ABSTRACT

The Predictors of Internalizing Jewish Beliefs

for Modern Orthodox Adolescents

Alumni of Modern Orthodox Yeshiva High Schools have varying degrees of commitment towards

religion. This study was designed to better understand the factors which lead some adolescents

towards internalizing the traditional Orthodox beliefs. Data was gathered from 1,341 students from

18 Modern Orthodox High Schools in the United States using an anonymous digital survey

consisting of 83 questions. The design involved a complex causal model as it evaluated the

relationship between spirituality and a number of factors, such as self-esteem, academic

achievement, spiritual struggle, religious homogeny between parents and adolescents, gender and

religious practice. Additional factors such as mental health, growth mindset, positive Judaic studies

experiences and relationships with Judaic studies teachers were examined as potential mediators.

These constructs were all measured using the Jewish Beliefs, Actions and Living Evaluation

(JewBALE 2.0) with the exception of self-esteem and mental health, which were measured by the

Duke Health Profile. The data indicated that students with high levels of spirituality would also have

high levels of self-esteem and religious homogeny with their parents, as well as high grades in

Judaic studies and high level of agreement with Orthodox communal norms that are less progressive,

such as women's limited roles in synagogue leadership. Positive relationships with teachers and

experiences in Jewish studies classes mediated the otherwise negative relationship between

spirituality and disagreement with communal norms. Females were more likely to have high levels

of spirituality than males. This study is important for those who want to better understand the factors

involved in helping students enrolled in Modern Orthodox High Schools achieve high levels of spirituality.

The Predictors of

Internalizing Jewish Beliefs

for Modern Orthodox Adolescents.

by

Sharon Elsant Weinstein

Submitted in partial fulfillment of the requirements

for the degree of

Doctor of Education

in the Azrieli Graduate School of Jewish Education and Administration

Yeshiva University

May, 2020

The committee for this doctoral dissertation consists of:

Chair: Scott Goldberg, Ph.D., Yeshiva University

Committee Member: Ilana Turetsky Ed.D., Yeshiva University

Committee Member: David Pelcovitz Ph.D., Yeshiva University

ACKNOWLEDGMENTS

 department. I hope this approach is available for other students, especially young mothers and community leaders.

I am grateful to my advisor, Dr. Scott Goldberg, whose enthusiasm for this project was contagious. Revising the JewBALE with him in order to create a statistically reliable measurement tool was a unique experience which I genuinely enjoyed. Beyond his commitment to excellence, attention to detail and sharp analytical thinking skills, which were traits I was looking for in a doctoral advisor, his menschlichkeit and humble manner made him a personal mentor for me as well. His patience with this long process and goal-oriented approach were critical to the success of this project.

To Shoshana Ross, thank you for your excellent statistical analysis of the data. Your professionalism, competency in your field and availability to answer questions made you an incredible partner in this effort.

To my former students at the Rae Kushner Yeshiva High School, thank you for your critical input while the JewBALE 2.0 was being created. The final version was based on many of our conversations in and outside of class.

To my committee members, Dr. David Pelcovitz and Dr. Ilana Turetsky, thank you for the helpful feedback which pushed me to create a more readable and clearly formatted paper.

To my mother, in addition to the unwavering support I mentioned above, I also owe you an incredible debt of gratitude for your outstanding editing skills which have enhanced this paper tremendously.

To my father, thank you for the loving support that I always know I can count on. Your ability to squeeze in the writing of novels during your career as a physician and now in

your retirement inspires me to continue to pursue multiple endeavors, including this dissertation.

Thank you to my in-laws for their sincere interest in my professional development and for their frequent questions about my graduation date which helped give me the push I needed to see this to the end.

To my husband, Jay, thank you for being an insightful sounding board to discuss the ideas in this paper from its initial stages of development to my final conclusions. Thank you for always cheering me on and for encouraging me to complete this project. To my children, as you know, I have tried to model the lifestyle: 'You can do it all, just not all at the same time.' I am proud that this dissertation did not play a burdensome role in our family life and am thankful for the incredible journey that we have embarked upon as a family, from Texas to New Jersey and now finally to Israel.

"LaHashem Haaretz Umloah", I am grateful to Hashem for this opportunity and for all the blessings in my life.

DEDICATION

To my mother, Gail Epstein Elsant,

whose big eyes I inherited

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

DEFINITION OF TERMS

For the purpose of this paper, the terms below refer to the following:

Spirituality – internalization of religious beliefs

Religiosity – practice of religious actions

Religiousness/Religious commitment – adherence to religion in general, referring to both religious beliefs and actions

Socio-Religiousness/Jewish struggle – personal beliefs in contrast to conventional norms in many Orthodox communities, such as the participation of women in synagogue leadership, acceptance of homosexual couples in Orthodox communal life, drug use and physical contact between sexes

Religious Homogeny – similar levels of belief and/or actions in the religious realm, also referred to as "religious homogomy" in much of the literature reviewed on this topic

CHAPTER I. INTRODUCTION

Importance of Religious Scales for Adolescents Enrolled in Parochial Schools

Parochial schools exist not simply to convey knowledge to their students but also in order to impart a religious lifestyle to the next generation. While academic testing has always been an integral aspect of such schools, the notion of measuring the students' achievements in the religious realm is a less developed concept. Perhaps some schools assume that their students are religious; after all, they may know from the interview process that they come from religious homes. Other schools may be wary of uncovering the truth about the religious beliefs of their students, and would prefer to stay a comfortable distance away from these types of questions. From an educational standpoint, there are also multiple hesitations to the notion of testing in the religious realm. Receiving a low score on one's religious commitment might cause a student to feel unfairly judged or shamed, which may lead to a more permanent disconnect from religion. Additionally, some students will focus on their grade and lose sight of the ultimate goal. They may aim to achieve high scores in the religious domain, but that could potentially distract them from a true internalization of the tenets of their religion. Notwithstanding these reservations, this paper aims to highlight the advantages of assessing students attending parochial schools in the religious realm.

Numerous measures currently exist to study one's religious level, such as the Religious Orientation Scale (Allport & Ross, 1967) and the Spiritual Well-Being Scale (Bufford et al., 1991). Distributing such measures to adolescents has been especially

informative, since research has demonstrated that children begin to question the religious beliefs with which they were raised during their adolescence (Johnson, 1996). These questions often coincide with a feeling of alienation towards religion (Beaudoin, 1998), and can lead to a decreased level of religious commitment (Sloane & Potvin, 1983). Potvin and Lee (1982) suggested that adolescents feel the need to co-construct the religious beliefs with which they were raised before they can feel comfortable performing the requisite religious actions. This process of co-construction results in either a rejection, modification or acceptance of their family's religion. Sloan and Potvin found that there was no relationship between the level of religiousness and the eventual decline of religiousness, highlighting the importance of studying adolescents supported by a religious school, family and community. The likelihood of their beliefs weakening is the same as it would be for an adolescent in a secular environment. Regardless of religion or denomination, research has shown that Americans are becoming less committed to religion than in the past. Smith et al. (2003) therefore suggested that new research must be done on American adolescents in order to understand the current trends among adolescents.

Limitations of General Religious Scales

Religions can vary from one another in dramatic ways, but most, if not all, demand of their adherents both to internalize certain dogmas as well as to act in accordance with prescribed rituals, which are all derived from the core values of the religion. Research differentiates between these constructs by labeling the personal feelings and beliefs as *spirituality* and referring to the practice of traditions and rituals as *religiosity* (Benson et al.,

2003). For the purposes of this paper, the terms *religiousness* and *religious commitment* refer to both religiosity and spirituality as part of one unified construct, while the individual terms *spirituality* and *religiosity* follow the distinct definitions referenced above. Over the past two decades, more than 100 new measures for spirituality and religiosity were created which allowed for rich analyses of an individual's beliefs and actions as well as the impact that religion can have on one's life. Notwithstanding this remarkable contribution to the ongoing study of religion, these measures were still lacking in breadth and depth. Koenig et al. (2001) reviewed 101 studies on religion and mortality and found that 47% of the studies relied on religious affiliation only as a measure of religiosity and another 43% relied on broad measures such as church attendance or membership. The reliability of such measures was limited due to the fact that religiousness was determined based on these broad categorizations (Hunter & Schmidt, 1990). These measures also did not allow for an understanding of which aspect of religiousness is correlated with external factors, such as mortality or mental health.

The existing research which did delve into the complexities of religion was still limited due to the over-representation of Christians in the piloting and administering phases of these measures. We cannot generalize the findings from the Christian community and apply them equally to other faiths. As Sloane & Potvin (1983) showed, there can be an interaction effect between gender and denomination and age and denomination with regard to religiosity; therefore, each religious denomination must be looked at individually. Research also has specifically demonstrated that Jewish adolescents have a different level of religious values than religious youth of other faiths. For instance, Smith (et al., 2003) found that

Jewish youth have a lower appreciation of faith and frequency of prayer when compared to their peers from other religions. Thus, we cannot assume that existing research from the Christian community can apply equally to the Jewish community.

We also can not rely on existing measures for Jewish individuals because, as in the Fiala et al. (2002) 21-item Religious Support Scale, the measure was piloted on American Protestant college students, and was therefore developed with a bias towards Christian beliefs and practices (Hood et al., 2009). When such measures are distributed among a diverse population, the findings might show a bias towards the Christian respondents. For instance, Sloane and Potvin's (1983) finding regarding the decline of religiousness by age was most apparent among religious Christian denominations. It is unclear whether this revealed a trend among Christians to the exclusion of adherents to other faiths, or whether the survey questions were irrelevant to non-Christian faiths and therefore the findings were not representative of the actual level of religiousness of the non-Christian participants.

Limitations of Jewish Religious Scales

After surveying many of the existing research measures on religiousness as well as developing his own, Gorsuch (1990) recommended creating new scales for religiousness only if the existing measures were not psychometrically appropriate for addressing the research problem or if the constructs in existing measures needed modification in order to be relevant for the sample population. Given the distinctive nature of Judaism as well as the dearth of detailed measures on Judaism, it follows from Gorsuch's recommendations that new measures should be developed with a specific focus on Orthodox Jews, in order to properly

study that population. Appropriately, over the past decade, studies have been created and implemented with a specific focus on the Jewish community, such as the 2011 Jewish Community Study of NY and the 2013 Pew Research Portrait of American Jews. These studies allowed for an authentic assessment of general trends in the North American Jewish population, but they did not address the nuances of Modern Orthodox Jewish life and therefore were of limited value to the Modern Orthodox. Of the thousands of respondents in these studies, about 8% of the NY study and 4% of the American study identified as Modern Orthodox. The 2017 Nishma study which focused exclusively on profiling American Modern Orthodox Jewry only interviewed adults over the age of 18, with the median age of respondents at 50 years old. Numerous survey questions were irrelevant to adolescents, asking about matters such as the upbringing of one's children.

Other Jewish studies were limited due to their brevity, and thus could not address the nuances of an individual's beliefs and actions. For instance, The Student Religiosity Questionnaire (Katz, 1999) consisted of only 20 items, while the Ben-Meir and Kedem (1979) included a mere 13 items and did not offer opportunity for respondents to expand beyond a simple yes or no response. Similar to the general or Christian religiousness measures, these measures did not allow for an understanding of which aspects of religiosity or spirituality were the cause of the correlations with other behaviors.

The studies on Jewish adolescents were likewise lacking in breadth and depth. Weiss (2007) interviewed ten 11th grade Modern Orthodox girls in order to uncover what spiritually inspired them. She found that traumatic events, Israel, music, informal education and influential people inspired them. This study was limited due to its small sample size. Shapiro

(1999) questioned 273 non-Orthodox Jewish adolescents on their beliefs regarding God and the creation of the world by convenience sampling. She found that girls were more likely than boys to believe that God had a role in creation and a role in determining their own lives. These students attended only supplementary school for their Jewish education, which makes this study questionable in its application to students with a Yeshiva Day School background. In Tannenbaum's (2009) analysis of high school alumni, she suggested that more research should be done on students while they are still in high school in order to understand whether the religious growth experienced in Israel actually stems from the seeds planted in their high school years.

In order to properly study the beliefs and actions of Modern Orthodox adolescents, Dr. Scott Goldberg pioneered a measure known as the JewBALE, the Jewish Beliefs Actions and Living Evaluation. The original version of the JewBALE as published in 2006 consisted of 175 questions with 66 of those questions regarding beliefs and 109 regarding religious actions. Over 2,000 students have completed that version of the measure and more than 10 dissertations have been written on the related data.

Looking at a sample of 484 Modern Orthodox adolescents who completed the JewBALE measure, Weinberg (2008) found that observance of Shabbat was correlated to observance of Kashrut and commitment to Israel but not to openness towards secular studies. His cluster analysis showed that among the "moderate" group who had a relatively low level of performance of religious actions, there was still a relatively high level of belief. Klein Poupko (2010) administered the JewBALE in conjunction with the Rosenberg Self-Esteem scale as well as other measures to 220 Modern Orthodox High School students. Multiple

regression analysis on this data showed a positive correlation between one's connection to God and one's commitment to self-improvement and moral helpfulness. Eisenberg (2010) similarly used the JewBALE together with other measures, such as the Israel Experience Questionnaire, and distributed them to 424 Modern Orthodox high school students during their senior year of high school as well as at the end of their gap year of study in Israel. His analysis showed that support from rabbis and teachers predicted high levels of Jewish beliefs and actions. Numerous dissertations were written using his data. For instance, Halpern (2012) studied how a student's outlook towards secular studies changed during his or her year in Israel. Goldmintz (2010) looked at the impact of the family on the religiosity of Modern Orthodox adolescents. Pollack (2012) analyzed the predictors of adolescent self-esteem.

The JewBALE measure was the first of its kind, and although it was piloted and then refined, it still contained some limitations that minimized its impact. Friedman's 2012 study, which was based on a shorter measure for middle-school aged participants, highlighted the redundant nature of some of the questions. For instance, with regard to Shabbat observance, there were several questions regarding the use of technology and electricity on Shabbat. This dissertation presents an updated version of the JewBALE, to be referred to as JewBALE 2.0, which revised the original JewBALE in order to eliminate redundancies, clarify some ambiguous phrases, expand the demographic section, and include the DUKE Health Profile and a Socio-Religious Scale of Personal Beliefs which incorporated questions that relate to contemporary issues.

In summary, given the research-based premise that adolescents begin to question the religion in which they were brought up, and the lack of current research on Modern Orthodox adolescents, it was particularly important to create a new model in which to study Jewish Modern Orthodox adolescents and understand their religious beliefs and practices. This paper analyzed data from the inaugural distribution of the JewBALE 2.0 in order to uncover correlations between spirituality and external factors, such as self-esteem, academic achievement, Jewish struggle, relationships with role models, and gender.

CHAPTER II. LITERATURE REVIEW

In order to properly analyze the correlation between spirituality and various other constructs such as self-esteem, academic achievement, Jewish struggle, connection with role models, gender and religious practice, the relevant literature in these areas must be reviewed.

Self-Esteem and Religiousness

Among the various factors correlated with religiosity and spirituality, the correlation with health was especially prominent in the literature. The common consensus was that higher levels of religiousness were correlated with better mental and physical health (Hackney & Sanders, 2003, Koenig, 2013). Most studies did not explain the direction of the influence, so it was unclear whether religious values predicted better health or whether they were a consequence of health. However, a study of 187,957 individuals from 11 European countries showed a stronger level of correlation between religiousness and psychological adjustment in the more religious countries (Gebauer et al., 2012). This suggested that the direction of the relationship stemmed from religion rather than health, meaning that religiousness predicted mental health outcomes. As religiousness is complex, it is important to evaluate which aspects of one's religious connection correlate with better health. In Pargament's (2002) review of the relevant literature, he concluded that this correlation existed only for those who had an intrinsic spiritual connection to religion. Similarly, Maltby et al. (1999) found high

self-esteem to be positively correlated with personal prayer whereas it was negatively correlated with church attendance.

Within the realm of mental health, self-esteem in particular was highlighted as a positive correlate of religiousness as well as other positive mental health outcomes. For instance, higher levels of self-esteem have been shown to correlate with higher levels of religiousness for Jewish Modern Orthodox adolescents (Eisenberg, 2010). Additionally, self-esteem was correlated with lower levels of symptoms of depression and anxiety for adolescents (Dumont & Provost, 1999). As a result of these correlations, some went so far as to suggest that self-esteem might be the explanatory factor in the correlation between religiousness and health, since religious individuals were more likely to have more self-esteem, and positive self-esteem led to better mental health outcomes (Ellison et al., 2001).

There are numerous theories and research-based ideas to explain why there would be a link between self-esteem and religiousness. Emmons (2005) posited that religion influences the generation and intensity of emotions, such as fear, love, and hope, as well as an evaluation of their appropriateness. Among those who agreed with this premise, there is still a debate regarding whether these changes in emotions will lead to a greater or weaker sense of self-esteem. Based on the Freudian notion that religion is associated with a person's deficiencies and the religious concept that man sins when he is too weak to overcome his evil inclinations, one might hypothesize that religiousness either negatively impacts self-esteem or moderates an otherwise positive correlation (Hanawalt,1963). In contrast, other researchers supported the religiosity-as-social-value hypothesis, meaning that a person connected to a religious community will be valued by his community more if he or she

demonstrates religious commitment (Sedikides & Gebauer, 2010). Since self-esteem can

be defined as "the evaluation which the individual makes...with regard to himself or herself

(Rosenberg 1965:5)," it is logical to assume that the community's evaluation of a person will

impact that person's self-evaluation (Sedikides & Strube, 1997). Thus, if an adolescent

belongs to a larger community which values religiousness, it could be that the explicit or

implicit criticism he receives from his community as a result of his lack of religious

commitment leads to a decline in his self-esteem. Similarly, if the community values his

strong religious commitment, that could lead to an increase in his self-esteem. Additionally,

if a person has positive and loving images of God, this may lead him to have a greater sense

of self-esteem (Hood et al., 2009).

Demographic factors, such as race, age, religion and other areas of mental health may

be relevant in this link between self-esteem and religiousness. Blaine and Crocker (1995)

found this relationship to exist only among their black, but not white, respondents. Ciarrochi

& Heaven (2012) surveyed close to 400 students enrolled in diverse Catholic High Schools

when they were in 11th and 12th grades and found that a correlation between religiousness

and self-esteem existed only when these students were in the 11th grade. These researchers

hypothesized that their results, as well as those from the earlier studies, reflected on the

Catholic denomination only and could not be extended to other denominations or religions.

Heaven & Ciarrochi (2007) found that no significant relationship existed between

religiousness and self-esteem once prior changes in levels of psychoticism and

conscientiousness were controlled for.

Smith et al. (1979) did a secondary analysis on Thomas and Weingart's 1971 survey of 1,995 adolescents from five cultural backgrounds and concluded that there was a link between religiousness and self-esteem in adolescents from four of the cultures studied, but not from the fifth. These researchers hypothesized that this correlation would be even stronger for females, based on the theories that women are more religious than men, and that women are more likely to conform to society's demands on them. However, this hypothesis was only mildly true for their Latin respondents. They discovered that the males from the non-Latin respondents were the ones who had a stronger self-esteem and religious correlation. Researchers have tried to understand why one's culture affects this correlation. Berger suggested that there should be a weaker connection between self-esteem and religiousness in the Latino community because there is a greater objective acceptance of religion in their community. Therefore, the decision to be religiously committed should have less of an impact on an individual's sense of self (Berger, 2011). In contrast, in other communities and cultures, where religion is challenged and questioned, an adolescent's religious level will more likely impact his sense of self (Rosenberg, 1965). Using this logic, we could expect to see a strong correlation between self-esteem and religiosity in the Jewish Modern Orthodox community where adolescents are typically exposed to peers or college-aged students who question religion.

While there were numerous studies, such as those cited above, which highlighted a correlation, there were other studies which demonstrated no significant correlation. For example, Williams et al. (2006) surveyed 279 adolescents and found that Christian adolescents with low self-esteem were more likely to reject their faith. Yet in Donahue &

Benson's (1995) analysis of data on 30,000 adolescents, there was no clear correlation between religiousness and self-esteem. Similarly, Francis & Jackson (2003) found no significant relationship between self-esteem and attitudes towards Christianity. Perhaps the relationship was not as broad as the researchers had assumed in the design of their studies, and in practice, more detailed questions regarding spirituality and religiosity, as well as other demographic factors, should be analyzed together with the self-esteem construct. Additionally, it might be more effective to break the construct down into its component parts in order to appreciate which aspects of self-esteem are correlated with religiousness. Some scales that measured self-esteem differentiated between specific disciplines, such as academic self-esteem or athletic self-esteem (Marsh, 2014). Theoretically, a person may have high self-esteem in one area and weak self-esteem in another area.

Research on self-esteem suggested that general self-esteem is related to academic self-esteem (Rosenberg, 1979; Anderson, 1981). The relationship between achievement and academic self-esteem has been shown to be bidirectional (Liu et al., 1992). Academic achievement will affect academic self-esteem, and to a lesser extent general self-esteem, with poor academic achievement leading to a decrease in students' self-esteem. Similarly, academic self-esteem, and to a lesser extent, general self-esteem, will affect the motivation with which he pursues his studies and his subsequent academic achievement (Rosenberg et al., 1995). Researchers are debating whether this correlation is still true today and are questioning the validity of the original studies reporting on this correlation and its bidirectional nature. Among those who have affirmed the validity of the positive correlation, there are some who suggested that there are other constructs which bring about this

relationship. Thus, academic achievement and self-esteem are not actually dependent on one another, but rather, other elements such as social class, perceived teachers' feelings about students' performance, motivation, deviant behavior, psychological distress, illness, school absence and academic ability bring about changes in academic achievement and self-esteem (Liu et al., 1992). Similarly, Dweck (2006) emphasized the role that growth mindset can play in enhancing one's self-esteem and academic achievement. If students believe that their current level of intellect can improve, then their self-esteem will be less damaged by poor grades. Additionally, based on her extensive research on the subject, Dweck posited that students with a growth mindset will be more likely to seek out challenges in order to accomplish them, resulting in high academic achievement. Further research should be done in order to examine whether religiosity or spirituality could be another such background element, like growth mindset, which brings about a change in both self-esteem and academic achievement.

Academic Achievement and Religiousness

The German historian, Max Weber, developed the Protestant ethic theory in the early 20th century, suggesting that the values inherent in Protestant theology led Protestants to fully engage in working in secular arenas, thereby creating and developing the capitalist era. Some contemporary researchers have refined Weber's theory, using data to show that it was not Protestant ethics which developed capitalism, but rather the promotion of literacy which was often found in Protestant communities (Korotayev et al., 2006 and Becker & Woessmann, 2009). This suggested that there was a correlation between religiousness and

academic achievement. This hypothesis has been validated in studies on adolescents which measured the correlation between church participation and scores on standardized tests. The researchers suggested that involvement in a church led the adolescents to have high educational expectations for themselves which, in turn, led to high test scores (Regnerus, 2003). Studies on adolescents which used more general religious scales, measuring religious involvement beyond mere church involvement, found similar results for 10th grade students (Muller & Ellison, 2001), African-American and Latino youth (Brown & Gary, 1991, Jeynes, 2002, Sikkink & Hernandez, 2003) and for both urban and non-urban students (Jaynes, 2003).

Some researchers have sought to find mediators or controlling factors that affected this correlation. Muller & Ellison (2001) found that the correlation was insignificant when controlling for family and community capital. This finding, as well as other similar findings, has been questioned by those who argued that the measurement tools used in these studies were limited. Studies using broader measures to assess an adolescent's academic achievement, family income, and neighborhood income levels, showed that the correlation between religiousness and academic achievement was still significant (Regenrus, 2003; McKune & Hoffman, 2009). Moradi & Langroudi (2013) studied the relationship between religiousness and language achievement. They used Pearson product-moment correlation coefficients to suggest that the positive correlation only existed for those with an intrinsic religious orientation, whereas the correlation became negative for those with an extrinsic religious orientation. The researchers suggested that this could be explained by the nature of extrinsics to be more likely to feel academic stress, whereas intrinsics would be more likely

to have a better sense of well-being while studying in college. The distinction between an intrinsic and extrinsic religious orientation was first discovered by Allport & Ross in 1967. An extrinsic orientation refers to those who use religion for their own ends, such as to gain social acceptance, while intrinsic orientation refers to those whose religious motivation stems from an internal belief in God.

There is a debate whether the Protestant theory is still relevant in modern times. Some have suggested that while it was true in the past, it is no longer relevant in contemporary society, arguing that religiousness and academic achievement have a negative correlation. Much research has been done on the negative correlation between intelligence and religiousness, showing that an increase in intelligence was associated with low levels of religiosity and spirituality (Lynn et al., 2009, Larson & Witham, 1998; Lewis et al., 2011). Assuming that high intelligence is correlated with high academic achievement, this could be an explanatory factor behind the negative correlation.

Others suggested that one's cognitive style might be more relevant than one's academic ability or achievement in predicting negative religious or spiritual outcomes. Cognitive styles with regard to problem-solving and decision-making abilities are commonly divided into two possibilities, type one being intuitive and associative and type two being more analytic (Stanovich & Toplak, 2012). In a series of studies run by Shenhav et al. (2011), an analytic cognitive style (ACS) was negatively correlated with belief in God even when controlling for academic ability. Pennycook et al. found similar results in their study of 223 adults in the United States. Additionally, they reported that ACS was the explanatory factor in the negative association between ACS and religiosity, meaning that ACS negatively

affected one's acceptance of conventional religious beliefs which in turn negatively affected religiosity (Pennycook et al., 2012). Similarly, Bertsch and Pesta (2008) surveyed 278 undergraduate students, 83% of whom were Christian, and found that one aspect of intelligence, information processing ability, was the strongest predictor of spirituality, with low levels of informational processing ability associated with high levels of spirituality and lower levels of religious questioning.

In a somewhat counter-intuitive manner, Beyerlein (2004) suggested that this negative bidirectional correlation might be especially true for students enrolled in parochial schools. High levels of religiousness may cause a student to have less motivation to pursue academic studies, thereby predicting low academic achievement. Beyerlein suggested that this would apply to conservative Protestants who might internalize the idea that secular studies "endanger the souls" and therefore focus less on their secular academic pursuits. Just as religiousness can negatively impact academics, so too can academics negatively impact religiousness, especially for students exposed to secular culture, because the religious ideas they are taught in class may conflict with their personal theology. Thus, as they achieve more academically in their religious and secular studies, they feel more conflicted about religion and may lessen their religious commitment.

In the past, exposure to college and even college preparatory courses has been shown to lead to a decline in religious participation and belief in the Bible (Hadaway & Roof, 1988:36, Sherkat, 1998). In a study of 549 individuals surveyed in their sophomore year of high school and again 10 years later, the respondents with college degrees gave more secular answers to questions about faith, while those without college degrees had fewer secular

responses (Funk & Willits, 1987). "So pervasive is the explanation for religious decline that some consider it a well-established fact that education, even Christian education, secularizes" (Hunter, 1983: 132). However, research since the 1990's suggested that the trend only applied to religious practice (Bryant et al., 2003). Today there are numerous programs for religious students in university as well as tolerance for religious beliefs permeating many classrooms. Therefore, religious beliefs have been shown to strengthen throughout the college years (Pascarella & Terenzini, 2005). Perhaps then, the Protestant theory is still relevant today, but only in the realm of spirituality.

In contrast to the studies referenced above, there were other studies which suggested that there was no correlation between spirituality and academic achievement. Ashouri & Rasekhi (2016) used cross-sectional data from 60 medical students obtained through a three-part questionnaire: demographic characteristics, a religious beliefs questionnaire designed by Golriz and Baraheni, and the General Health Questionnaire (GHQ–28). The researchers found that while there was a statistically significant positive correlation between religious beliefs and mental health status, no correlation was found between spirituality and academic performance. Similar findings were reported by Jeynes (2005), which revealed that religious values had a positive association with reducing negative behaviors, such as smoking, alcohol and drug usage, whereas, no significant improvement was observed in students' GPA scores.

Modern Orthodox schools devote a significant portion of the school day to secular studies and have a general focus on the importance of academic achievement in all subjects. Adolescents in these schools are also inundated with exposure to secular values via the internet and social surroundings. This might enhance their desire to achieve in secular studies

but minimize their desire to achieve in Judaic studies and also have a negative effect on

their religiosity and spirituality. Further research should be done in order to assess whether

the correlation between religiosity or spirituality and academic achievement, whether

positive or negative, which is found among alumni of Christian schools, also exists in the

Jewish community.

Spiritual Struggle and Religiousness

As mentioned above, Beyerlein (2004) argued that religiousness and academic

achievement had a negative correlation because of the tension that adolescents may feel

between the religious values they are taught and their inner sense of beliefs. This source of

tension, often referred to in the literature on religion as a spiritual struggle, is worth

analyzing on its own with regard to its relationship with spirituality and religiosity,

notwithstanding its effect on academic achievement. Spiritual struggle is common

(Hunsberger et al., 1993), affecting all types of people, but the manner in which it affects

them can vary dramatically. Some may choose to become more passionately committed to

religion after encountering spiritual struggle, others might completely reject their religion,

and many will fall somewhere on the spectrum in between these two extremes (Batson et al.,

1993). Psychologists have outlined the following forms of spiritual struggle: interpersonal

struggle, where a person has a religious conflict with others in his or her community;

intraindividual struggle, where a person feels religion conflicts with his or her personal

beliefs or actions; and theological struggle, where a person has claims against or questions

about God (Pargament et al., 2005).

Spiritual struggles have been associated with negative outcomes such as poor physical health. For example, slower and less significant physical recovery after an illness or injury was found among those who experience spiritual struggle (Fitchett et al., 1999). Similarly, spiritual struggle has been associated with poor mental health. Exline et al. (2000) surveyed 200 college students and found that spiritual struggle was correlated with depression. Johnson and Hayes (2003) studied 5,000 college students and found spiritual struggle to be correlated with distress in many areas, such as relationship losses, sexual assault, homesickness, suicidal feelings and confusion about beliefs and values. Krause et al. (1999) analyzed data on 1,851 Presbyterian adults and found the negative mental health outcomes of spiritual struggle to be especially prominent among individuals in their twenties, with the correlation weakening as people aged, until they reached their eighties when the negative correlation no longer even existed. In searching for a reason to explain this negative correlation, Krause suggested that one might feel shame or guilt about one's spiritual struggle which in turn negatively impacts one's self-esteem and therefore, one's mental health (Krause, 1987). Considering the research cited above that lower levels of self-esteem can negatively impact one's level of religiosity or spirituality, Krause's hypothesis could similarly explain why there would be a negative association between spiritual struggle and religiousness. In a longitudinal study on 939 high school seniors, 336 of whom participated again two years after they graduated from high school, spiritual struggle was associated with decreased personal religiousness (Hunsberger et al. 2002).

In contrast to these findings, there were also empirical studies which showed that spiritual struggles were associated with positive outcomes such as stress-related growth

(Calhoun et al., 2000), high levels of self-esteem, low levels of prejudice and illness (Ventis, 1995), high levels of reasoning and differentiation skills (Hunsberger et al 1993) and academic achievement (Poythress, 1975). Batson et al. (1993) included spiritual struggle as an important element of a "quest orientation" towards religion, an orientation which led to positive outcomes such as open-mindedness, helping others in need and self-acceptance.

The theoretical underpinning of this positive correlation was based on Piaget's (1975) notion of disequilibria, which he believed is the basis of maturation. He explained that disequilibria occurs when one challenges his current beliefs, which ultimately leads to a deepening and broadening of one's belief system. Based upon this theory of Piaget, Fowler (1984) developed the six stages of faith development, where stage four is a period of critical analysis of one's religion and the following two stages are periods of growth in one's religious commitment. Similarly, theories in developmental psychology suggested that doubt and uncertainty lead to cognitive development (Acredolo & O'Connor, 1991) and psychotherapists argued that an unquestioning attitude towards one's beliefs promotes poor mental health (Ellis, 1980).

Ozorak (1989) noted that the outcome of spiritual struggle differed based on age and religion. In her analysis of 390 adolescents, she noted that academic achievement and religious change was more positively related to spiritual struggle among older adolescents and non-Jews. She suggested that perhaps in Jewish communities, where questioning of religion is valued, one's spiritual struggle had less of an effect on other constructs.Ventis (1995) similarly suggested that positive outcomes might result from spiritual struggle for those who considered religious doubts appropriate or positive, whereas negative results will

emerge from a spiritual struggle for those who considered religious doubts inappropriate. The research on spiritual struggle and its effect on religiousness of adolescents was limited due to the fact that most of the studies on the topic were done on samples of undergraduate Christian students (Hunsberger et al., 1993; Nielsen & Fultz, 1995). Further study on adolescents in Jewish Modern Orthodox high schools is needed in order to understand the type of impact, if any, spiritual struggle has on their religiosity and spirituality.

Connection to Role Models and Religiousness

Parents

Based upon their analysis of data from the National Longitudinal Study of Adolescent Health on approximately 20,000 adolescents in grades 7 through 12 during 1994 to 1996, McKune & Hoffmann (2009) found that religious homogeny between parents and children was the best predictor of high academic achievement, regardless of whether there was a high or low level of religiosity. Similarly, the lowest academic achievement resulted from a religious divergence between parents and children, with parents reporting a high level of religiosity and children reporting a low level. Religious homogeny between parents and children proved to be more impactful on achievement than family capital or religiosity. McKune & Hoffmann concluded that further research was needed to understand other implications of religious homogeny between parents and children, especially with regard to the religiosity and spirituality of adolescents. The JewBALE 2.0 proposed to address this exact question by asking the respondents to rate their level of belief and practice in relation to

their mothers' and fathers' level of belief and practice. In Myers' (1996) study of 2,033 married individuals and 468 of their collective offspring, he did find that when consistent religious messages were transmitted from both parents in a family, the children were more likely to internalize those messages. Only offspring ages 19 and above were interviewed. The present study sought to hear directly from adolescents during their high school years.

Even within an individual parent, there can still be various degrees of religious homogeny, as a person's belief or discussions involving religion may differ from his public and/or private practice of religion. This type of discrepancy might specifically impact an adolescent who is, by nature, sensitive to appearances of hypocrisy (Frankel, 2014). Bader & Desmond (2006) found that parents who gave "mixed messages" by having a higher level of belief than actual practice, resulted in a lower level of practice by the children. In contrast, parents with a higher level of practice than belief had no significant effect on their children's religiosity, when other factors were controlled for. In separate questions, the JewBALE 2.0 asked the respondents to rate their parents' level of belief and practice, in order to understand whether perceived parental hypocrisy had a significant effect on the religiosity of their children.

In addition to religious homogeny, the form of parents' religious transmission plays an important role in the religious and spiritual development of their children. Parents can choose to exert religious transmission through coercion, by forcing their children to perform specific rituals. Alternatively, parents can provide inspiration by acting as role models, where children choose to internalize the teachings of their parents and therefore want to participate in religion. Similarly, other children may choose to follow the religious practice and espouse

the religious beliefs of their parents in order to please them. Kay & Francis (1996) found that while parents could require their children to perform certain religious rituals, such as attending religious services, they could not demand that their children have certain beliefs. This explains why adolescents have been found to have a greater decline in religious beliefs than in religious practices. It also explains why religious practice has been found to decline as adolescents transition into adults and begin to have more freedom to disobey their parents' wishes (Francis & Brown, 1991). This wide spectrum of forms of parental influence on adolescent religiosity questions the significance of adolescents' scores on measures of religiosity, since it is unclear whether the religious actions are being performed out of coercion, inspiration or desire to be part of the family. Therefore, included in the JewBALE 2.0 is a question that asked respondents to what extent their religious practice is dependent on their desire to please their parents versus their belief in the religion itself. The detailed beliefs section in the JewBALE 2.0 should likewise be able to identify those whose practices are based on coercion rather than an innate belief in the system. For instance, someone with a high level of practice but a low level of belief is likely to have an alternative motivating factor behind his or her performance of religious rituals. Presumably, when religious practice in adolescents is motivated by coercion, it is less likely to be long-lasting.

Parents can convey their approach towards religious practice through their actions, whereas their approach to religious beliefs may only be apparent to their children through explicit conversation. A recent study of 124 British non-Jewish children ages 7 and 10 showed the children's belief in creationism versus evolution with regard to the origin of human, animal and plant life to be closely related to their parents' views. Interestingly,

however, the approach of the children was more closely related to the topic that was brought up in conversation with their parents than the actual belief of the parent (Tenenbaum & Hohenstein, 2016). This underscored the significant role that conversation with parents played in the spiritual development of the children. A survey of 3,370 American teens showed that both the Jewish respondents and the non-religious teens were the least likely to talk about God or other spiritual matters a few times a week. Only 9% of the Jewish and non-religious teens said that this applied to them, whereas 15-29% of teens of various Christian denominations said that they spoke about spiritual matters a few times a week (Smith & Denton, 2009). Although this study had only a .08% representation of Orthodox respondents, its finding that Jewish teens had the same scores in this category as the teens who didn't identify with a religion at all is striking and deserves further analysis. The JewBALE 2.0 therefore asked the students to rate the amount of time they spent talking with their parents about God, in order to determine whether these conversations take place in Orthodox homes as well as assess any impact God-related conversations might have on spirituality.

Rabbis and Teachers

In many studies, adolescents chose parents or relatives as their primary role models and television or sports celebrities as their secondary role models. In a 2007 study on public school students, only 2.7% viewed their teachers as role models, due to the lack of trust and caring that they attributed to them (Bricheno & Thorton, 2007). Research on Jewish students showed a drastically different finding. A total of 66% of the 355 alumni of Jewish day schools surveyed in Tannenbaum's 2007 study viewed their teachers as good role models and

59% of them believed that their positive interactions with their teachers positively

impacted their religious growth. As a result of the high regard with which Orthodox students

viewed their teachers, as well as the general conservative leanings of day school teachers,

there was a general "shift to the right'' phenomenon among day school alumni. Students

chose to adhere to their conservative teachers rather than their more liberal family tradition

(Heilman, 2005, Soloveitchik, 1994). After interviews with the principal, two teachers and

five parents from seven participating Modern Orthodox junior and senior high schools in the

New York metropolitan area, Charyten (1997) hypothesized that teachers in the Orthodox

community have replaced the role that family used to play in religious development and that

teachers have now become the main factor in determining the religiosity of their students.

This was in part due to the efforts that the teachers extended to the students which showed

that they cared about them as individuals and as part of the Jewish community, as well as the

relationships which they formed with them beyond the classroom. The present study sought

to understand the depths to which admiration for and relationships with teachers affect an

adolescent's spirituality and religiosity.

Teachers of adolescents in particular have a robust opportunity to impact the beliefs

and actions of their students. Adolescents typically undergo a crisis of identity where they

are unsure of who they are, what they believe in, and how to manage their relationships with

others, especially romantic ones. Reaching out to their parents, who may judge them unfairly

or offer unwanted advice, is often an unappealing choice. Their peers and even young adults

lack the experience necessary to provide them with meaningful guidance. This is where non-

parent older adults involved in the lives of adolescents, such as teachers, can step in and

effectively mentor them. The adolescents who have strained relationships with their parents may be especially interested in pursuing a deep relationship with their teachers (Rhodes, 2002). Ideally, a positive teacher-student relationship should facilitate a stronger parent-child relationship. The Rhodes et al. (2000) study of 959 young adolescents found that positive relationships with mentors led to increased connection, communication and trust in their parents. Perhaps, the safe relationship that adolescents have with mentors provides a "corrective experience" for them, where they realize that adults can be trusted and are therefore willing to reconsider their previously strained relationship with their parents. (Rhodes et al., 2006). The JewBALE 2.0 asked the respondents to rate their relationship with their parents as well as with their Judaic and general studies teachers separately. This should provide helpful information regarding where their sources of tension and inspiration are coming from, how the relationship with teachers and parents may interact, and whether these relationships change as the students mature throughout high school.

There is abundant information on the notion of "observational research" which indicates that people learn from the behavior of those with whom they frequently come in contact (Bandura, 1986). The derivative, "observational spiritual learning" has been shown to similarly apply with regard to the modeling of religious actions and spiritual beliefs (Oman & Thoresen, 2003). Yet, despite the recent increase in spirituality research over the past two decades, there is still minimal research on the interactive role that teachers, seemingly key figures in the observational spiritual learning of adolescents, can play on their students' religiosity and spirituality (Aoki et al., 2000). A study of 200 Christian college students showed that mentorship led to increased spiritual growth, whereas a lack of mentorship led to

regression in spirituality (Cannister, 1999). Similarly, Eisenberg (2010) studied 424 Jewish adolescents studying in a gap year program in Israel and found that positive relationships with high school teachers and rabbis led to stronger religious beliefs and actions, with no interaction effect for students coming from cohesive families. Eisenberg noted that there was a limitation on the measure which he used in order to assess family cohesion. The Family Environment Scale (Moos & Moos, 1981) which he used included 90 true or false questions, but looked only at the family unit as a whole and not the individual relationship between the parents and adolescents. As he noted, an adolescent can come from a cohesive family, but still have a strained relationship with one or more parents. The present study sought to address this limitation by asking about an adolescent's individual relationship with both his or her mother and father and offering answers on a 7-point Likert scale, allowing for more nuanced responses than a true or false format, as well as an opportunity to comment, in order to expand upon his or her responses.

Gender and Religiousness

It has long been presumed that women were more religious and spiritually connected than men, but the actual research proving that this was true was limited (Stark, 2002). Of the studies that have been done to give validity to this assumption, some found a general difference in religiosity between the genders, with females scoring higher than males (Argyle & Beit Hallahmi, 2013; Pew Research Center, 2016). This general finding was demonstrated in 48 out of 49 of the nations surveyed in the World Values Survey (Stark, 2002). A study on 13 to 15 year old Catholics proved this to be true for adolescents as well. Even though the

religious beliefs of both the boys and the girls were weakening at the same rate, the girls still scored higher in all aspects of Christian beliefs and practices than the boys (Kay & Francis, 1996).

More detailed studies sought to understand which aspects of religiosity and spirituality had different outcomes for the different genders. For example, 13 to 18 year old Protestant adolescent females scored higher than their male counterparts only on the private aspects of religion, whereas there was no difference between the genders in public aspects. This suggested that peer or familial pressure was an important factor in keeping the male adolescents' religious actions steady at a time when their religious beliefs and private religious actions were weakening (Nelson & Potvin, 1981). Smith et al. (2003) found that belief in the importance of religion and the act of daily prayer were specific areas of difference, with adolescent girls believing in the importance of religion and praying daily at a higher rate than boys.

Other studies looked to uncover the reason behind women's higher level of religiosity and found that parental influence was a determining factor. For instance, in Sweden, men in rural areas were found to be more likely to leave their religion and then come back to it years later. In contrast, women were more likely to stay committed to their religion without a time period of abandonment. The researchers found that the women's motivation for staying affiliated was due to their parents' involvement in religion (Zetterberg, 1952). Parental connection to religion has been shown to be relevant to adolescent females as well. In a study on Catholic adolescents, parental modeling of religious commitment showed a greater influence on females than on males (Suziedelis & Potvin, 1981). High socioeconomic status

of mothers has been shown to have a negative effect on their daughters' religiosity and no effect on their sons' religiosity. The effect that parents in general, and mothers specifically, had on their daughters' religiosity could be explained by the power-control theory (PCT) advocated by John Hagan which suggested that women in certain professions or in patriarchial families were more controlling of their daughters than of their sons. (Collett & Lizardo, 2009). Alternatively, others suggested that girls are socially conditioned to be more submissive and obedient than boys. Submission and obedience are known as traits which were more predictive of religiosity (Mol, 1985; Suziedelis & Potvin, 1981). This obedient nature could also explain why girls would be more likely to be influenced by their parents than boys. Some recent studies had opposite findings, and noted that boys were more affected than girls by their parents' religiosity (Flor & Knapp, 2001; Regnerus, 2003). This could be due to the fact that the patriarchal families and social conditioning of girls at home is no longer as prominent in the 21st century as it had been in the past.

Another prominent theory behind gender differences in religiosity is one that can withstand the changing times, as it was based on the biological differences between men and women. Looking at research on criminal behavior, Miller & Stark (2002) proposed that women were more averse to risky or impulsive behavior and therefore will remain more committed to their religious beliefs. In contrast, men were more likely to engage in activities which resulted in immediate pleasure without thinking of the religious values or long-term consequences which should prevent them from engaging in such behavior. Eliot (2009) noted the possibility that these differences and thought processes could stem from the different levels of testosterone and estrogen in adolescent boys and girls.

Gender can also be interrelated with other constructs, such as age or denomination. As mentioned above, Sloane & Potvin (1983) found no interaction effect between gender and age on religiosity. However, they did find an interaction effect between gender and denomination and age and denomination. Once other constructs are shown to be relevant to religious outcomes, it begs the question of whether gender is the direct or indirect cause of a correlation. Sherkat & Wilson (1995) surveyed over 1,000 high school students in 1969 and then again in 1973. They found that women were significantly more likely to switch to liberal denominations than men. Although they believed that gender had a positive indirect effect on denominational switching, they attributed the difference to women's higher participation rate in religious organizations and stronger levels of beliefs. This led them to conclude that the effect of gender on denominational switching was insignificant. The researchers were surprised by the fact that women were found to be heavier consumers of religious goods, more likely to prefer a bible-based religion, and yet still twice as likely to switch to liberal denominations than to conservative ones, especially considering the fact that the women expected heavy demands from religion. The authors questioned whether this peculiarity was unique to the generation being studied, since acting in a countercultural manner was characteristic of the adolescents and young adults of the 1960s, or whether this preference for a liberal yet demanding religion was a lasting trend for women. Contemporary research must be done in order to determine whether this nuanced and unexpected approach to religion is still relevant to 21st century adolescents.

As was the case with research on religiosity in general, the existing findings on gender and religion were more pronounced among Christians than Jews. For example, in

Sullins' (2006) review of the 1995-6 World Values Survey which contained data from 51 nations, the Jewish women did not score higher than their male counterparts in any area of religion, in contrast to the findings regarding Christian women. Whereas Christian women attended church at a higher rate than Christian men, Jewish women attended synagogue at a lower rate than Jewish men. Similarly, Christian women had a higher belief in the afterlife than Christian men, whereas Jewish women had a lower belief in the afterlife than Jewish men. Sullins found this phenomenon to be true as well when he reviewed the findings of the National Opinion Research Center's General Social Survey (GSS) (1972-2002). These surveys did not focus on Orthodox Jews and so further research must be done in order to understand if these findings regarding Jews are relevant to each denomination of Judaism.

Charmé (2006) studied the attitudes of 67 Reform and Conservative Jewish youth with regard to the role of gender in religion. He found that the boys were more likely to believe in the traditional gender roles and the girls were more likely to be sensitive to issues of sexism. Kosmin & Keysar (2000) did a longitudinal study on 1,466 Conservative Jewish youth. At the ages of 13 to 14, the girls placed a greater importance on being Jewish, having a kosher home and community involvement in charity. Four years later, 1,295 of these now 17 to 18 year old girls showed similar gender differences. Girls were significantly more likely to believe in the importance of Judaism, celebrating the Sabbath and holidays and receiving a Jewish education. Twenty-seven percent of the girls reported being more observant than they were four years ago, whereas 19% of the boys stated that they were more observant. Given the fact that Orthodox Judaism makes a significantly greater distinction between the genders than non-Orthodox denominations, and allows only males to participate

in certain rituals, it is conceivable that there would be an even starker difference in the way that Orthodox Jewish males and females relate to their religion than in the non-Orthodox denominations. Further research is needed in order to validate this assumption and highlight the extent of the theoretical difference.

Davidman (1991) studied the different paths that led non-Orthodox Jewish men and women towards pursuing an Orthodox lifestyle, and found that men were more motivated by an existential search and women more motivated by a significant other. Similarly, men placed more of an emphasis on belief and spiritual experiences, whereas women placed more of an emphasis on connection. These findings lend support to the assumption that Orthodox men and women will have different religious beliefs and actions, but this still needs to be verified by actual research on the Orthodox community, among those who grew up in Orthodox homes as well as on Orthodox adolescents, to see whether these findings are also demonstrable during the adolescent years.

Research on adolescent Modern Orthodox individuals has focused on the ritual act of prayer. Goldmintz (2011) found that girls were more positively involved in prayer, and suggested that this stemmed from their stronger emphasis on God as a loving Being who is responsive to their needs and desires, as opposed to the boys' focus on God as the ultimate authoritarian. Brand (2012) surveyed 1014 adolescents enrolled in Modern Orthodox schools, and similarly found that girls had a stronger personal connection with God, and therefore were less likely to feel alienated from prayer and more likely to petition God for their needs and praise and thank God. More expansive research is needed in order to understand the other areas within the religiosity and spirituality of Orthodox adolescents that may differ for

boys and girls. When the original JewBALE was distributed in 2009 to 1,253 adolescents enrolled in Modern Orthodox schools, females were found to have a higher level of belief than males, but there was no significant difference in level of practice (S. Goldberg, personal communication, December 2017). The females showed a consistent level of belief and practice throughout their high school years, whereas the males showed a decline. These important distinctions provided helpful feedback for schools looking to tailor their education to the spiritual needs of their diverse student body. Close to a decade later, as the modern world continues to change rapidly, this study will enable an understanding of whether these trends are still true today.

Religious Practices and Spirituality

Studies that relate to a general construct of religion without differentiating between the constructs of religiosity and spirituality may be of limited value. The independent nature of these constructs has been elucidated in research on religion only recently (Oman, 2013). Even Allport and Ross's groundbreaking distinction between intrinsic and extrinsic religiosity did not appropriately separate between the two constructs. Their definition of intrinsic religiosity related to the degree in which one's belief in religion motivated one's behavior. However, contemporary definitions of spirituality generally did not include references to behavior or practices, and defined the construct as having a relationship with a higher power that provided meaning and purpose to life (Hodge, 2003). Unfortunately, much of the current data on religion is still based on a conflation of these two constructs, where, for instance, the effects of spirituality are measured using tools which assess elements of

religiosity, such as church attendance (Del Rio & White, 2012). These methods should no longer be considered appropriate, as recent research has demonstrated that religiosity did not necessarily predict spirituality, and that spirituality could even be present in an individual who rejected a religious framework (Hodge, & McGrew, 2004 and 2006). Additionally, when the constructs were looked at independently, their outcomes were not identical. In a secondary analysis on a data set which included over 1800 respondents who were surveyed via a telephone questionnaire in 1995 and again in 2005, spirituality was found to have a stronger correlation with psychological well-being than religiosity (Greenfield et al., 2009). Furthermore, research on 367 adult men demonstrated that spirituality mediated the relationship between intrinsic religiosity and depression (Nelson et al., 2009). Perhaps then, research which conflates the two constructs mistakenly attributes certain outcomes to religiosity when in fact, these outcomes were only due to particular elements of spirituality. In a three year longitudinal study with 890 participants regarding the relationship between mental health and religiosity and spirituality, the researchers concluded that the two constructs, while both positively and independently related to mental health, were "not interchangeable indices of religion" (McIntosh et al., 2011).

Allport and Ross's distinction between intrinsic and extrinsic elements of religious orientation is still helpful, as it gives a deeper breakdown of the components of religiosity. Outcomes that apply to intrinsic religiosity may not apply to extrinsic religiosity. For example, in a study surveying 197 adolescents, intrinsic religiosity was significantly positively associated with psychological well-being, but extrinsic religiosity was not (Singh & Bano, 2017). Therefore the JewBALE 2.0 asked the respondents to evaluate their

motivations for religious practice, allowing them to choose from a selection of intrinsic

and extrinsic options. Given that the JewBALE 2.0 included 50 questions regarding

religiosity, it was impractical to assess the intrinsic versus extrinsic nature of each practice.

Firstly, the survey would become too burdensome in terms of the quantity of questions, and

secondly, it would be difficult for an adolescent to determine the extent to which each of

their religious practices was intrinsically versus extrinsically motivated. Therefore only one

general question was included to assess the nature of their religiosity as a whole.

Due to this perceived limitation of the JewBALE 2.0, the primary research question

of this proposal focused on the predictors of spirituality as opposed to the predictors of

religiosity. While spirituality has numerous components to it, it is not as easily divisible into

separate entities which are known to have opposing outcomes, such as intrinsic versus

extrinsic religiosity. Additionally, Modern Orthodox adolescents, especially those planning

to attend a gap-year program in Israel, might see themselves as taking part in the general

trend to increase in observance after their year in Israel (Berger et al., 2007). Perhaps then,

they did not feel particularly responsible to observe all the religious practices at this stage of

their lives, and therefore, the assessment of their beliefs rather than their practices, would

provide a more accurate understanding of their commitment to religion. Furthermore, today's

adolescents in general are increasingly accepting of the notion of spirituality without religion.

In a study on American adolescents, where 84% of respondents were affiliated with a

religious group, 46% said that it was "somewhat true" that they were spiritual but not

religious and eight percent said that it was "very true" (Smith & Denton, 2005). In a recent

study on 1257 Jewish graduates of Modern Orthodox high schools, Grumet observed a

similar yet slightly different phenomenon in the Jewish Modern Orthodox community. Grumet noted that 34% of the respondents to his online survey thought that there was no link between their religious beliefs and religious practices, allowing for the possibility of spirituality without religion as well as religion without spirituality. His findings led him to conclude that the graduates of Modern Orthodox high schools were largely "orthoprax", meaning that they were more committed to the traditional rituals than to the particular beliefs of traditional Orthodoxy (Grumet, 2018). His study was significantly limited due to the fact that he did not report the psychometric properties of the survey which he developed.

While it is necessary to examine religiosity and spirituality as independent constructs, it is important to note their overlapping and multi-faceted nature, allowing for the possibility that they could be mediators or predictors for each other. A study of 777 college students enrolled in a university where 82% of the students identified as Christian showed that spirituality was the strongest predictor of intrinsic religiosity and vice versa (Matthew et al., 2010). A foundation of Jewish tradition is that "the hearts are pulled after the actions", meaning that one's actions can impact one's beliefs, even if the original action was not performed for altruistic or religious reasons (Sefer HaChinukh, 16:2). According to this concept, extrinsic religiosity has the potential to impact spirituality, and therefore in this study, the construct of Jewish practices, whether intrinsic or extrinsic, was looked at as a potential predictor of spirituality.

CHAPTER III. RESEARCH QUESTIONS AND HYPOTHESES

Research Question: What is the profile of a student enrolled in a Modern Orthodox high school who has high levels of spirituality (Jewish beliefs)?

Hypothesis #1: High levels of self-esteem will predict high levels of spirituality when controlling for mental health.

Supplementary hypothesis #1a: The correlation between self-esteem and spirituality can be moderated by gender, with the relationship being stronger for females than for males.

Supplementary hypothesis #1b: The correlation between self-esteem and spirituality can be moderated by growth mindset, with the relationship being stronger for those with a growth mindset.

Hypothesis #2: High levels of academic achievement will predict high levels of spirituality.

Supplementary hypothesis #2a: The positive correlation between academic achievement and spirituality will be less significant for students with high intelligence.

Hypothesis #3: High levels of Jewish struggle will predict low levels of spirituality.

Supplementary hypothesis # 3a: Positive learning experiences and relationships with teachers will lessen the negative correlation between Jewish struggle and spirituality.

Hypothesis #4: Religious homogeny between adolescents and their parents will predict high levels of spirituality.

Supplementary hypothesis #4a: The positive correlation between parent-child religious homogeny and spirituality will be stronger for students who talk about God with their parents.

Hypothesis #5: Adolescent females will have a higher level of spirituality than adolescent males.

Hypothesis #6: High levels of religiosity will predict high levels of spirituality.

CHAPTER IV. METHODOLOGY

Participants and Procedure

A total of 31 Modern Orthodox High Schools in the United States were contacted for this study, with the request to have 50 high school students complete the measure. Schools were recruited via emails sent to the principals between December and January 2017. In order to motivate the schools to agree to distribute the measure, each school was offered a personalized summary of the relevant data by the end of the 2017-2018 school year. Participating schools were asked to email their parent body in order to explain the nature of the survey and to request that the parents contact the school if they preferred that their child not participate in the study. There was no penalty for the students who did not participate. At least one school offered participating students the option to log the time that they spent completing the scale towards their community service requirement. Students completed the measure anonymously online via Survey Monkey so the data was obtained directly from the participants. Each school decided whether they preferred to send out the hyperlink for the measure to their students to be completed on their own time, or whether to designate a class period for students to complete the measure in the presence of a teacher. Some schools offered the entire student body the opportunity to participate in the study, while others distributed it to certain classes at their discretion. Based on the general consensus in the field of psychiatry that 300 subjects is the minimum accepted sample size (Rouquette & Falissard,

2011), the goal for this study was to get at least that many responses. In actuality, 18

schools participated, resulting in a sample of 1341 high school students. Of those who

responded tothe demographic questions, 39% were male and 58% were female while 3%

classified themselves as "other." The participants were in grades 9 through 12 at the time of

responding to the survey with 26% in ninth grade, 15% in 10th grade, 24% in 11th grade and

33% in 12th grade. Just under two-thirds (65%) of respondents came from an Ashkenazi

background whereas 29% were from a Sephardic background and 7% classified as "other."

Most (88%) of the respondents came from a home where the family usually prayed in an

Orthodox shul, 5% in a conservative synagogue, 2% in a reform temple and 5% in "another"

type of prayer service. Ninety-seven percent of the students came from homes which kept

kosher and 88% came from homes which observed Shabbat. Five percent stated that they

lived in multiple homes with different standards of observance. Most of the respondents

(87%) came from homes where their parents were married to each other, 9% came from

homes where the parents were divorced, 1% had separated parents and 2% had one deceased

parent.

Measures

The updated version of Goldberg's Jewish Beliefs Actions and Living Evaluation

scale, referred to here as the JewBALE 2.0 was used in coordination with the DUKE Health

Profile and a Socio-Religious Scale of Personal Beliefs in order to collect the data. The

JewBALE 2.0 sought to revise the original JewBALE in order to eliminate redundancies,

clarify some ambiguous phrases, expand the demographic section, and explore the reasoning

behind adolescents' actions. For instance, the scale attempted to uncover the reasons why the participants believe or act as they do. If a student responded that they sent text messages on Shabbat, then they were given follow-up questions on a 7-point Likert scale regarding their motivation behind texting on Shabbat. The scale also sought to uncover what the students who did not identify with mainstream Modern Orthodox Jewish beliefs or communal norms actually believed themselves. For instance, the survey contained questions that measured what the students believed regarding the role of women in Jewish leadership positions and the inclusion of homosexual couples in Orthodox institutions. The survey condensed the original version and now included 167 total questions: 33 regarding belief, 50 regarding actions, 40 regarding demographics, 27 regarding personal beliefs and the 17 item DUKE Health Profile.

The digital survey began by asking students to indicate whether or not they consented to participate in the study. It then continued with the following four general sections, each comprised of distinct subcategories.

1. JewBALE 2.0

    A. Total Beliefs (33 items)
   - Divine Providence with Relation to the World (5 items)
   - Divine Providence with Relation to the Individual (4 items)
   - Fear/Love/Awe of God (6 items)
   - Joyful/Meaningful Life (4 items)
   - Rabbinic Authority (4 items)
   - Divinity/Truth of Torah (3 items)
   - Relationship to Israel (4 items)
   - Outlook on Secular Studies (3 items)

B. <u>Total Actions (50 items)</u>

- Community Service (2 items)
- Prayer (10 items)
  - Blessings (2)
  - Formal Prayer (6)
  - Informal Prayer (2)
- Holiday Observance (7 items)
- Interpersonal Relations/Personal Character Traits (8 items)
- Kashrut (4 items)
- Study of Torah (4 items)
- Modesty (5 items)
- Sabbath Observance (8 items)
- Gender Specific Questions (3 items)
  - Boys (2)
  - Girls (1)

2. <u>Demographics</u> (40 items)

- General: name, grade, age, school, location, camp (6 items)
- Family: background, relationships (10 items)
- School: relationship with teachers, connection to learning, grades, tracking (14 items)
- Self-concept (5 items)
- Technology: use of, bullying (4 items)
- Aspiration to be a Jewish communal leader (1 item)

3. <u>Socio-Religious Scale of Personal Beliefs</u> (27 items)

- Future Plans (2 items)
- Women (5 items)
- Sexuality and Family Values (4 items)
- Western Values (3 items)

- Judgment (1 item)
- Social Media (2 items)
- Influences (6 items)
- Growth Mindset (4 items)

4. <u>Duke Health Profile</u> (17 items)
   - Physical Health (5 items)
   - Mental Health (5 items)
   - Social Health (5 items)
   - Perceived Health (1 item)
   - Disability (1 item)

Wherever possible, questions were asked on a 7-point likert scale, offering the student the chance to choose between 0 (completely disagree) and 6 (completely agree) regarding their commitment to a certain belief or practice. The study concluded with a feedback section, offering students the opportunity to share any concluding thoughts that they had regarding the measure.

The 83 items in the beliefs and actions section of the JewBALE 2.0 was based on the original 174 item JewBALE created in 2006. The original JewBALE was designed with input from religious teachers and laypeople. Its validity was supported by a review of 10 experts in Jewish law. These experts organized the questions into distinct subscales which represented a certain construct and also eliminated questions that were considered nonessential or that did not clearly fit into one subscale. The JewBALE 2.0 kept all the original subscales, except for one titled 'Personal Character Traits' which was deleted due to its sophisticated nature that was deemed more appropriate for an adult population. No new subscales were added to the

belief and actions section, and all original subscales were pared down in order to eliminate

redundancies. The JewBALE 2.0 was also sent to 10 experts in Jewish law to validate that

the questions in each subscale did in fact measure one's commitment to that construct.

Shortening the belief and action portion of the measure allowed for the expansion of the

demographic section, which now included a robust 40 items, allowing for a better

understanding of which factors in adolescents' home, school and personal life played an

interactive role in their religious and spiritual outcomes. Two new sections were added in

order to be able to appreciate further nuances in adolescents' religious experiences. A 27-

item Socio-Religious Scale of Personal Beliefs was created in order to assess the impact that

exposure to secular culture had on their personal beliefs. This scale was intended to uncover

the extent to which there was a conflict between adolescents' personal and religious beliefs

and what impact this had, if any, on their religious practices. Finally, the 17-item Duke

Health Profile was included in order to uncover potential relationships between the mental,

physical and social health of adolescents and their religious and spiritual outcomes. Using

statistical and clinical rationale, this scale was derived from the 63 item Duke-UNC Health

Profile (DUHP), resulting in a short survey which measured 10 valid scales.

The risks of this study were minimal. Since the participants' names were not recorded

and the data was anonymous, there was no risk of violating the students' privacy. After

piloting the measure on 10 high school students, it became apparent that some students felt

confused regarding their commitment to Jewish beliefs and actions upon completing the

survey. To address this potential risk, an email address was provided to the survey

participants, in the consent form and at the conclusion of the survey, so that the students

could seek guidance regarding their experience as a study participant. Additionally, all principals were encouraged to have Judaic studies teachers reach out to the students in the days following the distribution of the measure, to offer them the opportunity to discuss any concerns that the study may have brought to the students' attention.

Data from the scale was analyzed with SPSS Version 21. Reliability tests were run in order to assess internal consistency of the subscales of the JewBALE 2.0. Descriptive analyses were conducted to check for outliers and any other abnormalities in the dataset so that they could be removed as needed. Principal components analysis with oblimin rotation were used in order to understand the factors that underlay the overall questionnaire. An independent sample t-test was conducted in order to determine significant gender differences. Intercorrelations of all the variables as well as hierarchical multiple regressions to control for certain variables were used in order to develop a model for predicting a particular variable. One and two-way ANOVAs were used to assess the impact that a particular variable had on the variance in adolescents' spirituality as well as homogeny with their parents.

The following six variables were examined in the regression models: self-esteem, academic achievement, Jewish struggle, religious practices, gender and relationship with role models. As explained in the literature review above, self-esteem refers to the manner in which one evaluates himself or herself. It can be measured in general or in specific component parts. Dweck's research highlighted the importance of including one's potential for growth as part of one's self-evaluation. Thus, self-esteem was measured using a combination of the following three tools:

a) The Duke Health Profile to measure general self-esteem

b) The self-assessment of one's level of intelligence in and outside of school for academic self-esteem

c) The self-assessment of one's growth mindset

Academic achievement was measured by the student's report of his or her grades in Judaic and general studies. Intelligence was considered as a potential mediator of this relationship. Intelligence was measured using a student's placement in an academic track.

A religious or spiritual struggle refers to a feeling of tension between one's personal belief and what one's religious role models espouse as the true spiritual beliefs or religious actions. This source of tension is widespread among adolescents, but may have drastically opposing outcomes based on whether one's family, school and community value religious questioning. Jewish struggle was measured using the Socio-Religious scale of personal beliefs.

Relationships with teachers and Judaic studies learning experience were considered mediators of the relationship between Jewish struggle and spirituality. The subset of relationships with teachers was measured based on whether the respondents admired their Judaic studies teachers, felt that their Judaic studies teachers cared about them personally, and whether they felt that they had a good relationship with their Judaic studies teachers. Learning experience was assessed using the respondents' general feelings about the class and the relevance of the classroom learning.

Religious homogeny between parents and children was measured with questions that asked the students to rate the differences, if any, between the level of belief and practice that

their parents had with their own level of beliefs and practices. Jewish practices were

measured using the Total Actions subscale of the JewBALE.

CHAPTER V. RESULTS

Research Question: What is the profile of a student enrolled in a Modern Orthodox high school who has high levels of spirituality (Jewish beliefs)?

Hypothesis #1: High levels of self-esteem will predict high levels of spirituality when controlling for mental health.

A hierarchical multiple regression was conducted to determine whether high levels of self-esteem predict high levels of spirituality while controlling for mental health. The model was significant, with self-esteem significantly predicting spirituality while controlling for mental health, $R^2\Delta=.04$, $F(2,882)=36.17$, $p<.001$. Four percent of the variance of spirituality was accounted for by self-esteem while controlling for mental health.

Supplementary hypothesis #1a: The correlation between self-esteem and spirituality can be moderated by gender, with the relationship being stronger for females than for males.

Moderation analysis was conducted to determine whether gender moderated the relationship between self-esteem and spirituality. It was conducted by running a multiple regression. The first step included self-esteem and gender and the second step included the interaction between self-esteem and gender. The dependent variable was total spirituality. There was no significant moderation effect as there was no increase in the variation explained by the addition of the interaction term.

Supplementary hypothesis #1b: The correlation between self-esteem and spirituality can be moderated by growth mindset, with the relationship being stronger for those with a growth mindset.

Moderation analysis was conducted to determine whether growth mindset moderated the relationship between self-esteem and spirituality. A multiple regression was conducted where self-esteem and growth mindset were entered into the first step and the interaction between self-esteem and growth mindset were entered as the second step. The dependent variable was total spirituality. There was no significant moderation effect as there was no increase in the variation explained by the addition of the interaction term of self-esteem and growth mindset.

Hypothesis #2: High levels of academic achievement will be correlated with high levels of spirituality.

A Pearson-product moment correlation was conducted to look at the relationship between spirituality and Judaic and secular studies grades. There was a weak positive relationship between Judaic studies grades and spirituality, $r(955)=.11, p<.001$. The higher the Judaic studies grades, the higher the spirituality. There was no relationship between secular studies grades and spirituality, $r(957)=.04, ns$.

Supplementary hypothesis 2a: The positive correlation between academic achievement and spirituality will be less significant for students tracked in honors with high intelligence.

A Pearson-product moment correlation was conducted to look at the relationship between spirituality and Judaic and secular studies grades for those who were and were not tracked in honors in Judaic studies classes. Once the file was split, there was no longer a significant relationship between Judaic studies grades and spirituality for students tracked in honors.

Hypothesis #3: High levels of Jewish Socio-Religiousness will predict low levels of spirituality.

A multiple regression was conducted to determine whether women's participation, Jewish identity, moral relativism, drug use, homosexual couples and premarital socialization predict overall levels of spirituality. The overall model was significant, $R^2=.40$, $F(6,633)=69.41, p<.001$. Forty percent of the variance of spirituality in adolescents can be accounted for by the combination of the Socio-Religious scales of women's participation, Jewish identity, moral relativism, drug use, homosexual couples and premarital socialization. The significant predictors were women's participation ($p<.001$), premarital socialization ($p<.001$), Jewish identity ($p<.001$) and drug use ($p<.001$). Each of those were negative predictors such that the higher the levels of each of the socio-religious scales, the lower the levels of spirituality.

Supplementary hypothesis # 3a: Positive Judaic studies learning experiences and relationships with Judaic studies teachers will lessen the negative correlation between Jewish socio-religiousness and spirituality.

A hierarchical multiple regression was conducted to determine whether Jewish socio-religious scales predict spirituality while controlling for positive Judaic studies learning experiences and relationships with Judaic studies teachers. Positive Judaic studies learning experiences and relationships with Judaic studies teachers were entered as the first step. The combination of socio-religious scales including women's participation, moral relativism, Jewish identity, drug use, homosexuality, and premarital socialization were entered as the second step and the dependent variable was adolescent spirituality. Positive Judaic studies learning experiences and relationships with Judaic studies teachers significantly predicted overall spirituality, $R^2=.40$, $F(8,629)=101.28$, $p<.001$. Forty percent of the variance of adolescent spirituality can be explained by the combination of positive Jewish studies learning experiences and relationships with Judaic studies teachers. When adding in the socio-religious scales, the model was still significant $R^2=.56$, $F(8,629)=101.28$, $p<.001$. An additional 16% of variance of spirituality was explained by the addition of socio-religious scales to Judaic studies learning experiences and relationships with Judaic studies teachers. The strength of the relationship of socio-religious scales on spirituality was reduced once controlling for positive Judaic studies learning experiences and relationships with Judaic studies teachers.

Hypothesis #4: Religious homogeny between adolescents and their parents will predict high levels of spirituality.

A one-way ANOVA was conducted to determine whether there were differences in the level of adolescent spirituality based on how the adolescents compared their beliefs to

their parents' beliefs. There was a significant difference overall, $F(4,944)=104.74, p<.001$.

Post-hoc tests were conducted to locate and examine the differences. There were differences

between the weaker adolescents (M=4.10, SD=1.28) and the stronger (M=5.86, SD=.74) and

similar ones (M=5.69, SD=.85). The adolescents who said that their Jewish beliefs were

weaker than their parents' beliefs had lower belief scores than those who said they were

stronger or similar. Figure 1 below depicts the group differences.
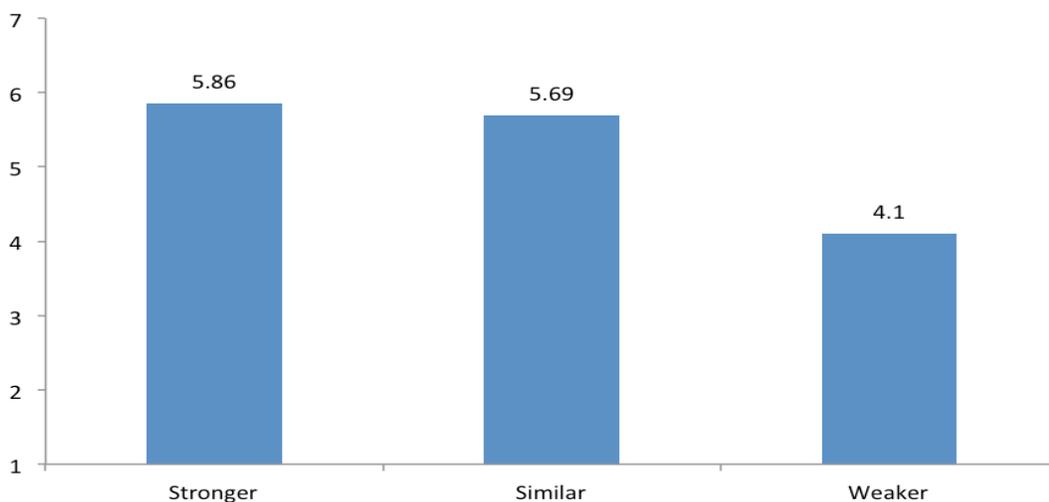
Figure 1. Differences between adolescent spirituality based on religious homogeny with

parents.

Supplementary hypothesis #4a: The positive correlation between parent-child religious homogeny and spirituality will be stronger for students who talk about God with their parents.

In order to determine whether the differences between parent-child religious

homogeny and spirituality were stronger when the adolescents talk about God with their

parents, a two-way ANOVA was conducted. The independent variables were adolescent

beliefs in comparison to their parents' beliefs and whether or not they spoke to their

parent(s) about God. The dependent variable was total spirituality of the adolescents. The

individual effects of adolescent beliefs in comparison to their parent's beliefs and whether or

not they spoke to their parent(s) about God were significant: For adolescent beliefs in

comparison to their parents, $F(4,939)=98.75$, $p<.001$ and for talking to their parent(s) about

God, $F(1,939)=7.92$, $p<.01$. There was no significant interaction effect between adolescent

beliefs in comparison to their parents and whether or not they spoke to their parent(s) about

God on their level of spirituality. This implied that no matter whether the adolescents' beliefs

were stronger than, similar to, or weaker than their parents' beliefs, those adolescents who

talked with their parents about God had higher levels of spirituality across the board. Figure 2

below depicts the total belief scores for the adolescents who did and did not speak to their
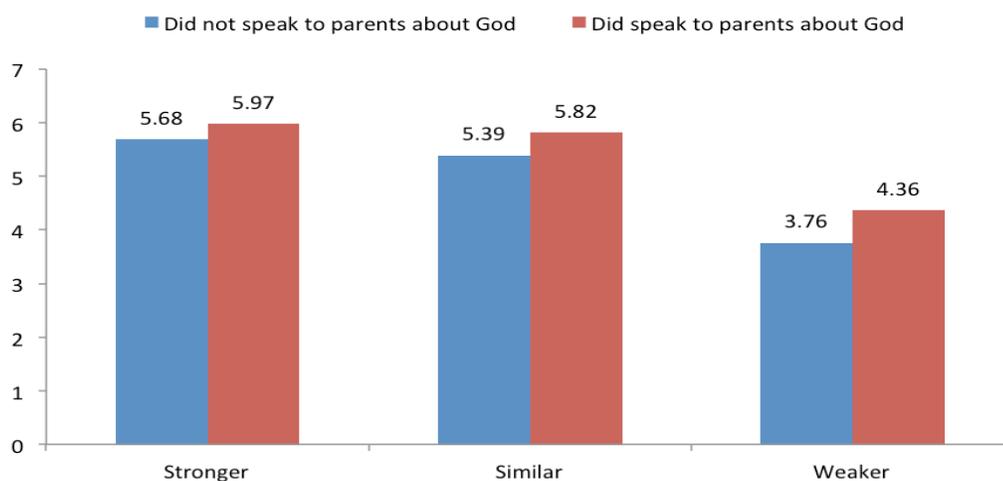
parents about God.

Figure 2. Differences between adolescents who did and did not speak with their

parents about God, their level of religious homogeny with parents, and their overall

spirituality.

Hypothesis #5: Adolescent females will have a higher level of spirituality than adolescent males.

An independent sample t-test was conducted to look at spirituality differences between adolescent females and adolescent males. There were significant differences between males and females, $t(706)=-2.96$, $p<.01$. Females had higher levels of spirituality (M=5.48, SD=.99) than males (M=5.26, SD=1.26). Figure 3 below depicts the gender differences.
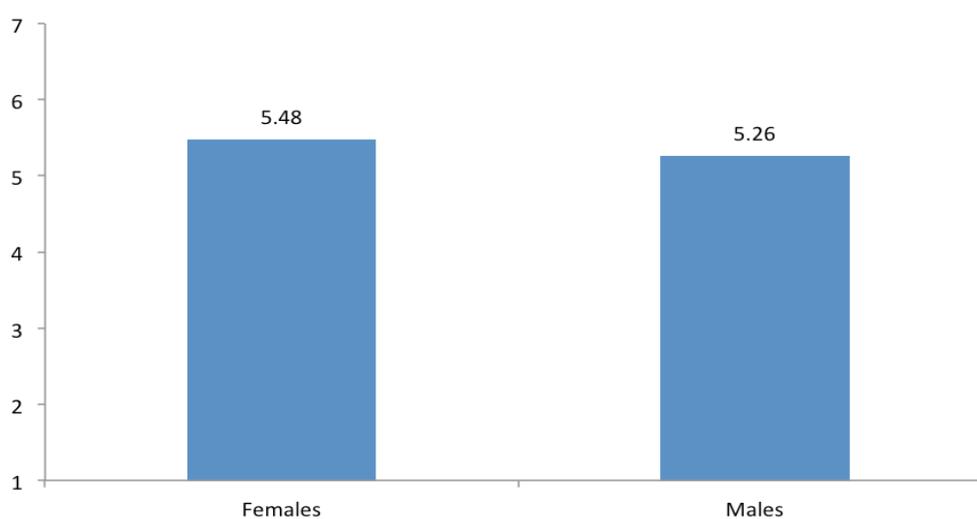
Figure 3. Gender differences in spirituality.

Individual t-tests were conducted to look at adolescent gender differences in each of the individual subscales of spirituality. The individual subscales that were compared were Divine Providence with relation to the world, Divine Providence with relation to the individual, Fear/Love/Awe of God, Joyful/Meaningful life, Rabbinic Authority, Divinity/Truth of Torah, and Relationship to Israel. There were significant gender differences for all of the subscales except for Rabbinic Authority and Divinity/Truth of Torah: for Divine

Providence with relation to the world, $t(686)=-3.22$, $p<.001$; for Divine Providence with

relation to the individual, $t(698)=-3.08$, $p<.01$; for Fear/Love/Awe of God, $t(726)=-2.63$,

$p<.01$; for Joyful/Meaningful life, $t(756)=-3.82$, $p<.001$; and for Relationship to Israel,

$t(732)=-3.68$, $p<.001$. In each of the significant spirituality subscales, females had higher

levels of spirituality than males. Table 1 and Figure 4 below display the mean differences.

Table 1. *Mean gender differences in the spirituality subscales.*

Subscale	Gender	Mean	SD	N
*Divine Providence with Relation to the World***	*Male*	*5.58*	*1.57*	*394*
	Female	*5.88*	*1.19*	*586*
*Divine Providence with Relation to the Individual**	*Male*	*5.44*	*1.66*	*394*
	Female	*5.75*	*1.28*	*583*
*Fear/Love/Awe of God**	*Male*	*5.10*	*1.52*	*395*
	Female	*5.34*	*1.24*	*584*
*Joyful/Meaningful Life***	*Male*	*5.33*	*1.20*	*394*
	Female	*5.62*	*1.03*	*583*

Rabbinic Authority	Male	4.60	1.35	392
	Female	4.62	1.24	584
Divinity/ Truth of Torah	Male	5.47	1.59	392
	Female	5.60	1.29	583
Relationship to Israel**	Male	5.26	1.23	390
	Female	5.54	1.03	582

*=p<.01

**=p<.001
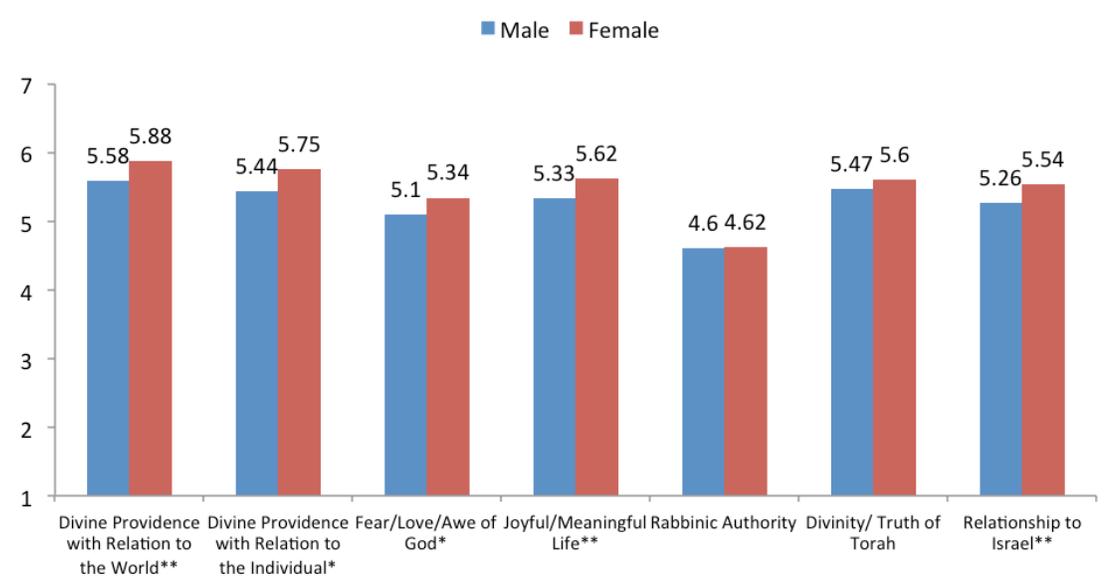
Figure 4. Mean gender differences for the individual subscales of spirituality.

Hypothesis #6: High levels of religiosity will predict high levels of spirituality.

A linear regression was conducted to determine whether religiosity predicts spirituality. The model was significant, $R^2=.60, F(1,1022)=1540.34$, $p<.001$. Sixty percent of the variance of spirituality was explained by religiosity. A multiple regression was conducted to determine whether the subscales of religiosity predicted spirituality. The subscales of religiosity were community service, tefilla, brachot, holidays, interpersonal relations, kashrut, study of Torah, modesty, and Shabbat. The overall model was significant, $R^2=.67, F(9,989)=227.60, p<.001$. Sixty-seven percent of the variance of spirituality was explained by the combination of the religiosity subscales. The subscales that were significant predictors were community service ($p<.01$), tefilla ($p<.001$), brachot ($p<.001$) holidays ($p<.001$), study of Torah ($p<.001$), and Shabbat ($p<.01$). The subscales that were not significant predictors were interpersonal relations, kashrut and modesty.

CHAPTER VI. DISCUSSION

Self-Esteem

In the analysis of the relationship between self-esteem and spirituality, mental health was controlled in order to isolate the effect of self-esteem on spirituality from the potential effect of other mental health factors on spirituality. This was based on the literature which suggested that self-esteem might be the determining factor for the positive relationship between religiousness and mental health (Ellison et al., 2001), as well as the literature which suggested that the relationship between self-esteem and religiosity will no longer be significant once changes in mental health are controlled for (Heaven & Ciarrochi, 2007). In this case, when controlling for mental health, self-esteem was found to be a significant predictor of spirituality. This finding adds to the current body of literature on self-esteem and religion on numerous levels. Firstly, it adds to the literature supporting a positive relationship between self-esteem and religiousness as opposed to the minority of studies suggesting a negative relationship or none at all. Unlike the prior studies in the Christian community which showed this correlation to be true only in studies with small sample sizes, this study demonstrated that the correlation in the Jewish Modern Orthodox community is maintained for larger sample sizes as well. Additionally, while Eisenberg's (2010) study demonstrated this positive correlation within the 424 Modern Orthodox adolescents studied, this larger scale study offers more statistical reliability to the finding. Eisenberg's study was in reference to religiousness, looking at elements of religiosity and spirituality together. This

study shows that the relationship is true as well when isolating the construct of spirituality. Finally, this study offers real data, through the use of the hierarchical multiple regression statistical tool, to support the suggestion that the direction of influence in this correlation can also stem from self-esteem and its effect on religiousness.

In prior studies which recorded a positive correlation between self-esteem and religiousness, the direction of the influence was sometimes assumed without the statistical methods to support it. For instance, Sedikides and Gebauer (2010) assumed that self-esteem was dependent on religiousness because they noticed that the positive correlation was found to be stronger in more religious areas. This assumption led to hypotheses regarding the power of a religious community, arguing that since the religious community valued those who were more religious, religiousness can be a means to positive self-esteem. However, there might have been other factors in the religious areas which contributed to the strength of the correlation. Similarly, Francis et al. (2001) assumed that the correlation they found between self-esteem and spirituality among Scottish adolescents stemmed from the power of religious belief, with an image of a loving God playing a similar role to that of a supportive community, and leading to an enhanced level of self-esteem. This assumption was based on the fact that there was a positive correlation between self-esteem and images of a loving God, whereas there was a negative relationship between self-esteem and images of a wrathful God. However, this was not a statistically reliable position, since looking at self-esteem as the causal factor in this relationship could similarly explain this phenomenon.

Among the studies which did use regression analysis to statistically analyze the direction of the influence between the two variables, the research question typically focused on the impact of religion on self-esteem and not the reverse. When finding that religion did

predict self-esteem, more expansive theories about the power of religion in general were posited. For example, it could be argued that since spirituality leads people to believe that God loves them and that their creation was purposeful, this may lead to an increased level of self-esteem (Ball et al., 2003). The research question on the JewBALE 2.0 data sought to add to the current literature by questioning whether the direction of influence in this correlation could also stem from self-esteem. In fact, analysis of this data showed that spirituality was dependent on self-esteem, and therefore new theories stemming from the potency of self-esteem must be explored to understand why self-esteem is a means to spirituality.

Perhaps self-esteem enables a person to feel ready to meet high demands and that equips an adolescent with the confidence needed to feel prepared to take on the expectations that come along with religious and spiritual commitment. Interestingly, this logic was used to support the cases where an inverse relationship was found between self-esteem and religiosity. For instance, when Mormon adolescents were shown to have lower self-esteem than a national sample of adolescents, it was inferred that the high demands of their religion led to a decreased level of self-esteem, with the adolescents feeling inadequate when unable to meet the multitude of demands their religion placed upon them. This rationale was also used to explain the high rate of antidepressant medication prescribed in the predominantly Mormon state of Utah (Chadwick 2010). However, as mentioned above, this was not a statistically reliable method of determining which element in the correlation was dependent on the other. There may be a factor, unrelated to religiousness, such as the culture of competition and perfectionism, which led Mormon youth towards low self-esteem and, in turn, led to low level of religiousness and high levels of depression. This analysis of the JewBALE 2.0 data emphasizes the importance of not making assumptions regarding the

direction of the correlation between self-esteem and religion, and also highlights the importance of self-esteem in the religious development of adolescents.

Growth mindset proved not to have an interactive effect on the positive relationship between self-esteem and spirituality. It was hypothesized that growth mindset might help adolescents with low self-esteem overcome the otherwise negative association with spirituality. However, the data did not support this, suggesting the limits of the otherwise positive impact that growth mindset could have on adolescents.

Gender

The findings with regard to the impact of gender on the relationship between self-esteem and spirituality were similar to those of Smith et al. (1979) in that the hypothesis that females would have a stronger correlation between self-esteem and religiousness was not supported by the data analysis. However, Smith's study showed that the males had a stronger correlation, while the JewBALE 2.0 showed no difference between the genders in terms of strength of this correlation. As predicted, the female adolescent participants in the JewBALE 2.0 did have a higher level of spirituality than their male counterparts, but this did not lead to an impact on the relationship between self-esteem and spirituality. This gives support to the premise mentioned above, that the direction of the influence stems from self-esteem rather than spirituality. Consequently, changes in spirituality do not necessarily affect self-esteem.

In the JewBALE 2.0, adolescent females were found to have a higher belief than adolescent males in numerous subcategories within spirituality, such as Divine providence with relation to the world, Divine providence with relation to the individual, fear/love/awe of God, joyful/meaningful life and the religious significance of the State of Israel. These

findings were helpful in adding further validity to the limited research regarding the premise that women were more spiritually connected than men. Consistent with research on Protestant adolescents, this data highlighted the affinity that female adolescents had towards the private aspects of religion. Consistent with data on Conservative Jewish youth, the differences between the genders were statistically significant, but the actual gap between the scores of males and females seemed to be relatively narrow. These findings were also consistent with data from when the original JewBALE was distributed, indicating that even with the changing of the times, and perhaps a shift towards a more egalitarian approach for women's education, there still is a difference between the way adolescent females and males approach spirituality. The most significant contribution of this research is that, unlike other broad studies, this data addresses which aspects of religion, and even which subsets within spirituality, adolescent females embraced more than males.

The two subscales for which there was no statistical significance between the scores of the females and males were Rabbinic authority and Divinity/truth of Torah. The fact that Rabbinic authority stood out as an exception is noteworthy, but seems self-explanatory. Perhaps females felt less connected to the all-male rabbinic system inherent in Orthodoxy, and therefore they were less committed to this subscale of spirituality than to most others. Interestingly, males also scored much lower in their belief in Rabbinic Authority than they did in any other subset of spirituality. The notion of submitting one's autonomy to the judicial system of the rabbinate seems to be more difficult for adolescents in general to relate to today, but especially for females. It is not clear why Divinity/truth of Torah was the other area where females did not score higher than males and whether or not this is connected to the same issue as Rabbinic Authority.

Jewish Struggle

As anticipated, the struggles which adolescents felt between the religious norms accepted by the leadership of the Modern Orthodox community and the adolescents' own beliefs played a significant role in the students' commitment to religious beliefs. The specific subscales of women's participation, premarital socialization, Jewish identity and drug use were negatively associated with spirituality, such that students' struggles in any of these areas led to a decreased level of spirituality. It is possible that the subset of women's participation should be looked at differently than the other subsets which may be more objective in terms of their antithesis with communal norms. There is no obvious argument to make to counter the importance of being proud of one's Jewish identity and being committed to the straightforward halachic guidelines against premarital physical contact and drug use. However, the evolving role of women in general society, their increased attendance at synagogue services, and the amorphous halachic status of positions such as synagogue president begs the question of whether there is room to adjust the current norms. Perhaps this should be discussed due to the feedback that adolescents are hindered in their spiritual beliefs because of the frustrations they feel with the current status of women's participation in synagogue services and religious leadership.

In contrast to the subscales mentioned above, no correlation was found between those who struggled with the lack of acceptance of homosexual couples in the Orthodox community and a decreased level of spirituality. Perhaps this is a newer issue only beginning to concern the current generation, as opposed to the questions with which Orthodox teens have struggled for generations, such as the ban on premarital physical contact. We might then expect a struggle with lack of acceptance of homosexual couples to affect students'

spirituality in the coming generations. Alternatively, it is possible that teachers approach the issue of struggles relating to homosexuality in a different manner than all other spiritual struggles. Often teachers provide explanations and motivational interpretations in order to respond to students' questions about laws such as premarital touching or issues such as drug use. These topics are often discussed in class, and "inspirational" speakers are even be brought in to address the entire school body on these topics. However, when faced with questions about homosexuality, Orthodox institutions seem to take a drastically different approach. The conversations take place on a much smaller scale, teachers may even validate the students' questions and cry together with the students, instead of trying to provide answers. Based on the data showing no correlation between struggles with homosexual acceptance in the Orthodox community and students' levels of spirituality, it can be suggested that this quieter and softer approach is the more effective response when students convey their struggles with religion. Perhaps an empathic, listening ear is what, in the long run, will allow students to maintain a high level of spirituality, notwithstanding their inner struggles.

As predicted, positive Judaic studies learning experiences and relationships with teachers significantly lessened the impact that a religious struggle will have on one's beliefs. This supports the conjecture described above with regard to struggles with homosexuality. Perhaps questions which students have about religion do not necessarily need to be answered directly or resolved in order for them to advance in their spiritual commitment. Rather, positive relationships with religious role models and enjoyable Judaic studies learning environments are enough to counter the otherwise harmful effects of spiritual struggles. Thus, teachers do not necessarily need to provide answers to some of these sensitive

questions, but rather should provide an inspirational framework to Judaism which enables the students to feel comfortable within the system, notwithstanding their questions.

Religious Homogeny With Parents

The significant power of religious homogeny between parents and children has been demonstrated with regard to a positive impact on academic achievement (McKune & Hoffmann, 2009). The JewBALE 2.0 highlights how religious homogeny in relation to beliefs will also lead to high internalization of Jewish beliefs. This means that when adolescents identify with their parents' approach to religion, they are more likely to internalize the beliefs which their parents are trying to impart. Therefore, parents might want to choose their words carefully when discussing matters of religion, to ensure that their children can identify with what they are saying. Notably, the adolescents in this study who spoke about God with their parents had a higher level of spirituality, regardless of whether their parents had a strong internalization of Jewish beliefs or not. This could be a relevant finding for those parents with a lower level of belief who want their children to have a high level of belief. Instead of shying away from religious topics, as they might have been inclined to do, this research suggests that they should actively look for opportunities to speak about God with their children. This also reminds all parents interested in their children's spiritual growth to be cognizant of speaking about spiritual matters and not simply assuming that implicit messages will be understood. Conversations with parents have been demonstrated to be influential on their child's conceptual development (Harris, 2012) and epistemological stances such as whether truth is absolute or subjective (Luce et al., 2013). This analysis of the JewBALE 2.0 data expands these findings to the realm of spirituality.

Academic Achievement

There is no clear consensus regarding the relationship between religiousness and academic achievement. Some suggested that an increased level of religious commitment encouraged adolescents to strive high in their academic pursuits (Regnerus, 2003), while others maintained that the opposite is true, and that a firm commitment to religion caused adolescents to be wary of committing to serious academic study (Beyerlein, 2004). A third group of researchers believed that no such relationship existed between these two variables, because the real factors impacting religiousness are cognitive style and intelligence level, which are not necessarily equivalent to academic achievement (Pennycook et al., 2012, Bertsch and Pesta, 2008). The majority of studies in this arena focused on the impact of religiousness, perhaps motivated by a search to uncover the benefits or risks of religiousness. This study focused on the reverse: the impact of academic achievement or failure on religious beliefs. When students receive high grades in Jewish studies classes, will they be more motivated to internalize Jewish beliefs? As Yeshiva Day Schools seek to educate but also to inspire their students, it is crucial to analyze the impact that receiving low grades in Judaic studies might have on students' levels of spirituality.

Not surprisingly, in this study, academic achievement in general studies was found to have no impact on students' spirituality. Yet, scores in Judaic studies classes did have a positive, albeit weak, correlation with spirituality. Perhaps, as hypothesized, when students received a good grade from their Judaic studies teacher, they were given an additional boost of motivation to commit to Jewish beliefs. Conversely, when students received a poor grade in a Judaic studies class, their motivation to internalize Jewish beliefs was negatively affected. Based on data which suggested that high intelligence was correlated with low

religiousness (Lewis et al., 2011), the researchers in this study hypothesized that the positive relationship between academic achievement and spirituality would be less significant for those with high intelligence. In fact, it was found that there was no relationship at all between academic achievement and spirituality for students placed in honors classes. This meant that the only students whose spirituality was impacted by receiving high or low grades in Judaic studies were those in non-honors classes. It seems that for the honors students, having high intelligence neutralized what would otherwise be a positive relationship between academic achievement in Judaic studies and spirituality. Those adolescents placed in honors classes might be more likely to receive high grades, and were therefore less impacted by the grades they received. They also might require a deeper cognitive reason to internalize Jewish beliefs rather than a superficial test score.

Religious Actions

Among the various predictors of spirituality that were examined as part of this study, the practice of religious actions served as the strongest predictor of spirituality. This finding was consistent with findings in the college-age Christian community (Matthew et al., 2010). In contrast to most studies which focused only on prayer and attendance in formal religious services (Idler, et al. 2003), the JewBALE's section on religious practices included a plethora of religious activities, which allowed for the assessment of which specific practices led to internalizing Jewish beliefs. Notably, in this study, only community service, prayer, brachot, holidays, study of Torah, and Shabbat were significant predictors of spirituality, whereas interpersonal relationships, kashrut, and modesty were not. Previous studies suggested that prayer and church attendance were religious activities whose connection to God were part

and parcel of the activity, and so it was understandable that these actions in particular would lead an individual towards spiritual beliefs (Polner, 1989, Levin, 2004). Additionally, church attendance provided a personally and socially enriching atmosphere which might sustain one's belief system (Bygren, et al., 1996). The same analysis can be suggested for tefillah, whose subset included synagogue attendance and brachot. A person who makes a blessing before eating food, even if done by rote, may be more likely to have internalized the concept that God exists. One who attends synagogue services, benefitting from the social opportunities that usually follow, might feel bolstered by the positive social experience to either firmly believe in the Torah's belief system or choose to accept the traditional beliefs in order to be a part of the community that they enjoy. Perhaps the holidays and Shabbat similarly provide for enriching personal and social atmosphere, whereas the study of Torah provides for a connection to God. If the above analyses are correct, then when performance of Jewish practices is clearly related to a relationship with God and also to personally and socially enriching opportunities, those practices will be more likely to lead to the internalization of Jewish beliefs. In contrast, for example, when Torah study is expected to be practiced alone, or without clear connection to Divine concepts, it would be less likely to lead to spiritual beliefs. We could suggest then, that interpersonal relationships, kashrut and modesty are generally less connected to a relationship with God or to an enriching personal or social environment and are therefore less likely to lead to spirituality. Perhaps since kashrut is traditionally viewed as one of the *chukim*, the laws whose reason is unknown to man, it becomes further removed from a connection with God in the eyes of an adolescent. The laws of modesty, often overly emphasized as a school rule or necessity due to man's frailty, may similarly not be relevant to adolescents' connection with God. It is disappointing,

although not surprising, that the subset of interpersonal relationships was grouped together with kashrut and modesty in the sense that it was not correlated with spirituality. When adolescents chose not to cheat on tests, decided not to bully others or thanked professionals for their service, it seems that they did not see these actions as an extension of their Divine service and their relationship with God, which is why their performance of these actions did not lead to an increase in spiritual beliefs. Berger (1997) found a similar result when he studied about 400 students studying in gap-year Orthodox programs in Israel. He recorded increasing commitments to ritual acts, Torah study, living in Israel and other Jewish values, but no change in interpersonal or ethical behavior. As the students were striving to increase in their religious commitment, improving their interpersonal behavior did not naturally fit into their efforts. Therefore, it is the job of the Jewish educators to value a good deed done in the interpersonal realm, just as they would with a ritual act, viewing both as stemming from Jewish values and precepts. This can help students internalize the importance of viewing interpersonal and ethical behavior as part of one's Jewish religious experience.

Conclusion

The above analyses showed general correlations which applied broadly to the 18 schools that participated in this study. The data indicated that students with high levels of spirituality would also have high levels of self-esteem and religious homogeny with their parents, as well as high grades in Judaic studies and high level of agreement with the Orthodox communal norms. Positive relationships with teachers and experiences in Jewish studies classes mediated the otherwise negative relationship between spirituality and

disagreement with communal norms. Females were more likely to have high levels of spirituality than males.

Beyond analyzing the data on a nationwide scale in order to come to general conclusions about the efficacy of a Modern Orthodox Jewish education as well as current trends, each school can also use the data obtained from their students to help the school succeed in fulfilling its mission. If the mission of the school is to have its graduates be God-fearing Jews committed to the beliefs and actions of Judaism, then the level of practice and belief of their students must be measured, preferably repeatedly throughout their high school years. It is difficult for a school to improve upon or attain something that is not measured. For instance, the data might show a weakening of beliefs in a certain year of high school, which would alert the school to implement more faith-based curricula for that year. The JewBALE 2.0 can act as the measurement tool to help schools come to terms with the reality of the religious level of their student body and consequently have greater success in fulfilling their mission.

CHAPTER VII. LIMITATIONS AND FURTHER STUDY

This analysis of the JewBALE 2.0 was the first attempt to uncover meaningful findings from the new data set. This extensive set of data, neatly divided into subsets of Jewish practice and belief, with thorough demographic and personal information, is replete with opportunities for further study in subsets not analyzed here. The researchers of this study focused solely on religious belief, leaving the entire realm of religious practice ripe for future analysis. For instance, this study analyzed the impact of academic achievement on spirituality, but not on religious practice. Bryant et al. (2003) found that the trend of decreasing commitment to religion for Christians as they became more educated in general studies only applied to religious action, but not belief. This study similarly found no connection between academic achievement in general studies and belief. The next step would then be to see whether, like the finding in the Protestant community, academic achievement in general studies negatively impacts practice, even though there was no impact on belief. Within the realm of spirituality, there is also much to further uncover about the correlations discovered in this study.

The researchers here found that adolescent females had a higher level of religious belief than males. It would be interesting to see how the school environment impacts religious belief, and whether attending single-gender versus co-ed schools affects the gap in religious belief between the genders. One might also compare this data on belief to the rates of religious practice among girls and boys. Perhaps, as was found in the Protestant adolescent

community (Nelson & Potvin, 1981), there would be no difference in practice although females scored higher in beliefs. Secondary analysis could further subdivide the data based on grade level to assess, for example, whether there are differences in the spirituality level of girls in grades 9 through 12. Based on the findings here, it could be hypothesized that since self-esteem levels of girls are known to decrease throughout high school at a faster rate than boys (Baldwin & Hoffmann, 2002), spirituality would also decrease at a faster rate for girls as they advance to higher grade levels. With self-esteem present as a construct of this data set, this hypothesis could be examined with ease. Additionally, since belief in Rabbinic Authority was found to be weak for both genders, secondary analysis could examine its effect on religious practice. With regard to religious homogeny between parents and children, future studies could look at the impact that having parents with high belief but low practice or vice versa has on their children's religiosity.

Future studies could also look at general trends among Modern Orthodox teens. For example, this study discussed the effect of religious homogeny with parents on spirituality but not the extent to which Orthodox teens have religious homogeny with their parents. Smith's analysis of the 2002 - 2003 data from the National Survey of Youth and Religion showed that while Jewish teens were the least likely to have religious homogeny with their parents when compared to teens from various Christian denominations, they still did have a strong level of agreement with their parents on religious issues (Smith & Denton, 2009). However, most of the Jewish teens in the study he examined were from a Reform background. Only .08% of the 3,370 total survey respondents were Orthodox. One could look at the data from JewBALE 2.0 to examine whether a strong level of religious homogeny

with parents is found in larger sample sizes as well and to see what the predictors are for a high level of religious homogeny with parents.

One could also examine the numerous curious findings within this paper which beg follow-up questions with regard to the reasoning behind them. Why is it that self-esteem predicts spirituality? Why would commitment to interpersonal relationships, kashrut and modesty not correlate with spirituality when all other areas of religious practice did correlate strongly with spirituality? Why should high grades lead to high spirituality only for students in non-honors tracks? Why is Rabbinic Authority hard for both females and males to connect to, whereas Divinity of the Torah is challenging in particular for females?

Secondary analysis on this data set could allow for potential answers to these questions. For example, one could dissect which subsets within spirituality are especially correlated with self-esteem. This might allow for more concrete explanations regarding the reasoning behind the positive relationship between the constructs. New studies using qualitative methods could also be drafted in order to answer some of the questions which arise from this study. For example, it is unclear why in this study, a religious struggle with homosexuality was not related to a decrease in spirituality, but a struggle with the laws of physical contact between genders did correlate with lower spirituality. Understanding why students can live with a religious struggle in one area without it impacting their spirituality can perhaps help uncover tools to help students who have a philosophical struggle with religion in other areas.

Future analysis of the data could also reexamine potentially powerful constructs such as growth mindset, use of technology, and relationship with parents to find the areas where they make an impact. For instance, growth mindset could be looked at as a potential mediator

in the relationship between academic achievement and spirituality. The effect of technology use could have been examined in any or all of the correlations with regard to spirituality, as its prevalence in today's society and especially in the lives of adolescents is ubiquitous. Recent studies on the impact of technology on adolescents should be examined before hypothesizing where this construct would have the most effect. Relationships with parents could be examined as a mediator in the negative relationship between spiritual struggle and spirituality since prior studies have shown that close connection with one's parents can prevent religious abandonment (Sherkat & Wilson 1995).

The JewBALE 2.0 included questions about class placement in tracked courses, as well as the grades students received in their courses, in order to delve into the question of the interplay between academic achievement, intellect and spirituality. These questions were limited in their significance, because grades and class placement requirements can vary dramatically between schools and do not necessarily correlate with intelligence. It could be that a student with high intelligence but low motivation is placed in a non-honors track, or that a student who is orderly and respectful earns higher cumulative grades than their test scores show. Future studies might choose instead to focus on cognition methods, such as whether a student is an analytical or intuitive thinker. Gervais & Norenzayan (2012) used five separate experiments to support their finding that analytic processing encourages religious disbelief in adults. Similar experiments could be applied to an adolescent audience in order to fine-tune the analysis of the impact of intellect on spirituality.

Other revisions to the JewBALE 2.0 scale itself might include new questions, such as whether students talk about God with their teachers, in order to expand upon the findings with regard to children speaking to their parents about God. Similarly, questions could be

added regarding other spiritual role models beyond parents and teachers such as shul rabbis or youth group leaders, since they may have played significant roles in the students' connection to Judaism. However, adding in new questions comes at the risk of making the measure too time-intensive and exhausting for the students. The socio-religious scale is the part of the scale which can use the most review and revision since this was its first distribution. For instance, the researchers chose to include students' feelings about the prohibition of touching between the sexes and not their feelings about the laws of modesty in the scale. This was due to the assumption that touching between the sexes is a proxy for modesty and therefore it is not necessary to ask both questions. This assumption was loosely based on prior distributions of the original JewBALE and could be reexamined and verified in the future.

Future implementation of the JewBALE 2.0 could include ID numbers for participants so that they could retake the survey in later years in a longitudinal study. This could help address the question of whether there is a long-term impact of having a weak commitment to spirituality during adolescence. It could also address the essential question of whether spirituality is innately present in higher levels in certain people or whether spirituality is something extrinsic to be learned. Regardless of the answer to that question, the JewBALE 2.0 remains a critical tool to understand the conditions under which adolescents' religiosity can flourish.

REFERENCES

Acredolo, C., & O'Connor, J. (1991). On the difficulty of detecting cognitive uncertainty. *Human Development*, *34*(4), 204-223.

Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, *5*(4), 432.

Anderson, L. W. (1981). An examination of the nature of change in academic self-concept. *Self Concept.* Cambridge, MA: Ballinger.

Ashouri, F. P., & Rasekhi, S. (2016). Correlation between Religious Beliefs with Mental Health and Academic Performance in Medical Students. *International Electronic Journal of Medicine*, *5*(1), 1-6.

Aoki, W. T., Wilson, R., Engert, P. A., Chen, J., Turk, A. A. & Latu, E. (2000). Mentoring and the discipleship of adolescents: Research and applications to the Church. *Journal of Psychology and Christianity*, *19*(4) 377-385.

Argyle, M., & Beit-Hallahmi, B. (2013). *The Social Psychology of Religion (Psychology Revivals)*. Routledge.

Ashouri, F. P., & Rasekhi, S. (2016). Correlation between religious beliefs with mental health and academic performance in medical students. *International Electronic Journal of Medicine*, *5*(1), 1-6.

Bader, C. D., & Desmond, S. A. (2006). Do as I say and as I do: The effects of consistent parental beliefs and behaviors upon religious transmission. *Sociology of Religion*, *67*(3), 313-329.

Baldwin, S. A., & Hoffmann, J. P. (2002). The dynamics of self- esteem: A growth curve analysis. *Journal of Youth and Adolescence*, 31, 101–103.

Ball, J., Armistead, L., & Austin, B. J. (2003). The relationship between religiosity and adjustment among African-American, female, urban adolescents. *Journal of Adolescence*, *26*(4), 431-446.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ, US: Prentice-Hall, Inc.

Batson, C. D., Schoenrade, P., & Ventis, W. L. (1993). *Religion and the individual: A social-psychological perspective*. Oxford University Press.

Becker, S. O., & Woessmann, L. (2009). Was Weber wrong? A human capital theory of Protestant economic history. *The Quarterly Journal of Economics*, *124*(2), 531-596.

Beaudoin, T., & Cox, H. G. (1998). *Virtual faith: The irreverent spiritual quest of Generation X*. San Francisco: Jossey-Bass.

Ben-Meir, J., & Kedem, P. (1979). Religiousness measure for the Jewish population in Israel. *Megamot*, *24*, 353-362.

Benson, P. L., Roehlkepartain, E. C., & Rude, S. P. (2003). Spiritual development in childhood and adolescence: Toward a field of inquiry. *Applied developmental science*, *7*(3), 205-213.

Berger, P. L. (2011). *The sacred canopy: Elements of a sociological theory of religion*. Open Road Media.

Berger, S. (1997). *A year of study in an Israeli yeshiva program: Before and after.* (Doctoral dissertation). The Azrieli Graduate School of Jewish Education and Administration, Yeshiva University.

Berger, S., Jacobson, D. & Waxman, C. (2007). *Flipping out?: Myth or fact: The impact of the "Year in Israel."* New York, Yashar Books.

Bertsch, S., & Pesta, B. J. (2009). The Wonderlic Personnel Test and elementary cognitive tasks as predictors of religious sectarianism, scriptural acceptance and religious questioning. *Intelligence*, *37*(3), 231-237.

Beyerlein, K. (2004). Specifying the impact of conservative Protestantism on educational attainment. *Journal for the Scientific Study of Religion*, *43*(4), 505-518.

Brand, R. (2012). *Gender Differences in the Spiritual Development of Adolescent Students Attending Modern Orthodox Jewish High Schools through the Lens of Prayer*. Yeshiva University.

Blaine, B., & Crocker, J. (1995). Religiousness, race, and psychological well-being: Exploring social psychological mediators. *Personality and Social Psychology Bulletin*, *21*(10), 1031-1041.

Bricheno, P., & Thornton, M. (2007). Role model, hero or champion? Children's views concerning role models. *Educational research*, *49*(4), 383-396

Brown, D. R., & Gary, L. E. (1991). Religious socialization and educational attainment among African Americans: An empirical assessment. *The Journal of Negro Education*, *60*(3), 411-426.

Bryant, A. N., Choi, J. Y., & Yasuno, M. (2003). Understanding the religious and spiritual dimensions of students' lives in the first year of college. *Journal of College Student Development*, *44*(6), 723-745.

Bufford, R. K., Paloutzian, R. F., & Ellison, C. W. (1991). Norms for the spiritual well-being scale. *Journal of Psychology and Theology*.

Bygren, Lars 0., Boinkum B. Konlaan, and Sven-Erik Johansson. 1996. "Attendance at Cultural Events, Reading Books or Periodicals, and Making Music or Singing in a Choir As Determinants for Survival: Swedish Interview Survey of Living Conditions." *British Medical Journal* 313:1577-80.

Calhoun, L. G., Cann, A., Tedeschi, R. G., & McMillan, J. (2000). A correlational test of the relationship between post-traumatic growth, religion, and cognitive processing. *Journal of Traumatic Stress*, *13*(3), 521-527.

Cannister, M. W. (1999). Mentoring and the spiritual well-being of late adolescents. *Adolescence*, *34*(136), 769-780.

Bruce A. Chadwick, Brent L. Top, and Richard J. McClendon, "Self-Worth," in *Shield of Faith: The Power of Religion in the Lives of LDS Youth and Young Adults* (Provo, UT: Religious Studies Center, Brigham Young University; Salt Lake City: Deseret Book, 2010), 161–85.

Charmé, S. Z. (2006). The gender question and the study of Jewish children. *Religious Education*, *101*(1), 21-39.

Charytan, M. (1997). The impact of religious day school education on Modern Orthodox Judaism: A study of changes in seven Modern Orthodox day schools and the impact on religious transmission to students and their families.

Ciarrochi, J., & Heaven, P. L. (2012). Religious Values and the Development of Trait Hope and Self-Esteem in Adolescents. *Journal For The Scientific Study Of Religion*, *51*(4), 676-688.

Cohen, S. M., Miller, R., & Ukeles, J. B. (2012). *Jewish community study of New York: 2011: Comprehensive report*. UJA-Federation of New York.

Collett, J.L. & Lizardo, O. (2009) *Journal for the Scientific Study of Religion* 48(2):213–231.

Davidman, L. (1991).*Tradition in a Rootless World*. Berkeley: University of California Press.

Del Rio, C. M., & White, L. J.(2012). Separating spirituality from religiosity: A hylomorphic attitudinal perspective. *Psychology of Religion and Spirituality*, 4, 123–142.

Donahue, M. J., & Benson, P. L. (1995). Religion and the well-being of adolescents. *Journal of Social Issues*, *51*(2), 145-160.

Dumont, M., & Provost, M. A. (1999). Resilience in adolescents: Protective role of social support, coping strategies, self-esteem, and social activities on experience of stress and depression. *Journal of Youth and Adolescence*, *28*(3), 343-363.

Dweck, C. S. (2006). *Mindset: The new psychology of success*. New York, NY: Random House Publishing Group.

Eisenberg, S. (2010). *Spiritual and religious mentoring: The role of rabbis and teachers as social supporters amongst Jewish modern Orthodox high school graduates spending a year of study in Israel* (Doctoral dissertation, Azrieli Graduate School, Yeshiva University).

Eliot, L. (2009). *Pink brain, blue brain: How small differences grow into troublesome gaps--and what we can do about it*. Houghton Mifflin Harcourt.

Ellis, A. (1980). Psychotherapy and atheistic values: A response to AE Bergin's "Psychotherapy and religious values." *Journal of Consulting and Clinical Psychology, 48*(5), 635–639.

Ellison, C. G., Boardman, J. D., Williams, D. R., & Jackson, J. S. (2001). Religious involvement, stress, and mental health: Findings from the 1995 Detroit Area Study. *Social Forces*, *80*(1), 215-249.

Emmons, R. A. (2005). Emotion and religion. *Handbook of the Psychology of Religion and Spirituality*, 235-252.

Exline, J. J., Yali, A. M., & Sanderson, W. C. (2000). Guilt, discord, and alienation: The role of religious strain in depression and suicidality. *Journal of Clinical Psychology*, *56*(12), 1481-1496.

Fiala, W. E., Bjorck, J. P., & Gorsuch, R. (2002). The religious support scale: Construction, validation, and cross-validation. *American Journal of Community Psychology*, *30*(6), 761-786.

Fitchett, G., Rybarczyk, B. D., DeMarco, G. A., & Nicholas, J. J. (1999). The role of religion in medical rehabilitation outcomes: A longitudinal study. *Rehabilitation Psychology*, *44*(4), 333.

Flor, D. L., & Knapp, N. F. (2001). Transmission and transaction: predicting adolescents' internalization of parental religious values. *Journal of Family Psychology*, *15*(4), 627.

Fowler, J. W., & Levin, R. W. (1984). Stages of faith: The psychology of human development and the quest for meaning.

Francis, L.J., & Brown,L.(1991). The influence of home, church and school on prayer among sixteen year old adolescents in England. *Review of Religious Research,* 33:2 112-122.

Francis, Leslie J., Harry M. Gibson, and Mandy Robbins. 2001. God images and self-worth among adolescents in Scotland. *Mental Health, Religion & Culture* 4 (2): 103–108.

Francis, L. J., & Jackson, C. J. (2003). Eysenck's dimensional model of personality and religion: Are religious people more neurotic?. *Mental Health, Religion & Culture*, *6*(1), 87-100.

Frankel, R. (2014). *The adolescent psyche: Jungian and Winnicottian perspectives*. Routledge.

Friedman, B. J. (2012). *Psychometric properties of the Jewish beliefs actions and living evaluation middle school form* (Doctoral dissertation, Rutgers University-Graduate School of Applied and Professional Psychology).

Funk, R. B., & Willits, F. K. (1987). College attendance and attitude change: A panel study, 1970-81. *Sociology of Education*, 224-231.

Gebauer, J. E., Sedikides, C., & Neberich, W. (2012). Religiosity, Social Self-Esteem, and Psychological Adjustment: On the Cross-Cultural Specificity of the Psychological Benefits of Religiosity. *Psychological Science (0956-7976)*, *23*(2), 158-160.

Gervais, W. M., & Norenzayan, A. (2012). Analytic thinking promotes religious disbelief. *Science*, *336*(6080), 493-496.

Goldberg, S.J. (2006) *Jewish Beliefs Actions and Living Evaluation (JewBALE)*, Unpublished manuscript, Yeshiva University, Azrieli Graduate School.

Goldmintz, J. (2010). The impact of family on the religious development of modern orthodox affiliated adolescents. (Doctoral dissertation). The Azrieli Graduate School of Jewish Education and Administration, Yeshiva University, New York.

Goldmintz, J. (2011). Religious development in adolescence: A work in progress. Azrieli Papers: Dimensions in Orthodox Day School Education, editors Schnall, B.J. & Sokolow, M. Yeshiva University Press: New York, New York. Pages 149-168.

Gorsuch, R. L. (1990). Measurement in psychology of religion revisited. *Journal of Psychology and Christianity*.

Greenfield, E. A., Vaillant, G. E., & Marks, N. F. (2009). Do formal religious participation and spiritual perceptions have independent linkages with diverse dimensions of psychological well-being? *Journal of Health and Social Behavior*, 50, 196–212.

Grumet, Z. (2018). Survey of Yeshiva High School Graduates. Retrieved from: https://zvigrumet.wordpress.com.

Hackney, C. H., & Sanders, G. S. (2003). Religiosity and mental health: A meta–analysis of recent studies. *Journal for the Scientific Study of Religion*, *42*(1), 43-55.

Hadaway, C. K., & Roof, W. C. (1988). Apostasy in American churches: Evidence from national survey data. *Falling from the faith: Causes and consequences of religious apostasy*, 29-46.

Halpern, S. W. (2013). *The role of self-concept, peer support, and family support as they relate to attitudes towards secular knowledge among Modern Orthodox high school graduates spending a year of study in Israel*. Yeshiva University.

Hanawalt, N. G. (1963). Feelings of security and of self-esteem in relation to religious belief. *The Journal of Social Psychology*, *59*(2), 347-353.

Harris, P. L. (2012). *Trusting what you're told: How children learn from others*. Harvard University Press.

Heaven, P. C., & Ciarrochi, J. (2007). Religious values, personality, and the social and emotional well-being of adolescents. *British Journal of Psychology*, *98*(4), 681-94.

Heilman, S. C. (2005). Jews and fundamentalism. *Jewish Political Studies Review*, 183-189.

Hodge, D. R. (2003). The intrinsic spirituality scale: A new six-item instrument for assessing the salience of spirituality as a motivational construct. *Journal of Social Service Research*, 30, 41–61.

Hodge, D. R., & McGrew, C. C. (2005). Clarifying the distinctions and connections between spirituality and religion. *Social Work & Christianity*, *32*(1).

---. (2006). Spirituality, religion, and the interrelationship: A nationally representative study. *Journal of Social Work Education*, 42, 637–654.

Hood Jr, R. W., Hill, P. C., & Spilka, B. (2009). *The psychology of religion: An empirical approach*. Guilford Press.

Hunsberger, B., B. McKenzie, M. Pratt, and S. M. Pancer. 1993. Religious doubt: A social psychological analysis. *Research in the Social Scientific Study of Religion* 5:27–51.

Hunsberger, B., Pratt, M., & Pancer, S. M. (2002). A longitudinal study of religious doubts in high school and beyond: Relationships, stability, and searching for answers. *Journal for the Scientific Study of Religion*, *41*(2), 255-266.

Hunter, J. D. (1983). *American evangelicalism: Conservative religion and the quandary of modernity*. Rutgers University Press.

Hunter, J. E., & Schmidt, F. L. (1990). *Methods of meta-analysis: Correcting error and bias in research findings*. Newbury Park, CA: Sage.

Idler, Ellen L., Marc A. Musick, Christopher G. Ellison, Linda K. George, Neal Krause,Marcia G. Ory, Kenneth I. Pargament, Lynda H. Powell, Lynn G. Underwood, David R.Williams. 2003. "Measuring Multiple Dimensions of Religion and Spirituality for Health Research: Conceptual Background and Findings from the 1998 General Social Survey."*Research on Aging,* 25:327-65.

Jeynes, W. H. (2002). A meta-analysis of the effects of attending religious schools and religiosity on Black and Hispanic academic achievement. *Education and Urban Society*, *35*(1), 27-49.

Jeynes, W. H. (2003). The effects of religious commitment on the academic achievement of urban and other children. *Education and Urban Society*, *36*(1), 44-62.

Jeynes, W. H. (2005). A meta-analysis of the relation of parental involvement to urban elementary school student academic achievement. *Urban education*, *40*(3), 237-269.

Johnson, E. L.(1996).The Call of wisdom: Adult development within Christian community, part one: The crisis of modern theories of post-formal development. *Journal of Psychology and Theology*, Vol.24, No. 2,83-92.

Johnson, C. V., & Hayes, J. A. (2003). Troubled Spirits: Prevalence and predictors of religious and spiritual concerns among university students and counseling center clients. *Journal of Counseling Psychology*, *50*(4), 409.

Katz, Y. (1999). Student Religiosity Questionnaire (SRQ) 1988.

Kay, W. & Francis, L. (1996). *Drift from the churches.* University of Wales Press: Cardiff.

Kosmin, B. A., & Keysar, A. (2000). *" Four Up": The High School Years, 1995-1999: The Jewish Identity Development of B'nai Mitzvah Class of 5755.* Jewish Theological Seminary.

Klein Poupko, S. (2010). *The relationship between relatedness to God and a commitment to self improvement and moral helpfulness* (Doctoral dissertation, Yeshiva University).

Koenig, H. G., McCullough, M. E., & Larson, D. B. (2001). *Handbook of religion and health.* New York: Oxford University Press.

Koenig, H. G. (2013). Religion and spirituality in coping with acute and chronic illness. In *APA handbook of psychology, religion, and spirituality (Vol 2): An applied psychology of religion and spirituality.* (pp. 275-295). American Psychological Association.

Korotayev A., Malkov A., Khaltourina D. (2006), *Introduction to Social Macrodynamics*, Moscow: URSS,

Krause, N. (1987). Life stress, social support, and self-esteem in an elderly population. *Psychology and Aging, 2*(4), 349.

Krause, N., Ingersoll-Dayton, B., Ellison, C. G., & Wulff, K. M. (1999). Aging, religious doubt, and psychological well-being. *The Gerontologist, 39*(5), 525-533.

Larson, E. J., & Witham, L. (1998). Leading scientists still reject God. *Nature, 394*(6691), 313.

Levin, J. S. 2004. Prayer, love, and transcendence: An epidemiologic perspective. *Religious influences on health and well-being in the elderly*, edited by K. W. Schaie, N. Krause, and A. Booth, pp. 69–95, New York: Springer.

Lewis, G. J., Ritchie, S. J., & Bates, T. C. (2011). The relationship between intelligence and multiple domains of religious belief: Evidence from a large adult US sample. *Intelligence*, *39*(6), 468-472.

Liu, X., Kaplan, H. B., & Risser, W. (1992). Decomposing the reciprocal relationships between academic achievement and general self-esteem. *Youth & Society*, *24*(2), 123-148.

Luce, M. R., Callanan, M. A., & Smilovic, S. (2013). Links between parents' epistemological stance and children's evidence talk. *Developmental Psychology*, *49*(3), 454.

Lugo, L., Cooperman, A., Smith, G. A., O'Connell, E., & Sandra, S. (2013). A portrait of Jewish Americans: Findings from a pew research center survey of US Jews. *Pew Research Institute*, *10*.

Lynn, R., Harvey, J., & Nyborg, H. (2009). Average intelligence predicts atheism rates across 137 nations. *Intelligence*, *37*(1), 11-15.

Maltby, J., Lewis, C. A., & Day, L. (1999). Religious orientation and psychological well-being: The role of the frequency of personal prayer. *British Journal of Health Psychology*, *4*(4), 363-378.

Marsh, H. W. (2014). Academic self-concept: Theory, measurement, and research. In *Psychological Perspectives on the Self, Volume 4* (pp. 71-110). Psychology Press.

Matthew L., C., Sherman A., L., & D. Lisa, C. (2010). Mysticism Matters: Distinguishing between Intrinsic Religiosity, Extrinsic Religiosity, and Spirituality Using Higher-order Factors of Personality and Mysticism. *Archiv Für Religions Psychologie / Archive For The Psychology Of Religion*, (2), 195.

McIntosh, D., Poulin, M., Silver, R., & Holman, E. (2011). The distinct roles of spirituality and religiosity in physical and mental health after collective trauma: a national longitudinal study of responses to the 9/11 attacks. *Journal of Behavioral Medicine*, 34(6), 497-507.

McKune, B., & Hoffmann, J. P. (2009). Religion and academic achievement among adolescents. *Interdisciplinary Journal of Research on Religion*, *5*.

Miller, A.S. & Stark, R. (2002). Gender and religiousness: Can socialization explanations be saved? *American Journal of Sociology,* 107(6), 1399-1423.

Mol, H. (1985). The faith of Australians. Sydney. George Allen & Unwin.

Moos, R. H. & Moos, B. S. (1981). *Family Environment Scale manual*. Palo Alto, CA: Consulting Psychologists Press.

Moradi, E., & Langroudi, J. (2013). The Role of Religious Orientation, Psychological Well-Being, and Self-Esteem in Iranian EFL Learners' Language Achievement. *Open Journal of Modern Linguistics*, 3(04), 337.

Muller, C., & Ellison, C. G. (2001). Religious involvement, social capital, and adolescents' academic progress: Evidence from the National Education Longitudinal Study of 1988. *Sociological Focus*, *34*(2), 155-183.

Myers, S. (1996). An Interactive Model of Religiosity Inheritance: The Importance of Family Context. *American Sociological Review,61*(5)*,* 858-866.

Nelson, C. J., Jacobson, C. M., Weinberger, M. I., Bhaskaran, V., Rosenfeld, B., Breitbart, W., & Roth, A. (2009). The role of spirituality in the relationship between religiosity and depression in prostate cancer patients. *Annals of Behavioral Medicine*, 38, 105–114.

Nelsen, Hart M. & Potvin, Raymond H. (1981) Gender and regional differences in the religiosity of Protestant adolescents. *Review of Religious Research*, 22(3) 268-285.

Nielsen, M. E., & Fultz, J. (1995). Further examination of the relationships of religious orientation to religious conflict. *Review of Religious Research*, 369-381.

Nishma Research. (2017). The Nishma Research Profile of American Modern Orthodox Jews. Retrieved from http://nishmaresearch.com/assets/pdf/Report%20-%20Nishma%20Research%20Profile%20of%20American%20Modern%20Orthodox%20Jews%2009-27-17.pdf

Oman, D. & Thoresen, C. (2003). Spiritual Modeling: A key to spiritual and religious growth. *The International Journal For the Psychology of Religion,* 13(3), 149-165.

Oman, D. (2013). Defining religion and spirituality. In R. F. Paloutzian & C. L. Park(Eds.), *Handbook of the Psychology of Religion and Spirituality* (2nd ed., pp. 23–47). New York, NY: Guilford.

Ozorak, E. W. (1989). Social and cognitive influences on the development of religious beliefs and commitment in adolescence. *Journal for the Scientific Study of Religion*, 448-463.

Pargament K. I. (2002). The bitter and the sweet: An evaluation of the costs and benefits of religiousness. *Psychological Inquiry*, 13, 168–181.

Pargament, K. I., Murray-Swank, N. A., Magyar, G. M., & Ano, G. G. (2005). Spiritual struggle: A phenomenon of interest to psychology and religion.

Pascarella, E. T., & Terenzini, P. T. (2005). *How College Affects Students: A Third Decade of Research. Volume 2*. Jossey-Bass, An Imprint of Wiley. 10475 Crosspoint Blvd, Indianapolis, IN 46256.

Pennycook, G., Cheyne, J. A., Seli, P., Koehler, D. J., & Fugelsang, J. A. (2012). Analytic cognitive style predicts religious and paranormal belief. *Cognition*, *123*(3), 335-346.

Pew Research Center. 2016. The Gender Gap in Religion Around the World. Retrieved from http://www.pewforum.org/2016/03/22/the-gender-gap-in-religion-around-the-world.

Piaget, J. (1975). *Biology and knowledge* , (2nd ed.), Chicago: University of Chicago Press.

Pollak, E. (2012). *Family Environment, Social Support, & Gender as Predictors of Self-esteem in Jewish Orthodox Adolescents* (Doctoral dissertation). Long Island University.

Pollner, M. 1989. Divine relations, social relations, and well-being. *Journal of Health and Social Behavior* 30(1):92–104.

Potvin, R. H., & Lee, C. F. (1982). Adolescent religion: A developmental approach. *Sociological Analysis*, *43*(2), 131-144.

Poythress, N. G. (1975). Literal, antiliteral, and mythological religious orientations. *Journal for the Scientific Study of Religion*, 271-284.

Regnerus, M. D. (2003). Linked lives, faith, and behavior: Intergenerational religious influence on adolescent delinquency. *Journal for the Scientific Study of Religion*, *42*(2), 189-203.

Rhodes, J. E., Grossman, J. B., & Resch, N. L. (2000). Agents of change: Pathways through which mentoring relationships influence adolescents' academic adjustment. *Child development*, *71*(6).

Rhodes, J.E. (2002) *Stand by Me: The Risk and Rewards of Mentoring Today's Youth*. Cambridge, MA: Harvard University Press.

Rhodes, J.E., Spencer, R.A., Keller, T.E., Liang, B., Noam, G. G. (2006). A model for the influence of mentoring relationship on youth development. *Journal of Community Psychology*, 34(6) 691-707.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Rosenberg, M. (1979). Conceiving the self. New York: Basic Books.

Rosenberg, M., Schooler, C., Schoenbach, C., & Rosenberg, F. (1995). Global self-esteem and specific self-esteem: Different concepts, different outcomes. *American Sociological Review*, 141-156.

Rouquette, A., & Falissard, B. (2011). Sample size requirements for the internal validation of psychiatric scales. *International Journal of Methods in Psychiatric Research*, *20*(4), 235-249.

Sedikides, C., & Gebauer, J. E. (2010). Religiosity as self-enhancement: A meta-analysis of the relation between socially desirable responding and religiosity. *Personality and Social Psychology Review*, *14*(1), 17-36.

Sedikides, C., & Strube, M. J. (1997). Self-evaluation: To thine own self be good, to thine own self be sure, to thine own self be true, and to thine own self be better. In *Advances in experimental social psychology* (Vol. 29, pp. 209-269). Academic Press.

Sefer HaChinukh. Author unlisted. Retrieved from: https://www.sefaria.org.il/Sefer_HaChinukh?lang=bi.

Shapiro, Susan. (1999). Spiritual education: As assessment of Jewish adolescents. (Doctoral dissertation). Temple University, 1999.

Shenhav, A., Rand, D. G., & Greene, J. D. (2011). Divine intuition: Cognitive style influences belief in god. *Journal of Experimental Psychology:* General

Sherkat, D. E., & Wilson, J. (1995). Preferences, constraints, and choices in religious markets: An examination of religious switching and apostasy. *Social Forces*, *73*(3), 993-1026.

Sherkat, D. E. (1998). Counterculture or continuity? Competing influences on baby boomers' religious orientations and participation. *Social Forces*, *76*(3), 1087-1114.

Sikkink, D., & Hernández, E. I. (2003). Religion Matters: Predicting Schooling Success among Latino Youth. Interim Reports.

Singh, P., & Bano, S. (2017). Effect of Intrinsic-Extrinsic Religiosity on the Psychological Well-being of Adolescents. *Journal Of Psychosocial Research*, *12*(1), 137-145.

Sloane, D. M., & Potvin, R. H. (1983). Age differences in adolescent religiousness. *Review of Religious Research*, 142-154.

Smith, C., & Denton, M. L. (2009). *Soul searching: The religious and spiritual lives of American teenagers*. Oxford University Press.

Smith, C. B., Weigert, A. J., & Thomas, D. L. (1979). Self-esteem and religiosity: An analysis of Catholic adolescents from five cultures. *Journal for the Scientific Study of Religion*, 18, 51-60.

Smith, C.; Faris, R.; Denton, M. L.; Regnerus, M. D. (2003). Mapping American adolescent subjective religiosity and attitudes of alienation toward religion: a research report. *Sociology of Religion 64(1),* p 111-133.

Smith, C. B., & Denton, M. (2005). *Soul searching: The religious and spiritual lives of American teenagers.* Oxford, England: Oxford University Press.

Soloveitchik, H. (1994). Rupture and reconstruction: The transformation of contemporary Orthodoxy. *Tradition: A Journal of Orthodox Jewish Thought*, *28*(4), 64-130.

Stanovich, K. E., & Toplak, M. E. (2012). Defining features versus incidental correlates of Type 1 and Type 2 processing. *Mind & Society*, *11*(1), 3-13.

Stark, R. (2002). Physiology and faith: addressing the "universal" gender difference in religious commitment. *Journal for the Scientific Study of Religion 41(3)*, p 495-507.

Sullins, D.P. (2006). Gender and religion: Deconstructing universality, constructing complexity. *American Journal of Sociology,* Volume 112: 3. 838–80.

Suziedelis, A.; Potvin, R. H. (1981). Sex differences in factors affecting religiousness among Catholic adolescents. *Journal for the Scientific Study of Religion 20 (1)*, p 38-51.

Tannenbaum, C. G. (2009). *Gender differences in the perceived religious influence of yeshiva programs*. 2010.

Tenenbaum, H. R., & Hohenstein, J. M. (2016). Parent–child talk about the origins of living things. *Journal of Experimental Child Psychology*, *150*, 314-329.

Ventis, W. L. (1995). The relationships between religion and mental health. *Journal of Social Issues*, *51*(2), 33-48.

Weinberg, N. Z. (2008). *Struggle from within: The complexity of Modern Orthodoxy, the relationship between religious actions and beliefs and the religious development of Modern Orthodox adolescents*. ProQuest.

Weiss, S. (2007). *Letting God in: The Spiritual Development of Modern Orthodox High School Girls*. University Microfilms.

Williams, E., Francis, L. J., & Robbins, M. (2006). Rejection of Christianity and self-esteem. *North American Journal Of Psychology*, (1).

Zetterberg, Hans L. (1952). The religious conversion as a change of social roles. *Sociology and Social Research, 36* (Jan-Feb): 159-66.

APPENDIX

JewBALE 2.0

Survey can be accessed online at: www. surveymonkey.com/r/jewbale

Individual Information and Consent Form

You are being asked to take part in a research study entitled: JewBALE Study of Jewish Day School Students.

The survey that appears after this consent page consists of 167 questions that are intended to provide a better understanding of what it is that students believe (BELIEFS) and do (ACTIONS) when it comes to their Judaism. This information will be anonymous and your teachers, administrators, and parents will not know how you respond.

The goal of gathering this information is to help create more meaningful Jewish educational experiences.

It should take you about 30 minutes to complete this survey and your participation is voluntary. If you do not want to take part in this study, simply click on the button at the bottom of this welcome screen that says "No, thanks, I do not agree to take part in this study."

If you decide to take part you are still free to withdraw at any time without giving a reason. You may also skip any question that you prefer not to answer or do not know the answer to. This will not affect how you are treated at school.
The study is being done under the supervision of Scott Goldberg Ph.D. (sjgoldbe@yu.edu) a professor at Yeshiva University. You may also contact Sharon Weinstein (jewbale@gmail.com), a doctoral student at Yeshiva University involved in this study.

All surveys will be completely anonymous. While you may not directly benefit from being in this research study, the information learned from this study may, in the future, benefit other young people attending Jewish day schools or otherwise involved in Jewish education. The research records will be kept in a secured manner, computer records will be password

protected, and the researchers who review the data will have no way of identifying who participated in the study.

 I AGREE TO TAKE PART IN THE STUDY

NO, THANKS, I DO NOT AGREE TO TAKE PART IN THIS STUDY

BELIEFS

Select the option which best describes how you relate to the following statements.

Completely agree = you are almost 100% in agreement with the statement.
Strongly agree = you feel strongly about your agreement with the statement
Agree = you generally agree with the statement.
Ambivalent = you have mixed feelings about the statement.
Disagree = you generally disagree with the statement.
Strongly Disagree = you feel strongly about your disagreement with the statement.
Completely Disagree = you have almost no hesitations in your disagreement with the statment.

If you prefer not to answer any of the following questions, you may choose to skip it.

1. Divine Providence with relation to the world (5 items)

A higher power created the world
God created the world.
A Messiah will come to redeem the Jews.
God rewards and punishes people based on their actions.
God is still involved in the world today

2. Divine Providence with Relation to the Individual (4 items)

What happens in my life is a result of a combination of what I do and what Gd does
Gd cares about me
God hears my prayers
God has the ability to answer my prayers

3. Fear/Love/Awe of God (6 items)
I am impressed by/appreciate the greatness of Gd
I fear God
I love Gd
Learning Tanach brings me closer to Gd
Learning Talmud brings me closer to God
I have experienced holiness

4. Joyful/Meaningful life (4 items)
Life is meaningful
I find meaning in singing Jewish songs
I try to find the positive even in challenging situations.
I am grateful to God for the life that I have

5. Rabbinic Authority (4 items)

It is important to find a rabbi (or group of rabbis) that will serve as my posek (a person who decides halakha for me).
A rabbi should be consulted when you have important life decisions to make.
I decide which religious practices to follow based on what makes sense to me.
I respect the process that Rabbis engage in to decide halakha for their community.

6. Divinity/Truth of Torah (3 items)

Jews experienced a Divine Revelation at Har Sinai.
The Torah was given to Moshe at Har Sinai
The Jewish religion is the only religion based on God's word

7. Relationship to Israel (4 items)

God gave the Land of Israel to the Jewish people.
I plan to make aliyah (move to Israel).
I believe the creation of the State of Israel was a miraculous event.
The state of Israel is important to me.

8. Outlook on Secular Studies (3 items)
My appreciation of God benefits from my exposure to secular studies.
My personal faith is challenged by apparent contradictions between Torah and science.
A person only needs to study Torah to understand the world.

ACTIONS

9. Community Service (2 items)
I perform community service activities even when not required.
I give charity.

10. Prayer (10 items)

Brachot (2)
I make a bracha (blessing) before eating food
I make the appropriate bracha (blessing) after eating.

Formal Prayer (6)
I try to pay attention to the words in my prayers as I say them.
Praying from the siddur helps me connect to God

1. When not in school/camp on weekdays, I daven Shacharit
● with a minyan (7 point likert)
● without a minyan (7 pt likert)
● I do not daven weekday Shacharit outside of school/camp (7 pt likert)

2. When not in school/camp on Shabbat, I daven Shacharit
o with a minyan (7 pt likert)
o without a minyan (7 pt likert)
o I do not daven Shabbat Shacharit outside of school/camp. (7 pt likert)

Informal Prayer (2)
"I use meditation (or other non-traditional methods) to connect to something greater than me.
I have personal conversations with God.

11. Holiday Observance (7 items)
I hold a lulav every day of Sukkoth that one is supposed to do so.
I make sure to hear Parshat Zachor each year.
I hear the megilla on Purim.
I go to a seder on pesach.
I fast on yom kippur
I fast on fast days (other than yom kippur and tisha b'av)
I don't eat bread products (chometz) on Pesach

12. Interpersonal Relations/Personal Character Traits (8 items)
I say thank you to professionals when they provide me with a service (for example: security guards, cashiers at the supermarket, etc.).
I am disruptive during class.
If I wrong my friend, I ask him/her for forgiveness.
I disobey my parents
I plagiarize
I speak lashon hara (talebearing)
I make fun of people who are different than me
I cheat on tests

13. Kashrut (4 items)

When seeing a new kashrut symbol, I make sure to find out if it is reliable
I do not eat dairy and meat products together
I eat only kosher food
I eat dairy products in non-Kosher restaurants

15. Study of Torah (4 items)
I set aside time to study Jewish texts (not assigned at school)
I enjoy studying traditional Jewish texts.
I enjoy studying Jewish content from sources other than traditional texts (reading a book, listening to a lecture, etc.)
I plan/want to continue studying Jewish texts (Talmud, Tanach, etc.) after high school

16. Modesty
I watch videos with nudity
My parents think the clothes I wear are not modest.
I decide for myself what modest means for the clothes I wear.
I follow the guidelines regarding modest clothes as set forth in halacha.
I do not touch peers of the opposite gender in affectionate ways.

17. Sabbath Observance
I say or hear Kiddush on Shabbat.
I text on Shabbat.
I use social media on Shabbat.
I make calls from my cell phone on Shabbat
I play ball on Shabbat
I go to shul on shabbat
I eat Shabbat meals with my family

I spend time with my family on Shabbat

18. Gender based questions will be asked below, after question #1 in the demograpgics

DEMOGRAPHICS:

1.Gender: (male, female, other:leave blank)

 Skip logic will be used to give gender specific Jewish action questions here. Anyone who selects "other" for their gender will receive the questions for boys and for girls

BOYS ONLY- I wear a kippah when in public (or other head covering)
        I put on tefillin every day that one is supposed to do so.

GIRLS ONLY- I do not sing a solo when men are present

2. Name of school

3. Location of School

4. Grade (9,10,11,12, other)

5. Date of birth (month/day/year dropdown)

6. How many summers have you been a camper at a Jewish sleep-away camp? (Never, 1, 2, 3, 4, 5+)

7. My family is: Ashkenazi, Sephardi, Other: Leave blank

8. The synagogue my family usually attends is: choices: Orthodox, Conservative, Reform, Other (describe)

9. Please check ALL of the following that applies to your home: (They should be allowed to select all)
        kosher
        shomer shabbat
        I live in multiple homes which have different standards of observance

10. My biological parents are: choices: Married to each other, Separated, Divorced, One parent is deceased, both parents are deceased, other (Explain)

Questions 11-16 below refer to your "mother", "father" and "parents". For those with step or adoptive parents in addition to biological parents, please refer to the mother or father that you spend the most time with when answering the questions below.

11. I have a good relationship with my mother

12. I have a good relationship with my father

13. God is a topic of conversation between me and my parent(s) (Likert – not at all to regularly, and n/a)

14. God is a topic of conversation between me and my parent(s). (Likert – not at all to regularly and n/a)

15. My religious practices in comparison to my parents' practices are

a) stronger b) similar c) weaker d)I do not know e)My parents do not have the same level of religious practice as each other f) n/a

16. My religious beliefs in comparison to my parents' beliefs are:
a) stronger b) similar c) weaker d) I do not know e)My parents do not have the same level of belief as each other f) n/a

17. Which of the following best describes your feelings about Judaic Studies classes:

·   I really enjoy my classes
·   I like my classes
·   I am ambivalent about my classes
·   I don't like my classes
·   I really hate my classes

18. Which of the following best describes your feelings about General/Secular classes:

·   I really enjoy my classes
·   I like my classes
·   I am ambivalent about my classes
·   I don't like my classes
·   I really hate my classes

19. My Judaic studies teachers care about me personally

20. My General studies teachers care about me personally

21. I admire my Judaic studies teachers

22. I admire my General studies teachers

23. I have a good relationship with my Judaic studies teachers

24. I have a good relationship with my General studies teachers

25. I find what I am learning in Judaic studies classes relevant to my life

26. I find what i am learning in General studies classes relevant to my life

27. My religious observance is influenced by (My belief in God, my desire to please my family, my desire to please my rabbis/teachers, my desire to fit into a certain social group/community, Other)
[Response Scale: Strongly agree..strongly disagree, and dont know

28. When I need help (academic, social, emotional, and/or religious) there is someone in school I feel comfortable turning to. [Likert]

29. When things get hard for me in school, I (I always give up, I sometimes give up, I never give up, I work even harder than I usually do, I ask for help. check all that apply)

30. In academic subjects I think of myself as.. (, Very intelligent, Intelligent, Ordinary, Not Intelligent, Not at all intelligent,)

31. In non academic subjects, commonly referred to as "street smarts", I think of myself as.... (same choices as above)

32. Which of the following best describes your placement in tracked Judaic Studies classes:
I am in the highest honors
I am in honors
I am in the middle track
I am in the lower track
My school does not track Judaic Studies classes
Other:

33. Which of the following best describes your grades this school year in your Judaic Studies classes:
Mostly A's (90-100)
Mostly B's (80-89)

Mostly C's (70-79)
Mostly D's (60-69)
Mostly F's (0-59)

34. Which of the following best describes your placement in tracked Secular Studies classes:
I am in the highest honors
I am in honors
I am in the middle track
I am in the lower track
My school does not track Secular Studies classes
Other:

35. Which of the following best describes your grades this school year in your Secular Studies classes:
Mostly A's (90-100)
Mostly B's (80-89)
Mostly C's (70-79)
Mostly D's (60-69)
Mostly F's (0-59)

36. On an average school day, how many hours do you use electronic devices for something that is not school work or listening to music? (Include time spent on things such as a smartphone, an iPad or other tablet, Xbox or other gaming system, texting, movies/videos, YouTube, Instagram, Facebook, or other social media.)

- I do not use an electronic device for something that is not school work

- Less than 1 hour per day
- 1 hour per day
- 2 hours per day
- 3 hours per day
- 4 hours per day
- 5 or more hours per day

37. Technology distracts me from focusing on learning in class

38. I have been electronically bullied by peers through texting, Instagram, Facebook, or other social media:
A. never
B. rarely

C. sometimes
D. often
E. frequently

39. I have been bullied by peers on school property:
A. never
B. rarely
C. sometimes
D. often
E. frequently

40. I aspire to be a professional Jewish communal leader when I grow up.

SOCIO-RELIGIOUS SCALE OF PERSONAL BELIEFS

<u>When I get older</u>
   1. I plan to marry:
      o I do not plan to get married
      o I plan to marry a man
      o I plan to marry a woman
      o Other _____

   2. I plan to send my children to a Jewish day school/yeshiva

Please answer the following questions based on what you personally believe, whether or not that is aligned with the Torah perspective and community norms. (all likert)

<u>Women</u>
3. Women may earn Orthodox rabbinic ordination.
4. Women may serve as a president of a shul.
5. Women may serve as clergy of a shul. (Clergy refers to a member of the professional leadership of a shul who performs religious duties.)
6. Women may lead tefila.
7. Women may read Torah publicly for a tzibur.

<u>Sexuality and Family Values</u>
8. Homosexual couples should be able to participate fully in an Orthodox shul as a family.
9. Jewish homosexual couples should be able to adopt children.
10. Jewish men and women should be allowed to be sexually active prior to marriage.

11. Jewish men and women should avoid casually touching each other.

Western Values
12. I prefer that my appearance does not identify me as a Jew.
13. Jews should not socialize with non-Jews.
14. It is not acceptable to use drugs recreationally (for non-medical purposes).

No judgement on anyone
15. I respect everyone's right to believe what they believe.

Social media (Skip logic. These questions only given to students who wrote earlier that they do text or use social media on Shabbat)
16. I text on Shabbat because (check all that apply):
a)   It is critical to maintaining my friendships
b)   I would feel left out if I did not text
c)   I think it is ok
d)   I don't know
e)   Another reason (fill in)

17. I use social media on Shabbat because (check all that apply):
a)   It is critical to maintaining my friendships
b)   I would feel left out if I did not text
c)   I think it is ok
d)   I don't know
e)   Another reason (fill in)

Growth Mindset
18. I have a certain amount of intelligence and I can't really do much to change it
19. I have a certain amount of talent and I cant really do much to change it
20. In 10 years, I see myself as: (sig more observant, more observant, the same, weaker observant, sig weaker observant)
21. In 10 years, I see myself as having (sig stronger belief in God, stronger belief in God, same level of belief in God, weaker belief in God, sig weaker belief in God)

Influences
22. I know a personally (not through social media) at least one person who….they need to be able to select as many as they know, currently can only select 1
   ● Orthodox teenager who is homosexual.
   ● Orthodox teenager who is sexually active.
   ● Orthodox person who uses drugs regularly.

- Orthodox person who is gets drunk regularly.
- non-Orthodox person.
- Orthodox person who doesn't believe in God.

DUKE HEALTH PROFILE:

https://cfm.duke.edu/sites/cfm.duke.edu/files/cfm/Research/HealthMeasures/Duke%20Health%20Profile%20%28Duke%29.pdf

Please share any concluding thoughts that you have. (leave blank)

If youd like to speak to someone about this please email: jewbale@gmail.com