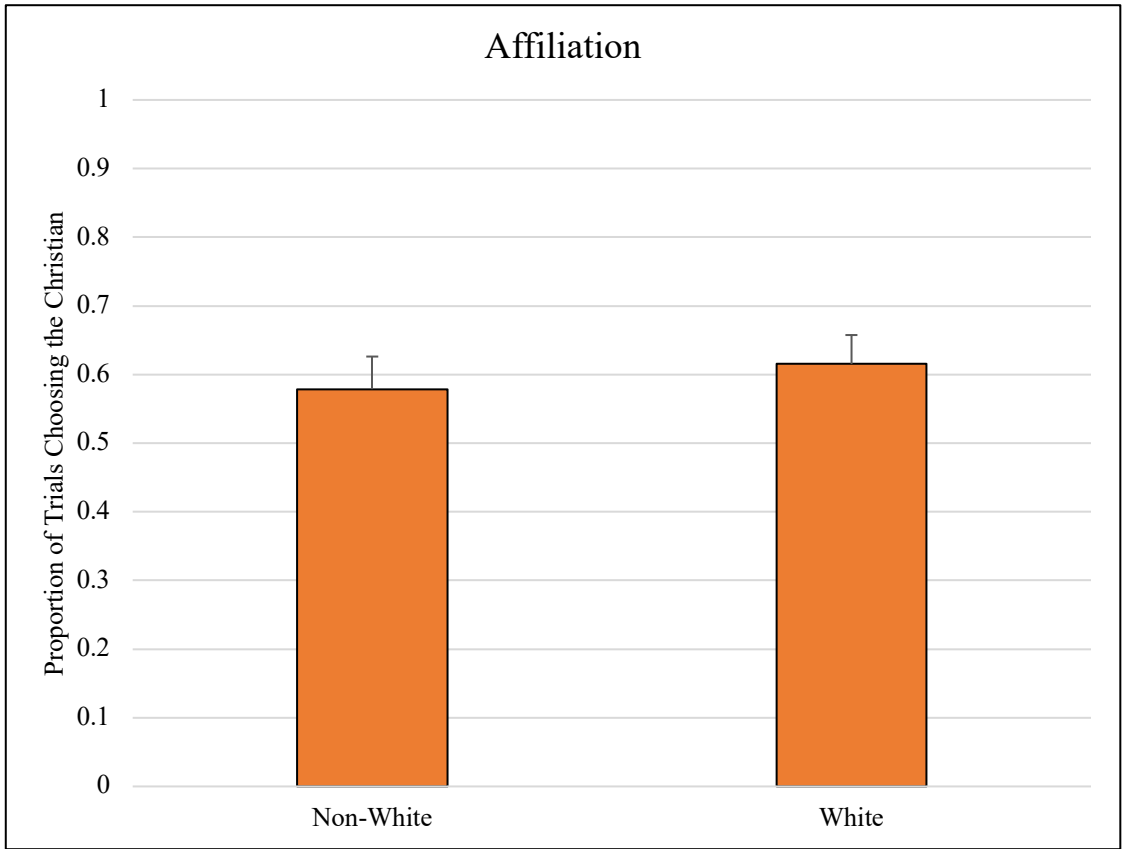

Figure 8. This chart shows the average amount that each race (Non-White and White) chose to affiliate with the Black Christian. Responses were averaged to fit on a 1-point scale. Error bars represent the standard error of the mean.

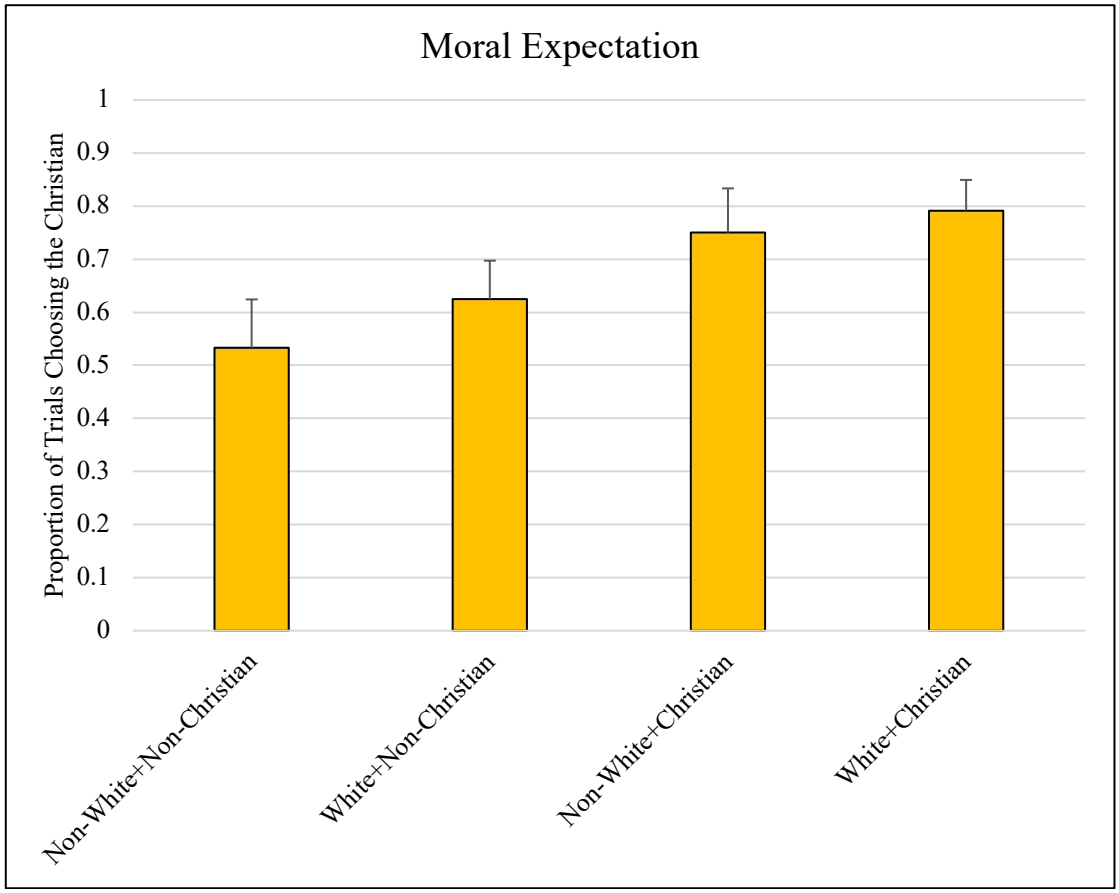

Figure 9. This chart shows participant's race (Non-White and White) and religion (Non-Christian and Christian) the average amount they chose the Black Christian as completing moral action. Responses were averaged to fit on a 1-point scale. Error bars represent the standard error of the mean.

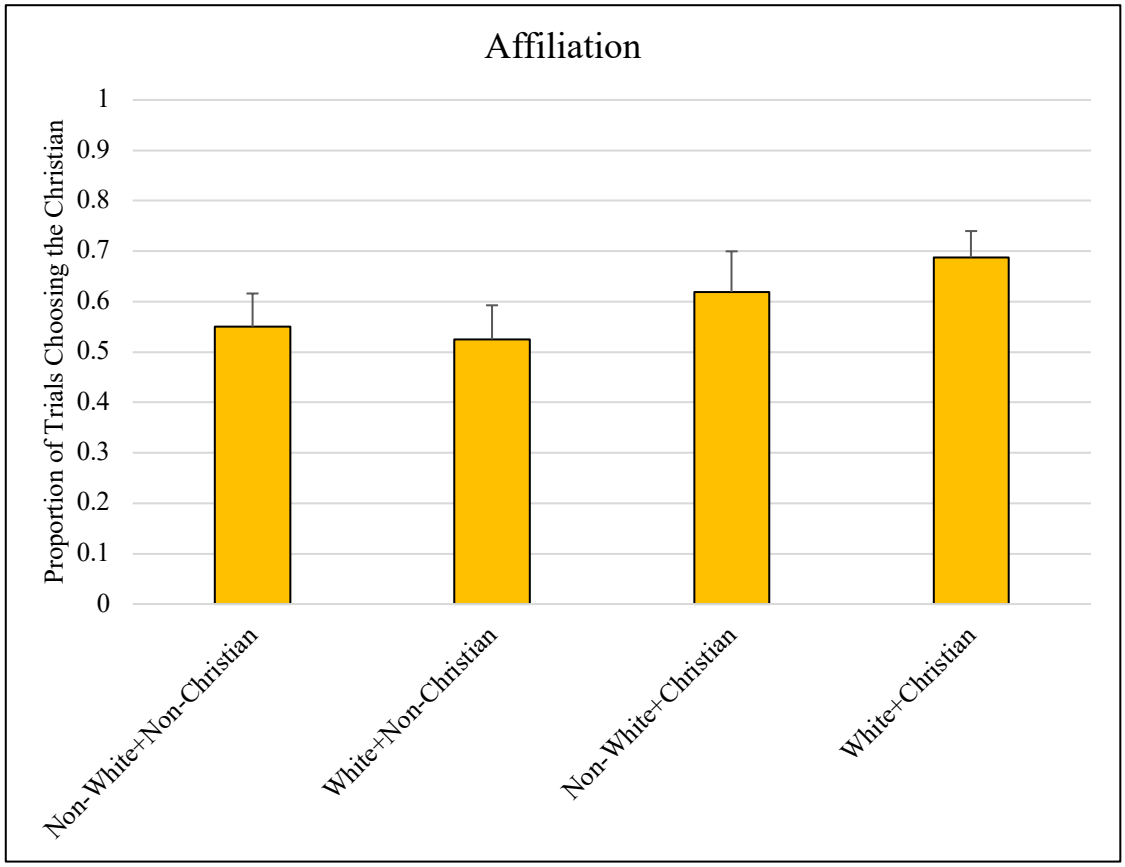

Figure 10. This chart shows participant's race (Non-White and White) and religion (Non-Christian and Christian) and the average amount they chose to affiliate with Black Christian. Responses were averaged to fit on a 1-point scale. Error bars represent the standard error of the mean.

Table 3.

Participant's Race and Religion

Variables (Race and Religion)	Participants	Percentage
Non-White + Non-Christian	15	23%
White + Non-Christian	16	25%
Non-White + Christian	10	14%
White + Christian	24	37%

Note. This table shows the number of participants grouped into race (Non-White and White) and religion (Non-Christian and Christian). Only 65 participants were included, as 7 participants did not list their race and/or religion.