

PSYCHOMETRIC PROPERTIES OF THE JEWISH BELIEFS ACTIONS  
AND LIVING EVALUATION MIDDLE SCHOOL FORM  
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## ABSTRACT

There is significant empirical support for the positive short- and long-term academic, behavioral, social, and emotional outcomes associated with religiosity and spirituality. A review of the literature suggests that preadolescence is a key period for religious and spiritual development. There is a need for a reliable and valid measure to assess the religiosity and spirituality of preadolescents. The purpose of this study is to evaluate the psychometric properties of the Jewish Beliefs Actions and Living Evaluation (JewBALE) Middle School Form, a 186-item survey designed to assess preadolescents in the core components of Modern Orthodox Judaism. Modern Orthodoxy is a sect of Judaism that tries to balance religious obligation with engagement of the modern world. The JewBALE Middle School Form is a downward extension of a JewBALE High School Form and consists of 2 composites - Total Beliefs and Total Actions. Subjects included 176 children (ages 10 to 14) attending a Modern Orthodox Jewish residential camp in Northern Pennsylvania during the Summer of 2011. Findings from the study suggest that there are no gender or grade differences between subjects on Total Beliefs and Total Actions mean scores. Both composites demonstrate good internal consistency reliability. Principal components analysis using oblimin rotation indicates that there are 17 factors that underlie the JewBALE Middle School Form. Correlations between newly added items and composite scores indicate strong relationships between items related to the Bar and Bat Mitzvah experience and other items, while only limited relationships exist between bullying items and composite scores. These results provide evidence for the reliability and validity for the JewBALE Middle School Form as a measure of religiosity

and spirituality of Modern Orthodox Jewish preadolescents. Limitations of the study are discussed and recommendations are offered in terms of improving the measure.

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## **Chapter 1**

### **Statement of the Problem**

Modern Orthodox Judaism is a sect of Judaism that strictly adheres to the religious and spiritual requirements, while also engaging in the modern secular world (Lamm, 1990). Recently, there has been an increased interest in finding measures to evaluate the current level of religiosity among Modern Orthodox Jewish youth and to assess the growth that occurs throughout a Jew's lifetime (Goldmintz, 2003). Goldmintz also notes that these research tools could lead to a better understanding of the spiritual and religious development of Jewish youth and will help educators develop curricula better suited to meet their students' spiritual and religious needs.

While measures have been developed to assess either spirituality or religiosity (e.g., Allport & Ross, 1967; Bufford, Paloutzian, & Ellison, 1991) a tool that can evaluate both constructs is needed, especially in contexts when the two are highly intertwined such as in Judaism. Research suggests that both religiosity and spirituality have a positive impact on the development of children and preadolescents. Additionally, an increase in one construct has a positive influence on the other, resulting in greater positive growth outcomes (Roehlkepartain, Benson, King, & Wagner, 2006). Orthodox Judaism believes that these two constructs are equally important and work synergistically to improve religious and spiritual development. This stems from the idea that actions without beliefs are incomplete, while beliefs in Jewish teaching without the resulting actions are also lacking. Thus, a measure that will assess both spiritual and religious actions is of high importance when studying the development of Modern Orthodox Jewish youth.

## **Demographics of Modern Orthodox Judaism**

According to a recent survey, there are approximately 14 million Jews worldwide (DellaPergola, 2010), with 6.4 million Jews currently living in the United States in approximately 900 communities (Sheskin & Dashefsky, 2010). This makes the United States a country with the second largest Jewish population, behind Israel (DellaPergola, 2010). Approximately 10 % of Jews in the United States identify themselves as Orthodox (Mayer, Kosmin, & Keysar, 2001), while even fewer classify themselves as Modern Orthodox. Schick (2009), in his nationwide survey of enrollment in Jewish schools in the United States, found a total of 228,174 students currently enrolled in Jewish day schools. Of this total, 29,397 (12.88%) were enrolled in Modern Orthodox schools. The author notes that enrollment in Orthodox day schools increased by 10% over the previous decade, likely as the result of high fertility rate within the Orthodox Jewish community. He also suggests that this trend is likely to continue.

## **Theories of Religious Development of Preadolescents**

One of the many challenges in creating measures of spirituality and religiosity is choosing a theoretical framework that underlies these constructs. The research literature is filled with different theories of religiosity and spiritual development across the lifespan, including Goldman's Theory of Religious Thinking (1964), Elkind's Theory of Religious Identity Development (1961, 1978), Kolberg's Theory of Moral Development (1981), Fowler's Stage Theory of Faith Development (1981, 1991), and Oser and Gmunder's Theory of Religious Judgment (1991). Although these theories differ in their specific focus, there is a consensus that preadolescence (ages 10-14) is a critical time period for religious and spiritual development. At this time, preadolescent religious and

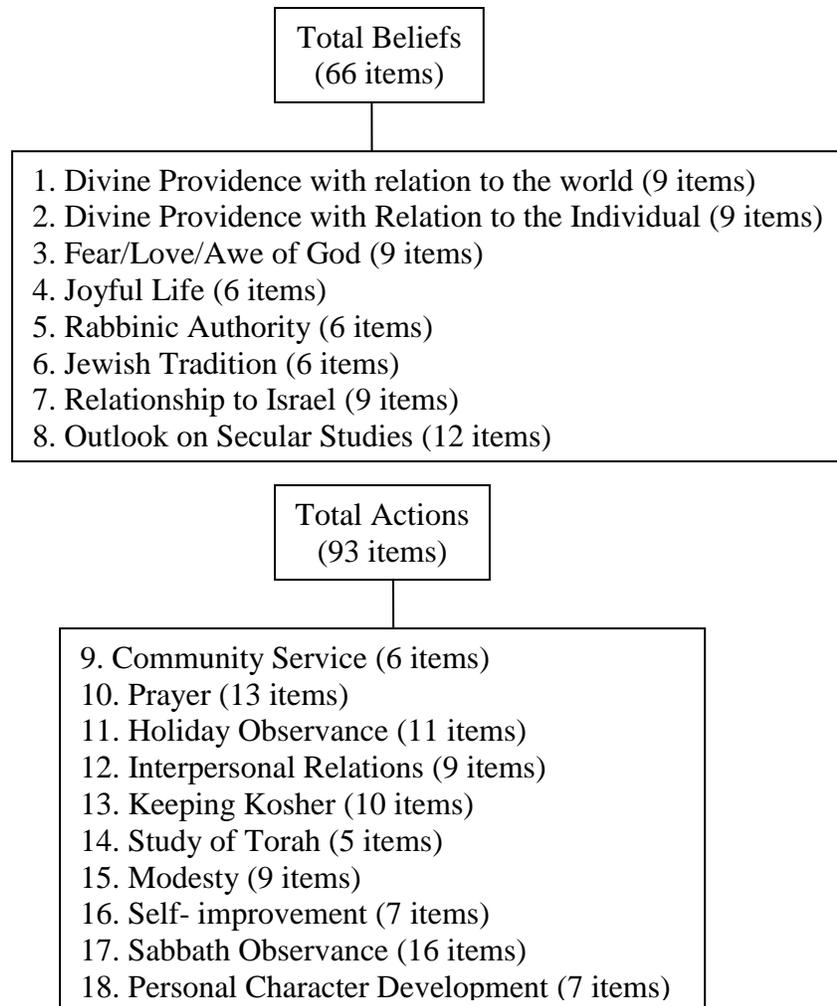
spiritual thinking changes from a concrete to a more abstract conceptualization of God. For instance, while the belief that “God is everywhere” often takes on a physical and concrete meaning for children, they often question this notion as they age and begin thinking more abstractly. This often leads to a time of questioning and turmoil that continues until they are able to grasp that “God is everywhere” in an abstract spiritual sense. This change in thinking signifies the middle (Kohlberg’s, Fowler’s, and Oser’s theories) or final stage (Goldman’s and Elkind’s theories) of religiosity and spiritual development.

Research on the spiritual and religious development of Modern Orthodox preadolescents is limited to date. Studies that have been conducted rely on interviews and self-reflections to gain an understanding about this critical time period. Common measures of spirituality and religiosity, such as the Religious Orientation Scale (Allport & Ross, 1967) and the Spiritual Well-Being Scale (Bufford, Paloutzian, & Ellison, 1991), lack items with sufficient specificity to properly measure nuances differentiating Modern Orthodox Judaism from other religions. A perusal of the literature did not yield a measure designed specifically for this religious age-group.

### **Development of the Jewish Beliefs Actions and Living Evaluation (JewBALE)**

To meet the need to understand religious and spiritual beliefs among Modern Orthodox adolescents (ages 14-18), Goldberg (2008; Goldberg & Isaacs, 2009; Goldberg, Pelcovitz, Rosenberg, & Ross, 2010) developed the Jewish Beliefs Actions and Living Evaluation (JewBALE). The JewBALE is a self-administered scale consisting of 66 items concerning beliefs and 109 items regarding actions as related to Orthodox Judaism. This measure has two composite scales: Total Beliefs and Total Actions. The Total

Beliefs composite is comprised of eight subscales: Divine Providence with Relation to the World, Divine Providence with Relation to the Individual, Fear/Love/Awe of God, Joyful Life, Rabbinic Authority, Jewish Tradition, Relationship to Israel, and Outlook on Secular Studies. The Total Actions composite includes ten subscales: Community Service, Prayer, Holiday Observance, Interpersonal Relations, Keeping Kosher, Study of Torah (traditional texts), Modesty, Self-improvement, Sabbath Observance, and Personal Character Development. Confirmatory factor analysis supported these two composite scales (Goldberg, 2008). Figure 1 summarizes the structure of the JewBALE. Evidence for reliability for the Total Beliefs and Total Actions composite scales was found to be adequate, with Cronbach's Alphas of .89 and .86, respectively. Evidence for content validity was established through expert agreement by ten Orthodox Rabbis and three women in leadership positions that these items represented core beliefs and actions for Modern Orthodox Jewish adolescents.



*Figure 1.* JewBALE composites and subscales

### **Research on the JewBALE**

The JewBALE is the main assessment measure of the Religious Understanding in Adolescent Children (RUACH) project at the Institute for University-School Partnership at Yeshiva University. The RUACH project is a long-term collaborative applied research initiative with six Jewish day schools to better understand how best to promote growth in the areas of spirituality, religious beliefs, and religious actions. Researchers involved in the RUACH project worked with the school to better understand the developmental processes that lead to successful religious and spiritual development. Recently, a number

of dissertations have used the JewBALE to study the religious and spiritual development of Modern Orthodox Jewish adolescents. Eisenberg (2010) used the JewBALE to study factors that influence this development that occurs among Modern Orthodox students who spend 1-2 years of post- high school study in yeshivot and seminaries in Israel. He found that support from rabbis and teachers predicted high levels of internalization of both Jewish actions and beliefs above and beyond the effects of other known correlates. Weinberg (2008) used four subscales from the JewBALE (Sabbath Observance, Keeping Kosher, Relationship to Israel, and Outlook on Secular Studies) to better understand the complex process of this development. He found that high levels of Modern Orthodox actions (Sabbath Observance and Keeping Kosher) were correlated with one's relationship with Israel, but not with one's perspective on secular studies. Thus, Weinberg concluded that the bifurcation between actions and beliefs may result from the lack of clarity in the definition of Modern Orthodoxy among religious leaders who maintain a strict adherence to religious practices, but fail to teach the beliefs that underlie these actions. Modern Orthodox adolescents model these behaviors by strictly upholding and performing religious actions, while failing to maintain an equal adherence to the religious beliefs that accompany these practices. Lastly, Klein Poupko (2010) used the JewBALE as part of an assessment battery to determine the relationship between religious adolescents who have a relationship with God characterized by relatedness and a commitment to self- improvement and moral helpfulness. Klein Poupko concluded that those, who have a relationship with God characterized by relatedness, do have an increased commitment to self-improvement and moral helpfulness. The author suggests that these results are likely a combination of prosocial behaviors that one develops as a

result from feeling close to god as well as specific lessons within Judaism such as *tikkun olam* (a commitment to social justice). All of these studies found the JewBALE to be an effective assessment tool for measuring the religiosity and spirituality of Modern Orthodox adolescents. These studies provide preliminary evidence for the usefulness of the JewBALE.

The above mentioned research was conducted exclusively with high school or post-high school students for which the JewBALE was originally designed. However, this research overlooks the critical period of adolescence, a time when Elkind (1978) and Goldman (1964) describe the conceptualization of religion and spirituality occurs that will guide people for the rest of their lives. An understanding of this period of development necessitates the creation of a measure that provides insight into the development of Modern Orthodox Jews during this key transitional period of preadolescence.

### **Development of the JewBALE Middle School Form**

To better understand preadolescent religious and spiritual development, the JewBALE Middle School Form (Goldberg, Ross, & Friedman, 2011) was developed. It used a similar structure (7-point Likert scale) and items as the JewBALE in order to allow for continuous comparison of spirituality and religiosity from preadolescence through adolescence. The JewBALE Middle School Form kept the original 175 questions, but changed the wording to increase understanding of participants. For example, the item “God will resurrect the dead” was rewritten as “God will bring the dead back to life in the future,” while items that used the phrase “*yirat shamayim*” were rephrased “awareness of God” to use age-appropriate terms. Items were added to assess

areas of interest particular for this age group, including evaluating a child's feelings about their Bar/Bat Mitzvah and about bullying. These questions were added in consultation with a middle school principal with almost 20 years of experience who was aware of the unique challenges confronting these children and was reviewed by two leading researchers in the field of Jewish spiritual and religious education.

### **Purpose of the Study**

The purpose of this study is to assess the psychometric properties of the JewBALE Middle School Form. The current study is a secondary analysis of the JewBALE dataset that was collected by the Institute for University-School Partnership at Yeshiva University with the approval of the Yeshiva University Committee on Clinical Investigation as part of the Religious Understanding in Adolescent Children project. Participants included 176 children ages 10 to 14 years old who attended a Modern Orthodox Summer camp in Northeast Pennsylvania during the summer of 2011.

### **Research Questions**

The research questions to be addressed in this dissertation are:

- 1) Are there significant gender or grade differences in the spiritual and religious development for this age group?
- 2) What is the internal consistency reliability of the Total Beliefs and Total Actions composites?
- 3) What factors underlie the JewBALE Middle School Form? Is the factor structure similar to the JewBALE for high school students and adults? Do new items specific to Middle School Form distinct factors, or are they best understood as part of other previously identified factors?

4) How do newly added items of JewBALE Middle School Form relate to the Total Beliefs and Total Actions Composites?

### **Hypotheses**

H<sub>1</sub>: Given that theories of religious and spiritual development of adolescents do not suggest any differences in age or gender, there will be no significant differences between genders and grade just completed.

H<sub>2</sub>: Given the high correlation between the items that comprise the JewBALE Middle School Form, the Total Beliefs and Total Actions composites will have at least Cronbach's Alphas of .80 or greater as indicated by the JewBALE.

H<sub>3</sub>: Given new items, there will be two additional factors on the JewBALE Middle School Form than those previously found in the JewBALE. The first factor will focus on the Bar/Bat Mitzvah experience, and the second factor will describe bullying and cyber-bullying in a manner differently than already conceptualized on the Interpersonal Relations subscale. In addition to these two new factors, additional new factors will be identified due to the way preadolescents conceptualize beliefs and actions differently than adolescents and young adults. This will lead to an increase in the number of factors above and beyond those expected as a result of the additional items.

H<sub>4</sub>: The items related to the Bar/Bat Mitzvah experience will be correlated with items of the Total Beliefs and Total Actions composites since beliefs and actions are closely intertwined. Items that are related to bullying may have weaker correlations with other items on the JewBALE, as bullying is not often conceptualized as a religious variable.

## **Statistical Plan**

Data will be analyzed using SPSS Version 19. In order to answer the first research question, an independent sample t-test will be conducted in order to determine significant gender differences, and a one-way ANOVA with Tukey's post-hoc test will be computed to look for significant grade differences. Cronbach's Alphas will be computed for the two composites of Total Beliefs and Total Actions in order to answer the second research question. To answer the third research question, a principal components analysis with oblimin rotation will be conducted in order to understand the factors that underlie the overall questionnaire. The number of expected factors will not initially be specified in order to determine the total number of potential factors underlying the JewBALE Middle School Form. To answer the final research question, item-composite correlations will be computed between the items that were added specifically for middle school children and a composite of the other items that were maintained from the JewBALE High School Form, allowing for a better understanding of the relationship between the middle school specific items and the items on the original JewBALE.

## **Significance of the Study**

The main benefit to be derived from this study is the establishment of a questionnaire that can be used to assess the development of spirituality and religiosity in Modern Orthodox Jewish preadolescents. This can help teachers and other service providers to better support preadolescents during their religious and spiritual development. The JewBALE Middle School Form is potentially a reliable and valid measure that can be used to evaluate outcomes, especially for programs that are designed to develop spirituality and religiosity in Modern Orthodox Jewish preadolescents.

## **Definition of Terms**

**Modern Orthodox Judaism** is a term that has been difficult for researchers both outside of the community as well as those within the community to define. For the purposes of this study, Modern Orthodox Judaism is a sect of Orthodox Judaism that maintains the beliefs and performs the actions that are assessed on the JewBALE. (For a more complete discussion on defining the term, see Weinberg, 2008).

**Spirituality** is defined as one's personal belief in a religious teaching or an internal commitment to one's faith (Good & Willoughby, 2006). Orthodox Judaism has long demanded that Jews maintain certain beliefs about God and his relationship to man, the Jewish people, and the world. These beliefs include the existence of God, monotheism, Divine revelation at Mt. Sinai, and that God is actively running the world by intervening in each individual's life.

**Religiosity** is defined as one's devotion to a set of beliefs. In religiosity research, it is often viewed as the performance of specific actions required by one's religion (Good & Willoughby, 2006). Orthodox Judaism believes that there are 613 commandments that a Jew must follow. These 613 commandments include both positive and negative commands, and each command has specific instructions on how and when these are to be performed. Examples include keeping kosher, observing the Sabbath, not gossiping, and not stealing.

## **Chapter 2**

### **Review of Literature**

Early psychological theories and research held a negative view of spirituality and religion. Freud (1927) viewed religion as “comparable to a childhood neurosis” (p. 52), which functioned as a defense mechanism to minimize stress. Behaviorists believed that religion was an internal process that could not be observed and is therefore not influential in behavior (Skinner, 1987). However, modern psychologists view religion and spirituality as having positive and protective influences on the development of children and adolescents by promoting the use of effective coping strategies and building resilience while minimizing the likelihood of engagement in risky behaviors. This chapter will review theories of religious and spiritual development, as well as examine the research that supports the modern view of spirituality and religiosity as protective factors. Additionally, common research challenges that arise when studying religious and spiritual development are discussed. Lastly, the JewBALE will be discussed in terms of its potential to increase understanding of the religious and spiritual development of Modern Orthodox Jewish preadolescents.

#### **Theories of Religious and Spiritual Development of Children and Preadolescents**

Developmental theories of spiritual and religious development often make multiple assumptions. The first assumption is that religion and spirituality develop in stages correlating with the cognitive and social development of the child, a view heavily influenced by Piaget’s theory of cognitive development. Stage theories suggest that a child must successfully master certain religious thoughts and beliefs before progressing to the next stage. Additionally, these theories assume that religious and spiritual

development is an innate process that humans will progress through if provided the necessary resources and opportunities by their families, communities, and societies. This leads to another assumption, that religious and spiritual development is a positive influence for all children (Roehlkepartain, Benson, King, & Wagener, 2006). Three main theories of religious and spiritual development will be summarized in this chapter: (a) Goldman's Theory of Religious Thinking, (b) Elkind's Theory of Religious Identity Formation, and (c) Oser's Theory of Religious Judgment Formation. These theories were chosen because of their historical significance and the high frequency they were cited in the literature.

### **Goldman's Theory of Religious Formation**

Goldman (1964) suggested the first theory of religious and spiritual development that was related to Piaget's theory of cognitive development. Focusing on the differences in children's and adults' interpretation of Bible passages, Goldman suggested that the progression of one's religious identity followed (in manner and timeframe) the stages of cognitive development espoused by Piaget. Goldman suggested four stages of religious identity formation:

- Stage 1-During **early childhood**, there is no indication that children think in any religious sense, as they lack the abstract thinking necessary to understand religion. This corresponds with Piaget's sensorimotor stage, when information about the world is gathered only through concrete sensory input.
- Stage 2- After preschool, children develop cognitive abilities characteristic of **middle childhood**. At this stage, Piaget posits that children still think of

everything concretely and are unable to think abstractly. Thus, at this stage, children still experience religious ideas in materialistic and concrete ways.

- Stage 3- In **late childhood**, children are forced to confront the inadequacies of their current religious paradigms and must shift these beliefs to allow for a more realistic theology. For example, children begin to recognize that a physical God can not be everywhere at all times, and are thus forced to accept a more abstract concept of God who exists as a non-physical “spiritual” entity. However, as explained by Piaget, this time period of preadolescence is defined by the difficulty in balancing their former child-like concrete schema with the emerging and developing adult-like abstract thinking.
- Stage 4- Goldman suggested that around the age of 14 children are able to balance the concrete and abstract thinking necessary to live a fulfilling spiritual life. Religious and spiritual identity is fully formed at this point.

### **Elkind’s Theory of Religious Identity Formation**

Elkind’s theory of religious and spiritual identity was developed through extensive interviews of Jewish (1961), Catholic (1962), and Protestant (1963) children and preadolescents in the United States. He published individual studies of each religion, and then used the similarities and differences to formulate a global theory of religious and spiritual development (1978). Elkind’s stage theory is based on emerging cognitive abilities that allow children to reconstruct their beliefs, practices, and dogmas of religion, as well as the methods used to differentiate between religious groups.

Elkind put forth the following stages:

- Stage 1 (ages 5-7): Children at this stage use categorical thinking in order to group ideas and concepts, but are unable to verbalize what differentiates the groups. Children believe that a person can only belong to one group, with “Jews” differing from “Christians” and “Americans,” but they cannot explain what differentiates a Jew from a Christian, or why a Jew cannot also be an American.
- Stage 2 (ages 7-9): Children at this stage utilize a concrete understanding of the differences between religious groups. They can differentiate between religious groups based on differences in the activities that members within each group perform. However, children at this stage cannot differentiate religions based on abstract concepts such as different beliefs about God. Thus, while they might be able to differentiate between religions based on the actions that are performed during prayer services, children cannot understand the abstract concepts of various religions that prompt these differences. They are also still incapable of grouping the different religions under a single abstract category of “religions.”
- Stage 3 (ages 10-12): Children at this stage are able to view “religion” as a single abstract concept, and can differentiate between religious groups based on differences in beliefs and thoughts. They can also understand that people can simultaneously belong to multiple categories that are not contradictory, such as “Christian” and “American.”
- Stage 4 (ages 13 and above): Children at this stage have a complete abstract understanding of their religion’s ideas and beliefs and can use this

comprehension to further their own beliefs, while distinguishing them from those of other religions.

Goldman's and Elkind's theories have been replicated in other cultures (for example, Tamminen, 1976). These studies support the notion that children and adolescents begin to develop their religious and spiritual identity, progressing from a concrete understanding to a more abstract belief system. However, these studies suggest that this change is more gradual in childhood and early adolescence than step-like. Researchers have also questioned the ages at which children progress through these different stages, as Elkind and Goldman both based their theories on the work of Piaget. However, recent research suggests that children's cognitive abilities may develop even faster than Piaget originally proposed. Additionally, researchers believe that spiritual and religious development may occur at a younger age than originally theorized. Lastly, some researchers have postulated that religious and spiritual growth and development may occur across the lifespan (Gottlieb, 2006).

### **Oser's Theory of Religious Judgment Development**

Another commonly cited theory of religious development was formulated by Swiss psychologist Fritz Oser (Oser, 1991; Oser, & Gmunder, 1991), who used semi-structured interviews to study how people at different ages respond to various challenges. Oser suggested five stages of religious judgment development, as well as postulated the existence of a sixth "universal" stage. He believed that religious judgment developed throughout life, but that growth is especially evident during times of religious crisis. According to Oser's theory, there are six stages of religious judgment development through which people progress starting at age 5.

- Stage 1 (ages 5-9): Children at this stage believe that God actively intervenes in human affairs by punishing or rewarding as He pleases. People are unable to influence God's decision and must react to His decisions.
- Stage 2 (ages 9-12): Children in this stage believe that God is an omniscient being still involved in rewarding and punishing people. However, they begin to believe that people can influence God's decisions by performing good deeds and fulfilling religious promises and vows.
- Stage 3 (ages 12-17): Early adolescents at this stage view themselves as autonomous from God. They believe that people are responsible for all decisions and outcomes that occur, and they question God's existence. Those who choose to believe in a higher being believe that God has an agenda that does not directly impact them.
- Stage 4 (ages 18-middle-aged adults): This stage is characterized by a continued belief that one maintains autonomy for making decisions and managing outcomes. However, one believes that God is the one who provides opportunities for freedom and gives meaning to life's challenges.
- Stage 5: This stage is characterized by a sense of intersubjectivity in which an external being is encountered everywhere and is an active participant in all life activities (even those that seem mundane and insignificant). People at stage 5 find that freedom can only be attained by completely subjecting one's self to the will of a higher being, and that all moments of life are opportunities to encounter the divine. Oser admitted that it is difficult to describe this stage, as few people in his samples attained this understanding.

- Stage 6: In this hypothesized stage, an individual develops such a degree of trust and belief in God that this relationship is not negatively affected by experiences of failure or pain. People at this stage believe that God provides infinite meaning to every aspect and detail of their lives.

Oser's theory provides a comprehensive view that explains the development of religious judgment and the evolving perception of God's role in everyday life. Oser agrees with Elkind's and Goldman's suggestion that religious thinking develops from concrete to abstract. However, Oser's theory is not universally accepted. Some of the critiques have focused on the lack of conclusive evidence to suggest a hierarchical progression from Stage 3 to any of the additional postulated stages. Critics suggest that these different stages actually imply alternative desirable endpoints (Batson, Schoenrade, & Ventis, 1993). Additionally, psychologists are concerned with the theological implications present in Oser's theory, which suggests that proper development leads to the acceptance of a God (Stage 4) and a belief that God permeates all aspects of one's life and can lead to salvation and freedom (Stages 4-6). Thus, researchers critique Oser's theory as a framework for how one's religious judgment ought to develop within a religious population as opposed to being a theory of how they actually develop (Kwilecki, 1988). Despite these criticisms, Oser's theory has often been cited as a comprehensive theory of religious and spiritual development across the lifespan.

### **Theories of Religious and Spiritual Development of Orthodox Jewish Children and Preadolescents**

There has recently been an increase in the number of studies that address the religious and spiritual growth of Modern Orthodox Jewish adolescents in high school

(Fisherman, 2000; Goldmintz, 2003; Weinberg, 2008) and those who spend a post high school year studying in Israel (Berger, Jacobson, & Waxman, 2007; Eisenberg, 2010). However, there remains a lack of research on the religious and spiritual development of Modern Orthodox Jewish children and preadolescents. It is therefore important to highlight Elkind's theory that discusses religious and spiritual development of children and preadolescents within the general Jewish community at large.

Elkind (1961) interviewed 210 Jewish children ages 5-11 from the Boston area who differed in religious affiliation, religious education, and socioeconomic status. Children were asked five questions about Judaism (Is your family Jewish? Can a cat or dog be Jewish? How do you become Jewish? What is a Jew? Can a person be Jewish and American at the same time?) and were then asked to explain their answers. Based on the types of responses given by children at different ages, Elkind theorized three stages of Jewish religious development. The first stage, usually for children age 5-6 years old, was characterized by a concrete conceptualization of Jews that were differentiated from other ethnic groups by physical features such as hair color, skin color and country of origin and also understood that only these people could possess the qualities necessary to be considered a Jew. Children at this stage also conceive of Judaism as an absolute quality that prohibited the inclusion of other groups. Thus, children in this group could correctly identify themselves as Jews, that their pets could not be Jewish, and that they were not Catholic or Protestant. However, they could not identify themselves as Americans. When asked why they were not American or Catholic they could only respond based on differences in physical features.

During the second stage, usually found among children ages 7-9, children maintain their concrete conceptualization of Judaism, but are able to distinguish between religions based on rituals and family relationships. Thus, children correctly identified themselves as Jews and that pets are not. However, when asked what makes them Jewish and not Catholic or American, they either identified a ritual that they performed that made Judaism unique (we celebrate the Sabbath, we pray in a synagogue) or based on a family's relationship to Judaism (I am Jewish because my parents are Jewish). The last stage, starting at age 10 and continuing throughout adulthood, views Judaism as an abstract concept that is different from other religions based on the contents of their beliefs. Children at this point are able to group together different religions under the heading of "world religions" and understand that the religions maintain different abstract concepts about God and the world. Children can also recognize that people are capable of being part of two different groups as long as they are not contradictory. Thus, children at this age differentiate Judaism from other world religions based on its specific system of beliefs about God that makes it unique, and a person can be both Jewish and American because a person can possess both a religion and a nationality at the same time.

Elkind found that the greatest individual variability in responses came from 10 year olds, as children transitioned from stage 2 (concrete thinking) to stage 3 (abstract thinking). Elkind postulated that children at this stage are confronted with the inadequacy of previous conception of religion and struggle to form a newer abstract reality. Though regression is possible, it is often a necessary part of a healthy "conceptual progression." To date, this is the only research that measured the religious and spiritual development of children within the Jewish community.

## **Research on the Impact of Spirituality and Religiosity**

Although a relatively new area of study, research has repeatedly found that religion and spirituality serve as protective factors and help promote positive psychological well-being. It is important to note that much of the research did not differentiate between spirituality and religiosity, and thus this review is a sampling of overall findings related to both of these constructs. Additionally, much of the research has focused primarily on adults (see, for example, Kiesling, Sorell, Montgomery, & Colwell, 2006; Wink & Dillon, 2003). It is only recently that researchers have begun to focus on the relationship between religiosity/spirituality and outcome variables in adolescents (e.g., Pearce, Little & Perez, 2003; Wright, Frost & Wisecarver, 1993). Even less research has focused on children and pre-adolescents (Benson, Roehlkepartain, & Rude, 2003).

Wright, Frost, and Wisecarver (1993) found an inverse correlation between church attendance and depressive symptoms among 451 adolescents in a Texas public high school. They also found that those who view their religion as providing meaning to life had fewer depressive symptoms than their peers who did not feel that religion provided them with a spiritual support. Pearce, Little, and Perez (2003) found that church attendance, self-ranked religiousness, congregational support, and congregational problems were all correlated with religion among 744 adolescents from grades 7-9. Their sample was comprised of 61% Catholic, 13% Protestant, 6% Jewish, 10% other, and 10% no religious affiliation. Interestingly, multiple regression analysis of these variables suggested that only variables associated with interpersonal relationship with one's congregation (congregational support and congregational problems) were significantly

predictive of depressive symptomatology. This highlights the importance of social supports and positive experiences that can be provided by religion.

Davis, Kerr, and Robinson Kurpius (2003) studied the relationship between religion and anxiety among adolescents in high school. Forty five students who were identified as at risk participated in the Talented At-Risk Girls: Encouragement and Training for Sophomores program. The sample was ethnically (12 Hispanic, 16 White, 5 African American, 4 American Indian, 2 Asian/Pacific Islander, and 6 multiethnic) and religiously (18 Catholic, 6 Protestant, 2 Mormon, 1 Jewish, 7 other Christian, 5 no religion, and 5 did not respond) diverse. In this study, spiritual well-being was composed of two distinct components: “religious well-being,” which refers to one's well-being in relation to "God," and “existential well-being” which refers to a sense of life purpose and life satisfaction without necessarily referring to anything specifically religious. Davis et al. found that spiritual well-being predicted lower levels of trait anxiety. When spiritual well-being was divided into two components, researchers found that existential well-being was the best predictor of trait anxiety. The authors concluded that though religion does have a moderating effect on trait anxiety, this moderating effect is dependant on one's associating religion with meaning and purpose of life.

Religiosity has been implicated in adolescents' perception and attitudes towards substance use. Francis and Mullen (1993) studied 4,753 13-15 year old adolescents in England. The sample consisted of 54% Christian denominations, 43% who self-reported no religious affiliation, and 3% who reported another world faith. The authors found that despite various substances use (glue, heroine, butane gas, marijuana, cigarettes, alcohol), religious observance was negatively correlated with all substances of abuse.

Similarly, Piko and Fitzpatrick (2004) found that religiosity served as a protective factor against middle and high school Hungarian male students' use of marijuana, alcohol, and cigarettes and female students' use of marijuana. This is an especially interesting findings in post-socialist Hungary, where affiliation with a religious denomination had been discouraged by the ruling socialist party. In Piko and Fitzpatrick's sample, only 67.8% of the respondents reported having a religious denomination. Of this group, 71.5% reported being Catholic, 6.8% were Protestant, 19.8% responded that they were simply Christian, and 1.9% responded other denominations such as Greek Orthodox. Because the authors felt that religious denomination did not necessarily match with active religious participation, additional questions on prayer and church attendance were asked. In response to the question "Do you pray?," 33.8% of the youth said yes and 66.2% said no. When asked about church attendance, 43.3% said that they "never attend religious services," 40.6% said that they "go to church only on the occasion of the great religious feasts," and 16.1% said that they attend religious services on a regular basis. Additionally, Engs and Mullen (1999) found that despite differences between religious affiliations (Roman Catholic, Protestants, Church of Scotland), students in Scottish colleges and universities who identified themselves as very religious were less likely to consume large quantities of alcohol and use tobacco, marijuana, amphetamines, ecstasy, and LSD as compared to those who identified as having no to little religious commitment. A review of all the studies that correlate religiosity to other outcome variables found the strongest relationship was those that showed an inverse relationship between substance use and religiosity (Dew et al., 2008).

Spirituality and religiosity have also been beneficial to developing adolescents decreased risk of suicide/suicide ideations (Donahue & Benson, 1995), decreased incidents of delinquency and an overall change in delinquency trajectory (Petts, 2009), postponement of sexual initiation (Lammers, Ireland, Resnick, & Blum, 2000), improved quality of life and increased happiness (Holder, Coleman, & Wallace, 2010), and improved academic engagement (Milot & Ludden, 2009). The pathways that underlie these relationships are often indirect and the strength of the relationship is different for each variable, but the overall findings suggest that spiritual and religious development lead to healthy development from childhood through adolescence and adulthood.

### **Challenges in Spirituality and Religiosity Assessment**

Despite research findings that support the positive role religion and spirituality play in adolescent development, quantitative research on this topic is still relatively new and limited. The difficulty in studying these areas can be divided into three major areas: definition of terms, measurement, and research design and analysis. These problems will be explored below as they relate directly to the current research.

A major problem in studying religion and spirituality is defining the terms in such a way that will best capture these complex variables. Recently, researchers have found it necessary to distinguish between spirituality and religiosity, yet have had difficulty agreeing on a definition. For example, Zinnbauer et al. (1997) identified spirituality as an individual phenomenon, whereas religiosity is conceptualized as a formally structured and institutionalized form of worship characterized by a set theology and practice. In contrast, Pargament (1999) defined spirituality as a search for the sacred, while religion creates the doctrines, beliefs and rituals that unite those that are searching for the sacred.

This lack of agreement within the research literature makes studying the constructs of “spirituality” and “religiosity” especially difficult.

A second problem is creating an instrument that can measure both the concrete and abstract components of religiosity and spirituality. As previously discussed, researchers have failed to come to an agreement in defining broad constructs such as spirituality and religiosity, and have had difficulty in determining the appropriate questions to ask concerning these constructs. In addition, translating spiritual and religious terms have proven difficult for many researchers. Though objective actions, such as frequency of bible study, are easy to define, more abstract concepts such as motivation to worship or fear of God are more difficult to objectively define and translate. This can be especially difficult when constructing measures that cover a wide range of age groups. Hart (2006) notes that researchers often use adult scales for measuring religious beliefs because of an assumption that full cognitive abstraction can only be achieved in adulthood. However, this introduces sources of error when these scales are then used for assessing children, who might respond without fully understanding the questions. Additionally, it is difficult to create a measure that is appropriate for both universal religious concepts, while respecting the nuances that are unique to each religious group. It is important, when creating new scales of religiosity and spirituality, to ensure that the questionnaire is cross-validated with other measures of belief, while also maintaining readability that is appropriate for the intended sample and is also respectful of the distinctions that makes each religion unique.

An additional difficulty is determining a methodology for research design and statistical analysis. Goruch and Walker (2006) provide three necessary conditions that

are required when using a cross-sectional research design. First, questions should be understood by all age groups that are being studied. The second condition is that analysis must use age and age-squared in order to assess for curvilinear relationships. Lastly, the authors must search for underlying causative factors that explain the age differences, such as differences in cognitive development, as opposed to simply stating that age differences explain religious differences. Goruch and Walker (2006) believe that path analysis and structural equation modeling (SEM) may help in determining causation, although they caution that causation is a function of research design and not the statistical method used.

To determine causality, time is often an important variable to take into account. This has led many researchers to use longitudinal designs to study the impact of religiosity and spirituality on future development of other developmental areas. Though endorsing well-designed longitudinal studies, Goruch and Walker (2006) highlight a number of difficulties in longitudinal studies, such as selective retention, participants' response to being asked certain questions, and the length of time it can take for data to be collected and analyzed that can make the information outdated and obsolete. The authors suggest that an overlapping cohort design that utilizes the strengths of both cross-sectional and longitudinal designs are better to understand the constructs in a time efficient manner. However, they still caution that this design does not conclusively identify causation. Rather, it provides information about potential causative factors that can further be studied using an intervention design.

### **The Jewish Beliefs Actions and Living Evaluation (JewBALE)**

The Jewish Beliefs Actions and Living Evaluations (JewBALE; Goldberg, 2008) provides a way to quantify Modern Orthodox Jewish adolescent and young adult levels of

beliefs and religiosity. The JewBALE is a self administered seven-point Likert scale that consists of 66 items concerning beliefs (e.g., God created the world from nothing, I love God ) and 109 items concerning actions related to Orthodox Jewish practice (e.g., I do not keep the Sabbath in public, I study Tanakh [Bible] outside of class time).

Administration time to complete the JewBALE is approximately one hour. Questions concerning beliefs are asked prior to the questions about actions. The JewBALE was divided into a Total Beliefs composite and a Total Actions composite and then further divided into subscales. The Total Beliefs composite is comprised of the following subscales: Divine Providence with Relation to the World, Divine Providence with Relation to the Individual, Fear/Love/Awe of G-d, Joyful Life, Rabbinic Authority, Jewish Tradition, Relationship to Israel, and Outlook on Secular Studies. Subscales of the Total Actions composite are: Community Service, Prayer, Holiday Observance, Interpersonal Relations, Keeping Kosher, Study of Torah, Modesty, Self-Improvement, Sabbath Observance, and Personal Character Development. The Total Beliefs composite is scored by taking the average scores of each beliefs subscale and then dividing that score by the number amount of beliefs subscales (8). Similarly, the Total Actions composite was scored by taking the average scores of each actions subscale and dividing by the total number of actions subscales (10). Cronbach's Alphas have been reported as .86 and .89 for Total Actions and Total Beliefs, respectively (Goldberg & Isaacs, 2009).

Items were constructed by interviewing a group of ten Orthodox Rabbis and three women in leadership positions in the Jewish community. This was done in order to ascertain that the categories of beliefs and actions would represent traditional Orthodox beliefs and activities. Based on feedback from these experts and confirmatory factor

analysis, 18 factors were identified, including 10 categories of actions and 8 categories of beliefs. These experts helped identify the constructs as comprising of religious beliefs and actions as mentioned above.

The JewBALE is the key assessment measure of the RUACH project, a long term partnership between researchers and educators to better understand religious and spiritual development and factors that influence this process. Areas of current study include investigating age and gender differences within a high school population and gaining a greater understanding of the impact attending a yeshiva high school has on religious and spiritual development in comparison to attending a public high school. The JewBALE will be essential in developing a theory of religious and spiritual development within the Jewish community. In addition, the JewBALE can be used to more deeply understand current trends in the religious and spiritual development of Jewish adolescents and provide evidence-based suggestions for community leaders and educators (Goldberg, Pelcovitz, & Rosenberg, 2011). Weinberg (2008) used the JewBALE to better understand the difficulty that Modern Orthodox Jewish adolescents experience when developing their religious identity. In that study, the author suggests that Modern Orthodox Judaism is a devotion to religious practice while maintaining a positive perspective on secular studies and a commitment to religious Zionism and the State of Israel. The author focused on four subscales of the JewBALE that directly related to this definition: Keeping Kosher, Sabbath Observance (measures of commitment to religious actions), Outlook on Secular Studies, and Relationship to Israel. The author made four hypotheses concerning the relationship of these four subscales. The author hypothesized that Modern Orthodox adolescents who were generally committed to Sabbath Observance

would also show a general commitment to Keeping Kosher. In addition, those who were generally committed to these two subscales would also show a generally positive commitment to the State of Israel. Lastly, those who were generally committed to the first three ideals of Modern Orthodoxy would also maintain a positive outlook on secular studies.

A sample of 484 Modern Orthodox Jewish Adolescents in yeshiva high schools completed the JewBALE. The author found support for a relationship between Sabbath Observance and Keeping Kosher, as well as a relationship between those who kept those two and a positive relationship to Israel. However, there were no correlates found among Keeping Kosher, Sabbath Observance, Relationship to Israel, and Outlook on Secular Studies. The author suggests that this difficulty may have been due to Modern Orthodox Jewish leaders' inability to agree on a single definition of Modern Orthodoxy. This confusion in the leadership trickles down to the youth who in turn have difficulty in developing a religious identity with equally strong commitment to religious actions and maintenance of beliefs. Results from a cluster analysis suggest that adolescents who were classified as "strong" in both actions and beliefs have a higher level of adherence to religious actions than to religious beliefs. These research findings may help religious educators design curriculums and programs that will help clarify the ideological components of Modern Orthodoxy and help further develop the beliefs of Modern Orthodox adolescents.

In a second study, Klein Poupko (2010) studied the relationship between Modern Orthodox Jewish adolescents' relationship with God characterized by relatedness and their commitment to self improvement and moral helpfulness. Select questions from the

JewBALE's Divine Providence- Relationship to the Individual, Fear/Love/Awe of God, Self Improvement, Community Service, Interpersonal Relations, and Personal Character Traits subscales were used in order to assess one's relationship to God, self improvement, and commitment to moral helpfulness. In addition, family cohesion, social support from friends, social support from mother, and self esteem were examined as potential confounding variables of the relationship. Results indicated that there was a correlation between having a relationship with God characterized by relatedness and a commitment to self improvement ( $r = .61$ ) and moral helpfulness ( $r = .43$ ). Multiple hierarchical regressions were then performed to assess the strength of predictability of having a relationship with God characterized by relatedness after controlling for potential confounding variables such as self-esteem, family cohesion, and social support from family and friends. Results indicated that having a relationship with God characterized by relatedness remains a statistically significant predictor of commitment to self improvement and moral helpfulness even after controlling for potential confounds ( $B = .59, p < .001$  and  $\beta = .37, p < .001$ , respectively). Lastly, the authors investigated possible gender differences in levels of relationship to God, commitment to self improvement, and moral helpfulness and possible interactions between gender and relatedness that may predict commitment to self improvement and moral helpfulness. The author found that females were significantly higher in their commitment to self improvement and moral helpfulness, but not on the level of relatedness to God. Additionally, no interaction effects were found for gender and relatedness to God in their ability to predict commitment to self-improvement or moral helpfulness. The author asserts that religion may play an important part in helping adolescents commit to self-

improvement and moral helpfulness above and beyond the messages received from society around them. Results from this study suggest that adolescents benefit from having a relationship with God characterized by relatedness.

Eisenberg (2010) used the JewBALE as part of an assessment battery in order to assess the relationship between support from rabbis and religious teachers while studying in Israel during a post high school year and the level of religious and spiritual growth that occurs during that year. Eisenberg hypothesized that having a positive relationship with a rabbi and/or religious teacher will serve as the strongest predictor of changes in both religiosity and spirituality. Eisenberg further hypothesized that children who develop positive supportive relationships with spiritual and religious mentors were more likely to come from families with high levels of cohesion. Additionally, Eisenberg hypothesized that there would be a difference in the way genders relate to their religious mentors. Namely, he suggested that females would be more likely than males to develop an emotionally-based relationship with a mentor, while males would be more likely than females to develop an intellectual-based relationship with a mentor. Lastly, Eisenberg suggested that students would be more likely to develop mentoring relationships with teaching staff than with non-teaching staff, such as dorm counselors, teaching assistants, and guidance departments.

For this study, the sample consisted of 598 (319 females; 279 males) graduates of Modern Orthodox Jewish high schools who were studying for a post high school year in yeshivot/seminaries that synthesized the classic commitment to excellence in Jewish textual study and religious devotion along with the more modern trends of religious Zionism, value of secular education, and pursuit of a professional career. Students

completed the assessment battery over a two week period towards the end of their year in Israel.

Religiosity and spirituality were both defined as scores on the Total Actions and Total Beliefs scales of the JewBALE, respectively. Teacher Support was operationally defined and measured using the Social Support Questionnaire (SSQ-6; Sarason, Sarason, Shearin, & Pierce, 1987), an abbreviated form of the free-response 27-item Social Support Questionnaire. Religious coping was measured using the Brief Religious Coping (Brief RCOPE; Pargamet, Smith, Koenig, & Perez, 1998), a 14 item survey that measure's how adolescents use their religion to cope with stressful situations. Family cohesion was measured by participants' scores on the cohesion subscales of the Family Environment Scale, which assess the degree of commitment, help and support family members provide for one another. Self-Esteem was measured by participants' scores on the Rosenberg Self-Esteem Scale, an empirically validated 10-question survey of one's own self esteem. In order to qualitatively assess the nature of one's relationship to teachers, Eisenberg analyzed the Emotional and Intellectual Engagement with Teachers subscales of the Israel Experience Questionnaire. This original questionnaire was to qualitatively understand various aspects of the year-in-Israel experience, including a) overall increases in religiosity and spirituality during the year, b) items contributing to religious development, c) changes in attitudes and behaviors from high school, d) emotional and intellectual engagement in relationship with teachers and friends, textual learning and informal education, and e) areas of support/conflict with parents.

Multiple regression analysis showed that support from rabbis and teachers predicted high levels of internalization of both Jewish actions and beliefs ( $\beta = .10, p < .05$  for both). In addition, females reported greater overall emotional engagement with their teachers than

males,  $t(401) = 3.70, p < .001$ , while males did not show greater intellectual engagement with teachers than females  $t(394) = 1.44, p = .55$ ). Lastly, students reported greater engagement with teachers as opposed to the non-teaching support staff. This increased engagement with teachers manifested itself in both emotional and intellectual attachment with teaching staff,  $t(400) = 3.30, p < .001$  and  $t(389) = 5.75, p < .001$ , respectively. The author summarizes his finding as initial support for the unique impact that teachers can have in nurturing the religious and spiritual growth of Modern Orthodox adolescents studying in Israel for the year. In addition, the author highlights a number of ways that teachers in Yeshivot/seminary differ from those in yeshiva high schools and the various opportunities that these teachers have to develop a relationship with these adolescents and support their religious and spiritual development.

In summary, these three dissertations provide initial support for the utility of the JewBALE in better understanding the religious and spiritual development of Modern Orthodox Jewish youths. In all three dissertations, the JewBALE provided a reliable and valid measure of assessing the religiosity of these adolescents and helped shed light on the unique challenges and opportunities that confronts adolescents. Though these studies highlighted the difficulties of adolescence, similar clarity and understanding of the unique challenges of preadolescent Modern Orthodox Jewish youths is also necessary.

### **Purpose of the Study**

The purpose of the current study is to establish the reliability and factor structure of the JewBALE –Middle School Form. It is believed that this new measure can provide valuable information about Modern Orthodox preadolescents. Currently, there is no instrument designed for this population that can be effectively used in research to provide information about the religious and spiritual development of Modern Orthodox

preadolescents. It is also believed that by keeping the questionnaire consistent with the High School Form, the Middle School Form will be able to capture the developmental transition into adolescence.

## Chapter 3

### Research Method and Design

#### Participants

Four Hundred seventy three (473) 5<sup>th</sup> to 8<sup>th</sup> grade Modern Orthodox Jewish children who attended a residential camp in northeast Pennsylvania were recruited for this study. Of the 473 children, fourteen children (3%) did not receive parental permission and were excluded. Thirty additional children (6%) were excluded because they were from outside North America (28 from Israel, 2 from France). Of the 429 children, 183 (38.68%) children completed the JewBALE with no more than 4 items missing. Two children who completed the scale do not affiliate as Modern Orthodox and were excluded. Five children were excluded for answering questions in a pattern (e.g. All 3's, or 0123456543210). Therefore, participants included 176 (37.42%) children who met all of the study's inclusion requirements. Participants' ages ranged from 10-14. Table 1 summarizes the demographic information regarding the sample.

Table 1

*Demographic Information about the Sample (N = 176)*

	<i>N</i>	%
<b>Sex</b>		
Male	69	39.20
Female	107	60.80
<b>Grade</b>		
5	26	14.77
6	49	27.84
7	55	31.25
8	46	26.14
<b>Ethnicity</b>		
Ashkenazic	111	63.07
Half Ahkenaz-Half Sefard	2	1.14
Sefardic	5	2.84
Other	2	1.14
No response	56	31.82
<b>Religious Orientation</b>		
Modern Orthodox	137	77.84
No response	39	22.16
<b>Previous camp experience</b>		
Yes	131	74.43
No	9	5.11
No Response	36	20.45
<b>Participation in youth organizations</b>		
No participation	26	14.77
Participate in 1 organization	70	39.77
Participate in 2 organization	33	18.75
Participate in 3 organization	5	2.84
Participate in 4 organization	1	0.57
No response	41	23.30

## Measures

**JewBALE Middle School Form.** The JewBALE Middle School Form is a 186-item questionnaire that was developed to assess the beliefs and frequency of religious actions performed by children currently in middle school. All questions were answered by rating one's belief or frequency of behavior on a 7-point likert scale. Ninety-eight questions pertaining to beliefs were asked first, followed by 88 questions on religious

activities. The JewBALE Middle School Form reworded the JewBALE in order to apply to preadolescents. Twenty-three items were added that were of particular interest to preadolescents, such as the Bar and Bat Mitzvah Experience and bullying. These items are listed in Table 2 below.

Table 2

*New Items Added to the JewBALE Middle School Form (N = 23)*

---

- 1) I light Shabbat (Sabbath) candles before sundown each Friday night (GIRLS ONLY).
- 2) I pray at least one time per day (GIRLS ONLY).
- 3) If there are men present, I do not sing (GIRLS ONLY).
- 4) I light Yom Tov (Holiday) candles for each Jewish holiday (GIRLS ONLY).
- 5) I put on tefillin each day I am supposed to (BOYS ONLY).
- 6) I am excited about wearing Tefillin (BOYS ONLY).
- 7) I believe that wearing Tefillin brings me closer to G-d (BOYS ONLY).
- 8) I think that it is not a problem to occasionally not wear my tefillin on days when I should be wearing them (BOYS ONLY).
- 9) Being part of a mezumin (group of three men) for Birkat HaMazon (i.e. Blessing after meals) is important to me (BOYS ONLY).
- 10) Tzniut applies to one's speech as well as to actions like giving Tzedaka.
- 11) Tzniut only applies to girls.
- 12) Wearing modest clothing has nothing to do with my relationship to G-d.
- 13) I have received offensive and hurtful text messages from someone I know.
- 14) When I'm upset at someone, I will often let them know through a text or online.
- 15) Facebook or other social websites are places where I can say and write what I want about other people.
- 16) I am hurt more by someone saying something mean to my face as opposed to texting or writing it online.
- 17) The Jewish laws of appropriate speech and slander (Lashon Hara) do not apply to Facebook, texting, or other social media.

Table 2- continued

*New Items Added to the JewBALE Middle School Form (N = 23)*

---

18) A fellow student at School has been deliberately mean to me.

19) What my school wants me to wear affects what I choose to wear.

20) What my friends wear determines what I wear.

21) My parents' opinion strongly impacts on my clothing decisions.

22) I curse more in text or online than in actual face to face confrontations.

23) I have experienced bullying by other students.

---

**Demographic questionnaire.** A 10-question demographic questionnaire was also administered to collect data on camper's age, grade, school, community, ethnicity, religious denomination, and participation in Jewish organizations throughout the school year.

### **Procedures**

Data was collected on the first Sunday of the first summer session in July, 2011. Parental consent was obtained by emailing opt-out forms to parents before camp, and child assent was obtained on the first page of the questionnaire. All camp counselors were given the JewBALE Middle School Forms the day before administration and the researcher explained each question as well as the process of administration. Any questions from the staff were answered by the researcher. The camp separates campers into division based on grade just completed. Each division was called into a room and the campers were asked to sit by bunk. The researcher introduced himself and read the consent form to the entire division, including the option to opt-out of participation. This information was written for children on the first page of the answer sheet. Counselors then administered the questionnaires to the campers in their bunks, with the researcher in

the room who was supervising the administration. Each division was given a 55-minute period to complete the questionnaire. Food was distributed during the administration, though participation was not required to receive food. All surveys were collected by the researcher either upon completion or at the end of the period.

### **Statistical Analysis**

The data was analyzed using SPSS version 19. Double data entry was performed to check for errors. In order to assess the first research question, a t-test for independent means was computed using gender as the grouping variable, and a one-way ANOVA was computed using grade just completed as the grouping variable in order to look for grade differences. Cronbach's Alpha was computed for both the Total Actions and Total Beliefs composite scores to answer the second research question. In order to examine the factor structure that underlies the JewBALE Middle School Form, a principal components analysis was performed on the total data set. The number of expected factors was not specified prior to the analysis. The number of factors and the questions that comprise each factor was then compared to the factor structure that has been found to underlie the JewBALE. In order to answer the final question, item-composite correlations were computed for the 23 items added to the JewBALE Middle School Form to determine the relationships of these new items with the Total Beliefs and Total Actions composites that were maintained from the High School Form.

## Chapter IV

### Results

The following paragraphs describe the findings of this study:

*Research question 1: Are there significant gender or grade differences in the spiritual and religious development at this age group?*

In order to assess the first research question, a Total Beliefs Composite Score was computed by finding the mean of the overall sample on the belief items ( $M = 4.33$ ,  $SD = .68$ ). Males had a slightly higher average in Total Beliefs scores ( $M = 4.37$ ,  $SD = .70$ ) than females ( $M = 4.30$ ,  $SD = .67$ ). An independent sample t-test was performed in order to evaluate the significance of gender differences in Total Beliefs. The Total Beliefs composite score was set as the test variable and gender as the Grouping Variable. Results suggested that there were no significant gender differences in Total Beliefs ( $t(174) = .75$ ,  $p = .46$ ).

A Total Actions Composite Score was computed for all participants by obtaining a mean of the overall sample on all 88 action items ( $M = 4.09$ ,  $SD = .64$ ). Females had a slightly higher Total Actions score ( $M = 4.11$ ,  $SD = .65$ ) than males ( $M = 4.07$ ,  $SD = .62$ ). A t-test for independent means was performed in order to look for gender differences in Total Actions. Results suggested that there were no significant gender differences in Total Actions ( $t(174) = .40$ ,  $p = .69$ ).

In order to investigate grade differences in Total Beliefs and Total Actions for preadolescents, 2 one-way ANOVAs were performed in which Total Beliefs and Total Actions composite scores was the dependant variable and grade was the grouping variable. Neither of these ANOVAs yielded significant results for Total Beliefs ( $F(3,$

172) = 1.18,  $p = .32$ ), and for Total Actions ( $F(3, 172) = 1.89, p = .13$ ). This suggested that there were no significant grade differences in responses to the items.

*Research question 2: What is the internal consistency reliability of the Total Beliefs and Total Actions composites?*

In order to evaluate the internal consistency of the composite scales, separate reliability scores were computed for each gender on the Total Beliefs composite scales. This was to account for gender specific items of the measure, four items for girls and five items for boys. A single Cronbach's Alpha coefficient was computed for Total Actions as items were not gender-specific. Evidence for reliability of the Total Beliefs composite was found for both males ( $\alpha = .918$ ) and females ( $\alpha = .939$ ), and for the Total Actions composite for the overall sample as well ( $\alpha = .937$ ).

*Research Question 3: What factors underlie the JewBALE Middle School Form? Is the factor structure similar to the JewBALE for high school students and adults? Do new items specific to Middle School Form distinct factors, or are they best understood as part of other previously identified factors?*

Separate factor analyses were computed for Total Beliefs and Total Actions. In line with the JewBALE High School Form, it is proposed that these two composites are related yet distinct and that items should be analyzed accordingly. Due to the small sample size, the sample was not separated by gender. This increased the power of the analysis to a level approaching what Comrey and Lee (1992) described as "fair" power for a factor analysis and thus increased the likelihood of finding meaningful results. However, this led to the exclusion of questions 1-9 from the analysis as specific items were only completed by each gender. These questions were hypothesized to comprise a

single factor related to the Bar and Bat Mitzvah experience. Future studies with larger samples from each gender should be conducted to properly confirm this hypothesis.

Principal components analysis was used because the primary purpose was to identify the subscales underlying each composite score of the JewBALE Middle School Form. The initial eigenvalues showed that 26 items had eigenvalues over 1, accounting for 77.50% of the variance of the Total Beliefs composite. A ten factor solution, which explained 51.21% of the variance, was preferred because of the ‘leveling off’ of eigenvalues on the scree plot after these factors and the insufficient number of loadings on the remaining factors. Both Varimax and Oblimin rotations were examined before deciding on the oblimin rotation due to the expected high correlation between the items and the ease of understanding the factor loadings after rotation.

All items had a factor loading of .30 or above with at least one of the factors, except for item #26. When possible, factors were named as they were on the JewBALE High School Form. The first factor, in order of percentage of variance accounted for, was named “Relating to God Through our World,” the second was named “Outlook on Secular Studies,” the third was named “Experiencing God in Daily Life,” the fourth was named “Veracity of the Torah,” the fifth was named “God’s Reward and Punishment for Sinners,” the sixth was named “Benevolence of God,” the seventh was named “Fear/Love/Awe of God,” the eighth was named “Commitment to Halacha (*Jewish law*),” The ninth was named “Eternity of Judaism,” and the final was named “Rabbinic Authority.” A complete listing of these factor loadings can be found in Table 3, and inter-factor correlations can be found in Table 4, and Cronbach's Alpha coefficients for each factor can be found in Table 5.

Table 3

*Factor Loadings and Communalities Based on a Principal Components Analysis with Oblimin Rotation for Total Beliefs of the JewBALE Middle School Form (N = 176)*

	Relating to god through our world	Outlook on Secular studies	Experiencing god in our daily life	Veracity of the Torah	God's reward and punishment for sinners	Benevolence of God	Fear/Love /Awe of God	Commitment to Halacha	Eternity of Judaism	Rabbinic Authority	commonalities
10. On Sukkoth								<b>.48</b>		-.40	.61
11. A Bar/Bat Mitzvah	<b>.55</b>										.57
12. G-d will bring						.33			<b>.37</b>		.46
13. Jews experienced									<b>.45</b>		.49
14. I am impressed by			<b>-.51</b>								.51
15. Tefilat haderech		.36							<b>.40</b>		.42
16. G-d created the				<b>.40</b>							.31
17. G-d deserves my						<b>.71</b>					.53
18. I would be willing							<b>.56</b>				.54
19. G-d created the				.30	<b>.36</b>						.42
20. The way to support									<b>.44</b>		.50
21. I would like to							<b>-.33</b>				.37
22. Only Jews should									<b>.57</b>		.47

*Note:* Factor loadings <.3 are suppressed

Table 3- continued

*Factor Loadings and Communalities Based on a Principal Components Analysis with Oblimin Rotation for Total Beliefs of the JewBALE Middle School Form (N = 176)*

	Relating to god through our world	Outlook on Secular studies	Experienc ing god in our daily life	Veracity of the Torah	God's reward and punish ment for sinners	Benevol ence of God	Fear/Love /Awe of God	Commit ment to Halacha	Eternity of Judaism	Rabbinic Authority	common alities
23. G-d does not listen			<b>-.37</b>								.26
24. The words of the										<b>-.36</b>	.45
25. All good deeds									<b>.66</b>		.61
26. If I sin, G-d will											.26
27. The miracles in				<b>.38</b>							.41
28. A rabbi's										<b>-.45</b>	.54
29. In times of crisis, a									<b>.44</b>		.38
30. It is important to										<b>-.39</b>	.45
31. I have a fearful							<b>.62</b>				.57
32. My Torah studies	<b>.45</b>										.43
33. The rabbis make										<b>.45</b>	.33
34. G-d knows the									<b>.36</b>		.29
35. As Torah scholars,								<b>.57</b>	<b>.37</b>		.55

*Note:* Factor loadings <.3 are suppressed

Table 3- continued

*Factor Loadings and Communalities Based on a Principle Components Analysis with Oblimin Rotation for Total Beliefs of the JewBALE Middle School Form (N = 176)*

	Relating to god through our world	Outlook on Secular studies	Experiencing god in our daily life	Veracity of the Torah	God's reward and punishment for sinners	Benevolence of God	Fear/Love /Awe of God	Commitment to Halacha	Eternity of Judaism	Rabbinic Authority	commonalities
36. I give away my	<b>.54</b>							.32			.51
37. A Jewish person		<b>.69</b>									.58
38. I am in debt to G-d	<b>.40</b>			.37							.43
39. Jewish people do										<b>.39</b>	.44
40. I'm less religious					<b>.34</b>						.37
41. It is acceptable for		<b>.67</b>									.55
42. I never have			<b>-.47</b>					.39			.48
43. I often make deals		<b>.39</b>						.35			.39
44. I find a great deal	.34	<b>.41</b>	-.35								.65
45. When I see a	<b>.37</b>						.31				.51
46. I do not feel G-d's			<b>-.69</b>								.53
47. It is important to		<b>.80</b>									.67
48. I love G-d.			<b>-.68</b>								.58

*Note:* Factor loadings <.3 are suppressed

Table 3- continued

*Factor Loadings and Communalities Based on a Principal Components Analysis with Oblimin Rotation for Total Beliefs of the JewBALE Middle School Form (N = 176)*

	Relating to god through our world	Outlook on Secular studies	Experiencing god in our daily life	Veracity of the Torah	God's reward and punishment for sinners	Benevolence of God	Fear/Love /Awe of God	Commitment to Halacha	Eternity of Judaism	Rabbinic Authority	commonalities
49. I am willing to be	.31					.31		.33			.44
50. All bad deeds will				.31					.48		.49
51. I try to bring G-d			-.44								.48
52. I am spiritually	.49		-.37								.59
53. I feel insignificant							.48				.26
54. I have never felt						.43	.33				.49
55. The difficulties in	.34		-.56								.61
56. I relate to religious	.78										.69
57. I find meaning in	.79										.77
58. Learning Jewish	.71										.72
59. Learning Jewish	.71										.78
60. What happens in						.45					.49
61. G-d provides		-.31				.48					.50

*Note:* Factor loadings <.3 are suppressed

Table 3- continued

*Factor Loadings and Communalities Based on a Principal Components Analysis with Oblimin Rotation for Total Beliefs of the JewBALE Middle School Form (N = 176)*

	Relating to god through our world	Outlook on Secular studies	Experiencing god in our daily life	Veracity of the Torah	God's reward and punishment for sinners	Benevolence of God	Fear/Love /Awe of God	Commitment to Halacha	Eternity of Judaism	Rabbinic Authority	commonalities
62. The Torah's laws						<b>.33</b>					.19
63. It is unacceptable	-.31	<b>.42</b>			.30						.41
64. I'm less religious										<b>-.64</b>	.61
65. Seeing a beautiful			<b>-.54</b>								.64
66. I relate to G-d	<b>.52</b>										.53
67. A Messiah will						<b>.56</b>			.31		.63
68. A rabbi need not					.35			<b>.41</b>			.35
69. G-d knows all our						.32	<b>.38</b>				.52
70. Jewish people										<b>-.47</b>	.33
71. A rabbi should be		.30				.35				<b>-.52</b>	.69
72. I have a personally			<b>-.58</b>								.64
73. I believe that G-d			<b>-.65</b>	.32							.71
74. I feel G-d's			<b>-.55</b>								.58

*Note:* Factor loadings <.3 are suppressed

Table 3- continued

*Factor Loadings and Communalities Based on a Principal Components Analysis with Oblimin Rotation for Total Beliefs of the JewBALE Middle School Form (N = 176)*

	Relating to god through our world	Outlook on Secular studies	Experiencing god in our daily life	Veracity of the Torah	God's reward and punishment for sinners	Benevolence of God	Fear/Love /Awe of God	Commitment to Halacha	Eternity of Judaism	Rabbinic Authority	commonalities
75. I am touched by	<b>.57</b>										.60
76. When bad things	.32		<b>-.42</b>								.56
77. I fear G-d.							<b>.71</b>				.70
78. I don't feel that			<b>-.58</b>			.32					.63
79. It is appropriate to		<b>.61</b>				.33					.66
80. When I pray I am				.41		<b>.54</b>					.65
81. The Land of Israel				.36		<b>.67</b>					.72
82. I am confident that				<b>.75</b>							.56
83. I don't believe that						<b>.35</b>					.33
84. Overall, life is a				<b>.73</b>							.58
85. I feel confident				<b>.74</b>							.66
86. I am confident				<b>.58</b>							.57
87. I find meaning in	<b>.40</b>		-.32								.57

*Note:* Factor loadings <.3 are suppressed

Table 3- continued

*Factor Loadings and Communalities Based on a Principal Components Analysis with Oblimin Rotation for Total Beliefs of the JewBALE Middle School Form (N = 176)*

	Relating to god through our world	Outlook on Secular studies	Experienc ing god in our daily life	Veracity of the Torah	God's reward and punish ment for sinners	Benevol ence of God	Fear/Love /Awe of God	Commit ment to Halacha	Eternity of Judaism	Rabbinic Authority	common alities
88. I feel a great deal			<b>-.49</b>			.32					.61
89. I feel joy when	<b>.53</b>					.39					.63
90. Tzniut applies to	.21					<b>.57</b>					.59
91. Tzniut only applies					<b>.34</b>						.40
92. Wearing modest					.31	<b>.52</b>					.56
93. I have received					<b>.60</b>						.51
94. When I'm upset at					<b>.65</b>						.49
95. Facebook or other					<b>.64</b>						.50
96. I am hurt more by								<b>-.39</b>			.30
97. The Jewish laws of							<b>.47</b>				.45
98. A fellow student at					<b>.49</b>						.27

*Note:* Factor loadings <.3 are suppressed

Table 4

*Correlation Matrix Between Factors for the Ten Total Beliefs Factors (N = 176)*

	Relating to god through our world	Outlook on Secular studies	Experiencing god in our daily life	Veracity of the Torah	God's reward and punishment for sinners	Benevolence of God	Fear/Love/Awe of God	Commitment to Halacha	Eternity of Judaism	Rabbinic Authority
Relating to god through our world	1.00	.07	-.22	.13	.06	.21	.21	.11	.17	-.17
Outlook on Secular studies	.07	1.00	.02	.06	.09	.10	.04	.03	.03	-.06
Experiencing god in our daily life	-.22	-.02	1.00	-.14	-.05	-.15	-.10	-.09	-.13	.14
Veracity of the Torah	.13	.06	-.14	1.00	.08	.17	.06	.08	.15	-.10
God's reward and punishment for sinners	.06	.09	-.05	.08	1.00	.07	.10	.02	-.02	-.02
Benevolence of God	.21	.10	-.15	.17	.07	1.00	.04	.10	.14	-.16
Fear/Love/Awe of God	.21	.04	-.10	.06	.10	.04	1.00	.06	.06	-.11
Commitment to Halacha	.11	.03	-.09	.08	.02	.10	.06	1.00	.01	-.08
Eternity of Judaism	.17	.03	-.13	.15	-.02	.14	.06	.01	1.00	-.13
Rabbinic Authority	-.17	-.06	.14	-.10	-.02	-.16	-.11	-.08	-.13	1.00

Table 5

*Internal Consistency Reliability of the Ten Identified Factors of the Total Beliefs Composite (n=88)*

Factor	<i>n</i>	<i>α</i>
Relating to god through our world	14	.91
Outlook on Secular studies	7	.64
Experiencing god in our daily life	15	.90
Veracity of the Torah	7	.77
God's reward and punishment for sinners	8	.59
Benevolence of God	11	.79
Fear/Love/Awe of God	7	.77
Commitment to Halacha	6	.45
Eternity of Judaism	7	.71
Rabbinic Authority	8	.58

Including the one factor related to the Bar Mitzvah questions that could not be analyzed, a total of 11 factors were identified to underlie the Total Beliefs composite. This is an increase over the 8 factors that underlie the Total Beliefs composite of the JewBALE. Contrary to the original hypothesis, the six bullying items did not all map on a single factor. Rather, 4 items loaded on to “God’s reward and punishment for sinners,” 1 item loaded on to “Fear/Love/Awe of God,” and the remaining items loaded on to “Commitment to Halacha.”

Principal components analysis was also used on the actions items. The initial eigenvalues showed that 24 items had eigenvalues over 1, accounting for 76.39% of the variance of the Total Actions composite. A six factor solution, which explained 45.22% of the variance, was preferred because of the ‘leveling off’ of eigenvalues on the scree plot after these factors, and the insufficient number of loadings on the remaining factors. Both Varimax and Oblimin rotations were examined before deciding on the oblimin rotation due to the high correlation between the items and the ease of understanding the factor loadings after this rotation.

All items had a factor loading of .30 or above with at least one of the factors, except for item #78. When possible, factors were named as they were on the JewBALE

High School Form. The first factor was named “Kashruth and Sabbath Observance,” the second was named “Learning and Praying,” the third was named “Negative Reactions to Others,” the fourth was named “Holiday Observance,” the fifth was named “Chesed/Kindness,” and the sixth was named “Engagement with the Outside World.” A complete listing of these factor loadings can be found in Table 6, and inter-factor correlations can be found in Table 7, and Cronbach's Alpha coefficients for each factor can be found in Table 8.

Table 6

*Factor Loadings and Communalities Based on a Principal Components Analysis with Oblimin Rotation for Total Actions of the JewBALE Middle School Form (N = 176)*

	Kashrus and Sabbath observance	Learning and praying	Negative reacting to others	Holiday Observance	Kindness/ chesed	Engagement to outside world	Communalities
1. I perform					<b>.60</b>		.52
2. I study						<b>-.54</b>	.60
3. I eat dairy	<b>.67</b>	.31					.62
4. I give at					<b>.51</b>		.40
5. I greet				.31	<b>.38</b>		.38
6. I give					<b>.42</b>	-.35	.47
7. I spend					.35	<b>-.48</b>	.47
8. I eat in	<b>.36</b>						.27
9. I study		<b>.41</b>					.51
10. I pray						<b>-.40</b>	.26
11. I turn			<b>-.41</b>				.27
12. I carry in	<b>.53</b>						.42
13. I study		<b>.39</b>					.34
14. I watch		.31	<b>-.57</b>				.47
15. I dress in						<b>-.35</b>	.33
16. I try to						<b>-.51</b>	.54
17. If			-.35	<b>.38</b>			.31
18. I say or	<b>.32</b>						.37
19. If I					<b>.42</b>		.41
20. I work				<b>.33</b>			.26
21. I eat	<b>.67</b>						.51
22. My						<b>-.67</b>	.44
23. When		.32			<b>.38</b>		.39
24. I say		<b>.32</b>					.27

Note: Factor loadings <.3 are suppressed

Table 6- continued

*Factor Loadings and Communalities Based on a Principal Components Analysis with Oblimin Rotation for Total Actions of the JewBALE Middle School Form (N = 176)*

	Kashrus and Sabbath observance	Learning and praying	Negative reacting to others	Holiday Observance	Kindness/ chesed	Engagement to outside world	Communalities
25. The						<b>-.45</b>	.43
26. I speak	<b>.52</b>		-.38				.48
27. I text	.34			<b>.66</b>			.75
28. I turn on	<b>.75</b>						.66
29. I come		.35				<b>-.39</b>	.45
30. I count		<b>.42</b>					.45
31. I visit	-.38				<b>.51</b>		.49
32. I eat				<b>.39</b>	.35		.34
33. I go		<b>.53</b>					.32
34. I eat	<b>.53</b>	.35		.44			.81
35. I go on	<b>.58</b>	.35		.41			.84
36. I eat	<b>.75</b>						.65
37. I work						<b>-.63</b>	.49
38. I hear	<b>.49</b>			.39			.54
39. I wear	.40					<b>-.51</b>	.52
40. I do not	<b>.50</b>						.55
41. I borrow			<b>-.36</b>				.35
42. I'm					<b>.65</b>		.47
43. I cheat			<b>-.56</b>				.43
44. I set						<b>-.55</b>	.51
45. I take a	<b>.43</b>						.44
46. I make	.41	<b>.50</b>		.40			.70
47. I skip	<b>.36</b>						.34
48. I belittle			<b>.50</b>	.30			.39

*Note:* Factor loadings <.3 are suppressed

Table 6- continued

*Factor Loadings and Communalities Based on a Principal Components Analysis with Oblimin Rotation for Total Actions of the JewBALE Middle School Form (N = 176)*

	Kashrus and Sabbath observance	Learning and praying	Negative reacting to others	Holiday Observance	Kindness/ chesed	Engagement to outside world	Communalities
49. Kiddush				<b>.60</b>			.59
50. I drive in	<b>.47</b>	-.44	-.30				.61
51. I have a		<b>.35</b>					.32
52. I speak	.30		<b>-.50</b>				.57
53. I engage		<b>.37</b>					.43
54. When in				.30		<b>-.38</b>	.45
55. I eat	<b>.64</b>						.55
56. When I					<b>.32</b>		.26
57. If			-.33		<b>.40</b>	-.30	.54
58. I remove	<b>.45</b>						.36
59. I steal	.35		<b>-.36</b>	.30			.56
60. I say the		<b>.56</b>					.40
61. If I smell		<b>.70</b>					.54
62. I raise			<b>.43</b>				.28
63. I work		<b>.44</b>					.43
64. I make						<b>-.30</b>	.48
65. I			<b>-.57</b>				.50
66. I watch		.37	<b>-.45</b>				.36
67. I fast on						<b>-.31</b>	.29
68. I move	<b>.64</b>						.43
69. Upon		<b>.64</b>		.31			.56
70. I turn on	<b>.49</b>						.37
71. I eat				<b>.79</b>			.65
72. I listen				<b>.59</b>			.50

*Note:* Factor loadings <.3 are suppressed

Table 6-continued

*Factor Loadings and Communalities Based on a Principal Components Analysis with Oblimin Rotation for Total Actions of the JewBALE Middle School Form (N = 176)*

	Kashrus and Sabbath observance	Learning and praying	Negative reacting to others	Holiday Observance	Kindness/ chesed	Engagement to outside world	Communalities
73. I wear				<b>.48</b>			.34
74. I do not	.32			<b>.49</b>			.53
75. I lie to			<b>-.62</b>				.52
76. I pray		<b>.60</b>					.58
77. I read		.35			<b>-.52</b>		.43
78. I pray							.16
79. I watch	.48			<b>.63</b>			.78
80. I say		<b>.69</b>					.56
81. I never					<b>-.39</b>		.21
82. I learn						<b>-.62</b>	.47
83. I				<b>.81</b>			.63
84. What						<b>-.37</b>	.20
85. What					<b>.36</b>		.23
86. My						<b>-.45</b>	.33
87. I curse			<b>-.38</b>	.32			.38
88. I have			<b>.37</b>				.23

*Note:* Factor loadings <.3 are suppressed

Table 7

*Correlation Matrix Between Factors for the Six Total Actions factors (N = 176)*

	Kashrus and Sabbath observance	Learning and praying	Negative reacting to others	Holiday Observance	Kindness/chesed	Engagement to outside world
Kashrus and Sabbath observance	1.00	.09	-.21	.25	.13	-.14
Learning and praying	.09	1.00	-.12	-.03	.11	-.31
Negative reacting to others	-.21	-.12	1.00	-.16	-.02	.14
Holiday Observance	.25	-.03	-.16	1.00	.16	-.18
Kindness/chesed	.13	.11	-.02	.16	1.00	-.14
Engagement to outside world	-.14	-.31	.14	-.18	-.14	1.00

Table 8

*Internal Consistency Reliability of the Six Identified Factors of the Total Actions Composite (n=88)*

Factor	<i>n</i>	<i>α</i>
Kashrus and Sabbath observance	19	.89
Learning and praying	12	.81
Negative reacting to others	13	.60
Holidays	13	.70
Kindness/chesed	13	.71
Engagement to outside world	18	.87

The original hypothesis was not supported. The 6 factors identified to underlie the Total Actions composite represent a decrease from the 10 factors identified in the Total Actions composite of the JewBALE.

In total, 17 factors were identified to underlie the JewBALE Middle School Form. This is a reduction of 1 factor that comprises the JewBALE. Three of the Total Beliefs subscales and five of the Total Actions subscales on the JewBALE High School Form were identified in the Middle School Form, although sometimes in combination with

each other. The new items that were added to the Middle School Form were best understood within the context of other factors and do not comprise individual new factors. The JewBALE Middle School Form appears to have a different underlying factor structure than the JewBALE High School Form, which may limit the use of these forms to directly assess religious and spiritual development from preadolescence through adolescence. Figure 2 represents the similarities and differences in the underlying factor structure of the JewBALE Middle School Form and the JewBALE High School Form

JewBALE Middle School Form Total Beliefs Subscales		JewBALE High School Form Total Beliefs Subscales
Relating to God Through Our World		
<b>Outlook on Secular Studies</b>		<b>Outlook on Secular Studies</b>
Experiencing God in Our Daily Life		
Veracity of the Torah		
God's Reward and Punishment for Sinners		
Benevolence of God		
<b>Fear/Love/Awe of God</b>		<b>Fear/Love/Awe of God</b>
Commitment to Halacha		
Eternity of Judaism		
<b>Rabbinic Authority</b>		<b>Rabbinic Authority</b>
		Divine Providence with relation to the world
		Divine Providence with Relation to the Individual
		Joyful Life
		Jewish Tradition
		Relationship to Israel

JewBALE Middle School Form Total Actions Subscales		JewBALE High School Form Total Actions Subscales
<b>Kashrus and Sabbath observance</b>		<b>Sabbath Observance; Keeping Kosher</b>
<b>Learning and praying</b>		<b>Prayer; Study of Torah</b>
Negative reacting to others		
<b>Holiday Observance</b>		<b>Holiday Observance</b>
Kindness/ chesed		
Engagement to outside world		
		Community Service
		Interpersonal Relations
		Modesty
		Self- improvement
		Personal Character Development

Figure 2. Comparison of the underlying factors of the JewBALE Middle School Form and the JewBALE High School Form

*4) How do newly added items of JewBALE Middle School Form relate to the Total Beliefs and Total Actions Composites?*

In order to evaluate the relationship between the items maintained from the JewBALE High School Form and new items added to the JewBALE Middle School Form, two composite scales were computed by obtaining the mean of the Total Beliefs and Total Actions items that were maintained from the JewBALE High School Form. Bivariate item-composite correlations were computed between each of the new items and these composite scores. The questions that were specific to girls and related to the Bat Mitzvah experience were significantly correlated with both Total Beliefs and Total Actions composites found on the JewBALE. All items specific to boys that related to the Bar Mitzvah experience were significantly correlated with the Total Beliefs composite found on the JewBALE, and four of the five items were significantly correlated with the Total Actions composite of the JewBALE. These findings suggest that there is a relationship between the items in the Middle School Form and High School Form and the items that were added just to the Middle School Form. Of the 6 items that were added to the beliefs section of the JewBALE Middle School Form that related to bullying, only 2 (I have received offensive and hurtful text messages from someone I know; The Jewish laws of appropriate speech and slander (Lashon Hara) do not apply to Facebook, texting, or other social media.) were significantly correlated with belief items previously found on the JewBALE. Only 3 (I have received offensive and hurtful text messages from someone I know; Facebook or other social websites are places where I can say and write what I want about other people; The Jewish laws of appropriate speech and slander (Lashon Hara) do not apply to Facebook, texting, or other social media) were correlated

with the action items found on the JewBALE. However, both items that were added to the actions section of Middle School Form that related to bullying were significantly related to the beliefs and actions questions that were maintained from the JewBALE. This suggests a stronger relationship between one's actions related to bullying and one's spirituality and religiosity than the relationship between one's beliefs about bullying and one's religiosity and spirituality. Table 7 presents all of these item-composite correlations.

Table 9

*Pearson Bivariate Correlations Between New Items Added to the JewBALE Middle School Form and Composites Maintained from the JewBALE (N = 176)*

<u>Item</u>	<u>Total Beliefs</u>	<u>Total Actions</u>
I light Shabbat (Sabbath) candles before sundown each Friday night	.20*	.20*
I pray at least one time per day	.54**	.46*
If there are men present, I do not sing	.38**	.46**
I light Yom Tov (Holiday) candles for each Jewish holiday	.30**	.19*
I put on tefillin each day I am supposed to	.41**	.21
I am excited about wearing Tefillin	.48**	.47**
I believe that wearing Tefillin brings me closer to G-d	.73**	.51**
I think that it is not a problem to occasionally not wear my tefillin on days when I should be wearing them	.57**	.53**
Being part of a mezumin (group of three men) for Birkat HaMazon (i.e. Blessing after meals) is important to me	.59**	.60**
Tzniut applies to one's speech as well as to actions like giving Tzedaka.	.58**	.53**
Tzniut only applies to girls.	.06	.17*
Wearing modest clothing has nothing to do with my relationship to G-d.	.37**	.42**
I have received offensive and hurtful text messages from someone I know.	.16*	.23**

\* $p < .05$  \*\* $p < .01$

Table 9- continued

*Pearson Bivariate Correlations Between New Items Added to the JewBALE Middle School Form and Composites Maintained from the JewBALE (N = 176)*

<u>Item</u>	<u>Total Beliefs</u>	<u>Total Actions</u>
When I'm upset at someone, I will often let them know through a text or online	.02	.09
Facebook or other social websites are places where I can say and write what I want about other people.	.10	.17*
I am hurt more by someone saying something mean to my face as opposed to texting or writing it online	-.20	.03
The Jewish laws of appropriate speech and slander (Lashon Hara) do not apply to Facebook, texting, or other social media.	.29**	.25**
A fellow student at school has been deliberately mean to me.	-.13	-.01
What my school wants me to wear affects what I choose to wear.	.33**	.23**
What my friends wear determines what I wear.	.02	.18*
My parents' opinion strongly impacts on my clothing decisions.	.34**	.36**
I curse more in text or online than in actual face to face confrontations.	.18*	.33**
<u>I have experienced bullying by other students.</u>	<u>.07</u>	<u>-.09</u>

\* $p < .05$  \*\* $p < .01$

## **Chapter V**

### **Discussion**

The purpose of this dissertation was to evaluate the psychometric properties of the JewBALE Middle School Form to be used in the Modern Orthodox Jewish community to assess the religiosity and spirituality of preadolescents. Having an empirically validated measure will allow for appropriate assessments of this community and allow schools and community organizations to effectively plan programs to meet the needs of this population. The current measure is a downward extension of an empirically validated measure used in the Modern Orthodox community for such purposes. By adding items that were particular to the challenges associated with preadolescence, it is believed that this measure will accurately assess this age group, while also contributing to the advancement of theories about the religious and spiritual development from preadolescence to adulthood.

The scores on the Total Beliefs and Total Actions composite scores paint a positive picture for current religious leaders. The average scores for both composites were above 4, suggesting that preadolescents generally agree with the beliefs that were identified as key components of Modern Orthodox Judaism and often perform the religious actions that are considered essential. Eisenberg (2010) reported a mean of 5.02 for Total Beliefs and a mean of 4.64 for Total Actions in a sample of high school seniors and post high school students in Israel for a year, which are higher than the results reported in this study. These differences are to be expected, as one's spirituality and religiosity is anticipated to continuously grow and develop. In addition, the standard deviations from this study (.68 for Total Beliefs and .64 for Total Actions) are slightly

higher than those reported by Eisenberg (.66 for Total Beliefs and .60 for Total Actions). The slight decrease in variability suggests that part of this life-long growth is the development of more appropriate categorization of religious and spiritual obligations and increased consistency in religious commitment. Religious educators should embrace these differences and the challenges necessary to reach these higher goals.

There were no grade differences in average Total Actions or Total Beliefs found in this study. The lack of differences can be explained based on the theories of religiosity and spirituality discussed previously. All of these theories suggest that preadolescence is a time-period of transitioning cognitive abilities from concrete to abstract thought. They suggest variability in the age at which individuals achieve this transition, though all individuals should accomplish it by age 14. In addition, the theorists suggest that this transition is a gradual process and not stepwise. As Elkind (1961) suggests, these children are often conflicted between their old concrete thoughts and their new abstract thoughts. Therefore, it is not surprising that within this sample there were some younger individuals who matured faster while some older children matured at a slower rate.

There were no gender differences in this study. None of these theorists suggest gender differences in the rate or the nature of the cognitive transition of religiosity and spirituality from concrete to abstract. However, it is possible that the nature of Jewish education and law at this point is responsible for the lack of gender differences. In the Modern Orthodox Jewish day schools, students of both genders are often taught the same curriculum and are in coeducational classes until 5<sup>th</sup> grade. Starting in 6<sup>th</sup> grade, many schools separate the genders for Judaic Studies classes. In addition, the curriculum changes as boys are introduced to Mishna and Talmud, while girls attend other Jewish

classes including Jewish History and *Tefillah*. However, children very rarely change schools during middle school and are thus exposed to similar teachers and ideologies. It is only when children reach high school that they are forced to make important decisions about the Jewish *Hashkafa* (ideology) of the School and their future perspective on their religiosity and spirituality. It is therefore possible that the current educational structure of the Yeshiva day school system allows for a more uniform level of religiosity and spirituality between genders during this time period. Studies comparing gender differences in Modern Orthodox adolescents in high schools can help shed some light on this question. In addition, studies looking for gender differences in preadolescents in other religions could help understand the impact of gender on the development of religiosity and spirituality.

The results of the current analyses suggest that both composite scores of the JewBALE Middle School Form have high internal consistency for both genders. However, it does lead one to question whether it was *too* high. Hattie (1985) suggests that Cronbachs Alphas above .9 may imply that the scale is one-dimensional and that questions are repetitive (for a more complete discussion, see Schmitt, 1996). Though this scale does not appear to be one-dimensional, it does seem that certain questions are redundant. For example, on the questions related to Sabbath observance, separate items ask about turning on the lights, turning on the television, using the internet, and text messaging on the Sabbath. Despite the current interest in “half-Shabbos” (observant Jews who text message on Sabbath; see for example Lipman, 2011), it does not seem necessary to ask 4 questions that essentially measure the same underlying religious law (the prohibition of using electricity on the Sabbath). Though this does lead to a more

robust scale that is better able to measure complex religious and spiritual concepts in a more complete manner, it limited the ability of children to complete the scale. During administration, many children complained that there were too many questions, which resulted in either refusing to participate or quitting in the middle of completing the form. Other children complained that questions seemed repetitive. Removing multiple questions that measure similar concepts may lower the internal consistency of the scale, but will increase its usability in real-world settings. One suggestion by Dr. Scott Goldberg, a leader in the field, is the creation of a short-form to be used as an initial screener, while using a longer form for a more comprehensive evaluation for those who are classified as ‘low’(S. Goldberg, personal communication, November 21, 2011).

Results of the principal components analysis seemingly shed some light on how preadolescents conceptualize their spirituality and religiosity. Contrary to the original hypothesis, the JewBALE Middle School Form had fewer overall factors than the JewBALE. There are two ways to consider why these differences have been found. It is possible that the discrepancy resulted from the different statistical analyses that were used on each form. The current analyses used an exploratory principal components analysis to understand the underlying factor structure of the Middle School Form. In contrast, a confirmatory factor analysis was used with the JewBALE High School Form in which the subscales were predetermined in consultation with 13 religious leaders. It is possible that if the JewBALE High School Form was subjected to a principal component analysis then the underlying factor structure would have been more similar to that of the JewBALE Middle School Form. Conversely, it is possible that the decision to use confirmatory factor analysis was due to the difficulty in effectively using exploratory principal

components analysis to distinguish between highly correlated items. It may be advisable to have the same religious leaders divide the Middle School Form into predetermined subscales and then perform similar analyses as those used for the High School Form. Both of these results may suggest that the two forms are more similar to each other than currently believed. In addition, results from these analyses may help better determine the degree to which the two forms may be used in longitudinal studies to evaluate religious and spiritual development and growth over time. Lastly, such analysis may help shed some light on the high Cronbach's Alphas reported in this analysis and the appropriate way to balance the desire for a robust scale able to measure complex variables in an appropriate fashion and making the scale's length appropriate for children.

An additional possible explanation for the differences in underlying structure is a result of the discrepancy in the cognitive abilities expected of children at these different age groups. In line with the theories discussed in this paper, it is possible that the discrepancy results from an inability to fully differentiate between different categories of obligations and beliefs. For example, the Sabbath and Kashruth Observance factor is actually a mixture of two factors found on the JewBALE. Both of these obligations are essential in defining Modern Orthodox Judaism (Weinberg, 2008) and are emphasized in Jewish homes, yet children this age were unable to separate them into two separate religious obligations. As opposed to the original hypothesis, this inability to distinguish between factors led to over-generalizing of ideas into a single construct, as opposed to over-differentiating into multiple constructs. An additional example of this is the factor loading of items related to *Kiddush* and *Havdala*, which are obligations of the Sabbath and Holidays, yet factor-loaded more strongly on the Holidays subscale. It appears that

the children over-generalized all religious behaviors that are performed on Holidays to include these other actions as well.

The final findings of this study related to the association between items that were specific for Middle School students and the Total Beliefs and Total Actions composites that were maintained from the JewBALE High School Form. There was a significant correlations between the Bar and Bat Mitzvah items with the items that were kept from the JewBALE High School Form. The Bar and Bat Mitzvah process is the time in which Jewish men and women are expected to accept responsibility for their own religious and spiritual choices. One would expect that these children would relate the Bar and Bat Mitzvah experience with the rest of the items. Also interesting is the lack of correlation between many of the bullying items and the composite scores. Though it was hypothesized that these items would have weak correlations, the lack of statistically significant correlations was not anticipated. It is possible that there is no relationship between Judaism and bullying, or that Judaism has nothing to say about bullying. This, however, is not likely as Jewish texts are full of statements supporting the need for empathy for the weak, care for others, social justice, empowering of bystanders, and recognizing the inherent value of every individual (Novick, 2007). Rather, it seems more likely that the items about bullying were not able to effectively measure the complexities of this issue. Perhaps due to the fact that the questions focused on cyber-bullying in relation to typical bullying, students were unable to fully express their beliefs and history with bullying. It is possible that a more detailed questionnaire would provide a more robust assessment of bullying that can be correlated with the JewBALE Middle School Form to more accurately evaluate this relationship.

The results from this study suggest that the JewBALE Middle School Form is a reliable scale for assessing the religious and spiritual development of Modern Orthodox preadolescents. However, it is important to note certain limitations of the study. The first limitation is the relatively small sample size. Having only 176 respondents who met inclusion criteria limited the power of the study and the scope of analyses that could be completed. The fact that there were gender-specific questions further limited the power of the study and highlighted the need for a much larger sample size from both genders in order to truly detect statistical difference. An increased sample size will be especially useful when conducting future exploratory factor analysis, in which many researchers suggest large samples or high subject-to-item ratios in order to find meaningful results (Comrey & Lee, 1992; Costello & Osborne, 2005; MacCullum, Widaman, Zhang, & Hong, 1999).

An additional limitation of the study is that all of the participants were from a single setting. Though the camp attracts campers from communities across the country and does not exclude participants based on religious values, parents who choose to send their children to this camp likely hold similar religious and spiritual values. As previously defined, Modern Orthodox Judaism is a continuum of religious and spiritual beliefs and practices, and it is likely that people who are in similar places within that continuum will send their kids to similar camps and schools. Future research should administer the JewBALE Middle School Form in a variety of Modern Orthodox settings (schools, camps, synagogues) and communities in order to get a more complete picture of Modern Orthodox preadolescents.

As previously mentioned, the length of the scale posed a problem for many participants. Many campers either refused to participate, quit in the middle, or were unable to complete the scale within the allotted time period (55 minutes) due to the length of the scale. Campers also made it clear that they would not complete the scale a second time, limiting the ability to use the scale to measure growth over time. In order to increase the usability of the scale for future research and for longitudinal studies, the scale must be shortened. There are a number of ways to reduce the length of the scale. The first would be to use statistical analysis to eliminate questions that are repetitive or that did not add to the reliability of the scale. Secondly, Rabbinic and community leaders should be consulted to establish content validity, ensure that the questions are grade appropriate, and eliminate questions that are deemed ambiguous or non-essential. This could help resolve the problem as to whether questions related to bullying are best placed on a scale of spirituality and religiosity or better studied in a different method. Lastly, a smaller pilot study should be undertaken to better understand how preadolescents comprehend and react to the questions. During the current study, a number of questions made children feel uncomfortable. Specifically, belief items #18 (“I would be willing to give up my life to sanctify G-d’s name in the world when halakhically appropriate”), #38 (“I am in debt to G-d for my life”), and #83 (“I don’t believe that life is meaningful”) were asked about by a number of children before answering or omitting. Other words, like “ambiguous,” “secular knowledge,” and “belittle” were not understood by these children. Removing such items or rewording them as necessary will help in this process. Though such an attempt was made prior to this study, further analysis and refinement based on these initial results are warranted.

Despite these limitations, the study does provide some very important and useful information about the JewBALE Middle School Form. It provides preliminary support for the reliability of the measure. This study helps highlight the underlying factor structure of the scale as well as the similarities and differences between the Middle School and the High School Forms. This scale will help educators and community leaders understand the religious and spiritual challenges that currently face Modern Orthodox preadolescents. Though further refinement of the scale seems necessary, the lack of other measures applicable to this population coupled with the importance assigned to this time-period makes the current study an important beginning to developing appropriate measures for Modern Orthodox preadolescents.

## References

- Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology, 5*(4), 432-443.
- Batson, C. D., Schoenrade, P., & Ventis, W. L. (1993). *Religion and the individual: A socialpsychological perspective*. New York, NY: Oxford University Press.
- 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, S. Z., Jacobson, D., & Waxman, C. I. (2007). *Flipping out? Myth or fact: The impact of the "year in Israel"*. Brooklyn, NY: Yashar Books.
- Bufford, R. K., Paloutzian, R. F., & Ellison C. W. (1991) Norms for the spiritual well-being scale. *Journal of Psychology and Theology, 19*, 56-70.
- Comrey, A. L., & Lee, H. B. (1992). *A first Course in Factor Analysis*. Hillsdale, NJ: Erlbaum.
- Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment Research & Evaluation, 10*(7). Retrieved from <http://pareonline.net/pdf/v10n7a.pdf>.
- Davis, T. L., Kerr, B. A., & Robinson Kurpius, S. E. (2003). Meaning, purpose, and religiosity in at risk youth: The relationship between anxiety and spirituality. *Journal of Psychology and Theology, 31*(4), 356-365.

- Dew, R. E., Daniel, S. S., Armstrong, T. D., Goldston, D. B., Triplett, M. F., & Koenig, H. G. (2008). Religion/spirituality and adolescent psychiatric symptoms: A review. *Child Psychiatry and Human Development, 39*, 381-398.
- DellaPergola, S. (2010). *World Jewish Population, 2010*. Storrs, CT.
- Donahue, M. J., & Benson, P. L. (1995). Religion and well-being of adolescents. *Journal of Social Issues, 51*, 145-160.
- 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). Retrieved from Proquest Dissertation and thesis database. (3431386).
- Elkind, D. (1961). The Child's Conception of his religious denomination: I. The Jewish Child. *The Journal of Genetic Psychology, 99*, 209-225.
- Elkind, D. (1962). The child's conceptions of his religious denomination II: The Catholic child. *Journal of Genetic Psychology, 101*, 185-193.
- Elkind, D. (1963). The child's conceptions of his religious denomination III: The Protestant child. *Journal of Genetic Psychology, 103*, 291-304.
- Elkind, D. (1978). *The child's reality: Three developmental themes*. Hillsdale, NJ: Lawrence Erlbaum.
- Engs, R. C., & Mullen, K. (1999). The effect of religion and religiosity on drug use among a selected sample of post secondary student in Scotland. *Addiction research, 7*(2), 149-170.

- Fisherman, S. (2000). Spiritual identity in Israeli religious male adolescents: Observations and educational implications, *Journal of Jewish Education*, 66(3), 6-18.
- Francis, L. J., & Mullen, K. (1993). Religiosity and attitudes towards drug use among 13-15 year olds in England. *Addiction*, 88, 665-672.
- Fowler, J. W. (1981). *Stages of faith: The psychology of human development and the quest for meaning*. San Francisco: Harper & Row.
- Fowler, J. W. (1991). Stages in faith consciousness. *New Directions for Child Development*, 52, 27-45.
- Freud, S. (1927). The Future of an Illusion. *The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume XXI (1927-1931): The Future of an Illusion, Civilization and its Discontents, and Other Works*, 1-56.
- Goldberg, S. J. (2008). JewBALE – Jewish Beliefs Actions and Living Evaluation. Unpublished scale.
- Goldberg, S. J., & Isaacs, J. (2009). *The Jewish beliefs actions and living evaluation*. Unpublished Manuscript.
- Goldberg, S. J., Pelcovitz, D., & Rosenberg, J. (2011). *Nourishing the Adolescent Soul: Insights and Recommendations to Support Religious and Spiritual Growth*. New York, NY: Institute for University-School Partnership.
- Goldberg, S. J., Pelcovitz, D., Rosenberg, J., & Ross, S. (2010). [Religious understanding in adolescent children (RUACH)]. Unpublished raw data.
- Goldberg, S. J., Ross, S., & Friedman, B.J. (2011). JewBALE – Jewish Beliefs Actions and Living Evaluation Middle School Form. Unpublished scale.

- Goldman, R. (1964). *Religious thinking from childhood to adolescence*. London: Routledge and Kegan Paul.
- Goldmintz, J. (2003). Religious Development in adolescence: A work in progress. *Tradition, 37*(4), 50-68.
- Good, M., & Willoughby, T. (2006). The role of spirituality vs. religiosity in adolescent psychosocial adjustment. *Journal of Youth and Adolescence, 35*(1), 41-55.
- Goruch, R. L., & Walker, D. (2006). Measurement and research design in studying spiritual development. In E. C. Roehlkepartain, P. E. King, L. M. Wagener, & P. L. Benson (eds.), *The Handbook of spiritual development in childhood and adolescence* (pp. 92-107). Thousands Oak, CA: Sage Publishers.
- Gottlieb, E. (2006). Development of religious thinking. *Religious Education, 101*(2), 242-260.
- Hart, T. (2006). Spiritual experiences and capacities of children and youth. In E. C. Roehlkepartain, P. E. King, L. M. Wagener, & P. L. Benson (eds.), *The Handbook of spiritual development in childhood and adolescence* (pp. 163-182). Thousands Oak, CA: Sage Publishers.
- Hattie, J. (1985). Methodology review: Assessing unidimensionality of tests and items. *Applied Psychological Measurement, 9*(2), 139-164.
- Holder, M. D., Coleman, B., & Wallace, J. M. (2010). Spirituality, religiousness, and happiness in children aged 8-12 years. *Journal of Happiness study, 11*(2), 131-150.

- Kiesling, C., Sorell, G. T., Montgomery, M. J., & Colwell, R. K. (2006). Identity and spirituality: A psychosocial exploration of the sense of spiritual self. *Developmental Psychology, 42*(6), 1269-1277.
- Klein Poupko, S. (2010). *The relationship between relatedness to God and a commitment to self improvement and moral helpfulness*. (Doctoral Dissertation). Retrieved from Proquest Dissertation and thesis database. (3438281).
- Kohlberg, L. (1981). *Essays on Moral Development, Vol. I: The Philosophy of Moral Development*. San Francisco, CA: Harper & Row.
- Kwilecki, S. (1988). Personal religion and belief development: The "articulate authoritarian" type. *Religion 18*, 231-253.
- Lamm, N. (1990). *Torah U'Maddah*. Northvale, NJ: Jason Aronson, Inc.
- Lammers, C., Ireland, M., Resnick, M., & Blum, R. (2000). Influences on adolescents' decisions to postpone onset of sexual intercourse: A survival analysis of virginity among youth aged 13 to 18 year. *Journal of Adolescent Health, 26*, 42-48.
- Lipman, S. (2011, June 22). For many orthodox teens, "half-Shabbos" is a way of life. *The Jewish Week, p 1*
- Mayer, E., Kosmin, B., & Keysar, A. (2001). *American Jewish Identity Survey, 2001*. New York, NY.
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong S. (1999). Sample size in factor analysis. *Psychological Methods, 4*, 84-99.
- Milot, A. S., & Ludden, A. B. (2009). The effects of religion and gender on well-being, substance use, and academic engagement among rural adolescents. *Youth and Society, 40*(3), 403-425.

- Novick, R. (2007). *Bullying, Harassment and Social Exclusion in Jewish Schools: Unique Opportunities and Challenges to Promote Positive Peer Culture*. (Azrieli Papers Monograph Series). New York: Yeshiva University, Azrieli Graduate School of Jewish Education and Administration.
- Oser, F. K. (1991). The development of religious judgment. *New directions in childhood and adolescent development*, 52, 5-25.
- Oser, F. K., & Gmunder, P. (1991). *Religious judgment: A developmental perspective*. Birmingham, AL: Religious Education Press.
- Pargament, K. I. (1999). The psychology of religion *and* spirituality? Yes and no. *The International Journal for the Psychology of Religion*, 9(1), 3-16.
- Pargament, K., Smith, B., Koenig, H., & Perez, L. (1998). Patterns of positive negative religious coping with major life stressors. *Journal for the Scientific Study of Religion*, 37, 711-725.
- Pearce, M. J., Little, T. D., & Perez, J. E. (2003). Religiousness and depressive symptoms among adolescents. *Journal of Clinical Child and Adolescent Psychology*. 32(2), 267-276.
- Petts, R. J. (2009). Family and religious characteristics' influence on delinquency trajectories from adolescence to young adulthood. *American Sociological Review*, 74,465-483.
- Piko, B. F., & Fitzpatrick, K. M. (2004). Substance use, religiosity, and other protective factors among Hungarian adolescents. *Addictive behaviors*, 29, 1095-1107.
- Roehlkepartain, E. C., Benson, P. L., King, P. E., & Wagener, L. M. (2006). Spiritual development in childhood and adolescence: Moving to the scientific mainstream.

- In E. C. Roehlkepartain, P. E. King, L. M. Wagener, & P. L. Benson (eds.), *The Handbook of spiritual development in childhood and adolescence* (pp. 1-15).  
Thousands Oak, CA: Sage Publishers.
- Sarason, I. G., Sarason, B. R., Shearin, E. N., & Pierce, G. R. (1987). A brief measure of social support: Practical and theoretical implications. *Journal of Social and Personal Relationships*, 4, 497-510.
- Schick, M. (2009). *A Census of Jewish Day Schools in the United States 2008-2009*.  
New York, NY: Avi Chai Foundation
- Schmitt, N. (1996) Uses and abuses of coefficient alpha. *Psychological Assessment*, 8(4), 350-353.
- Sheskin, I, & Dashefsky, A. (2010). *Jewish Population in the United States, 2010*. Storrs, CT.
- Skinner, B. F. (1987). What religion means to me, *Free Inquiry*, 7, 12-13.
- Tamminen, K. (1976). Research concerning the development of religious thinking in Finnish students. *Character Potential*, 7, 206-219.
- 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*. (Doctoral Dissertation). Retrieved from Proquest Dissertation and thesis database. (3322279).
- Wink, P., & Dillon, M. (2003). Religiousness, spirituality, and psychosocial functioning in late adulthood: Findings from a longitudinal study. *Psychology and Aging*, 18(4), 916-924.

Wright, L. S., Frost, C. J., & Wisecarver, S. J. (1993). Church attendance, meaningfulness of religion and depressive symptomatology among adolescents.

*Journal of Youth and Adolescence*, 22(5), 559-568.

Zinnbauer, B. J., Pargament, K. I., Cole, B., Rye, M. S., Butter, E.M., Belavich, T. G., ...

Kadar, J. L. (1997). Religion and spirituality: Unfuzzifying the fuzzy. *Journal for the Scientific Study of Religion*, 36, 549-564.