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The Relationships Among Literacy, Church Activity and Religious Orientation: A Study of Adult Members of the LDS Church in Utah County

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THE RELATIONSHIPS AMONG LITERACY, CHURCH ACTIVITY

AND RELIGIOUS ORIENTATION: A STUDY OF ADULT

MEMBERS OF THE LDS CHURCH IN UTAH COUNTY

by

Bruce R. Brewer

A dissertation submitted to the faculty of

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GRADUATE COMMITTEE APPROVAL

of a dissertation submitted by

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This thesis has been read by each member of the following graduate committee and by majority vote has been found to be satisfactory.

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BRIGHAM YOUNG UNIVERSITY

As chair of the candidate's graduate committee, I have read the dissertation of Bruce R. Brewer in its final form and have found that (1) its format, citations, and bibliographical style are consistent and acceptable and fulfill university and department style requirements; (2) its illustrative materials including figures, tables, and charts are in place; and (3) the final manuscript is satisfactory to the graduate committee and is ready for submission to the university library.

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ABSTRACT

THE RELATIONSHIPS AMONG LITERACY, CHURCH ACTIVITY

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The study assessed the interplay among literacy, church activity, and religious orientation and examined the extent to which literacy predicts church activity in the presence of private religious behavior. One hundred fifty-seven subjects were administered measures of intrinsic religiousness, extrinsic religiousness, literacy levels and measures of church activity. The findings from this study suggest that literacy is related to activity, but in a way that is more complex than many investigators have considered. The results of the multiple regression analysis helped clarify the ability of literacy to predict church activity in the presence of religious orientation. Results further indicated that in the presence of the others, only intrinsic religiosity maintained its significant predictive ability. Implications for research and theory are discussed.

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CHAPTER 1

INTRODUCTION

Many individuals consider religion a strong influence in their lives. About 95%
of Americans profess a belief in God or a "higher power" and 9 out of 10 people also
pray, most of them (67%-75%) on a daily basis (Gallup & Lindsay, 1999). More than 4
out of 5 people (82%) surveyed in 1998 acknowledged a personal need for spiritual
growth, up 24% from just 4 years earlier (ibid). "Across the board . . . surveys confirm a
remarkable rise in spiritual concern" (Gallup & Jones, 2000, p.27). In this context,
Bergin (1988) made the following comment regarding the influence of the psychology of
religion: "It is important to recognize that a movement is occurring. It is a widespread
cultural phenomenon; a return to the study of values, including spiritual values, but it is
happening with new sophistication and more systematic and empirical analysis" (p. 22).

This prominent influence has made a substantial impact on both the research and
practice of psychology and psychotherapy. Many studies have shown relationships
between various types of religiousness and mental health. The relevant extensions of this
research include the variety of ways people cope with life stress and depression (Cole &
Pargament 1999, Smith et al., 2003), the relevance of religion as a central guiding force
in the lives of individuals (Gallup & Lindsay, 1999), and the subsequent effects of that
devotion in public as well as private behavior.

Given the broad influence varying degrees of religiosity plays in the personal,
social, and political environment, many have sought to identify those factors which tend
to encourage or discourage religious activity. Race, nationality, gender, socioeconomic

status and education have been shown to predict trends in religious activity (Albrecht & Heaton, 1984). Miller and Thorson (2003) argue, however, that researchers have rarely stated specific hypotheses about spiritual/religious measures, and often relatively strong predictive relationships have simply appeared in a table, without further mention or discussion (Larson et al., 1992). Although more sophisticated research has more recently been conducted on how spirituality or religion affects mental health (Hood et al., 1996, Smith et al., 2003), measurement on religious activity and literacy constructs has been broadly conceived, without providing specific hypotheses and/or predictive relationships advocated by Miller and Thorson.

One significant variable identified as influencing varying degrees of religious activity is literacy. Kaestle (1988) argues that an important part in any shared culture is universal literacy among its members. Studies of members of the Church of Jesus Christ of Latter-day Saints (hereafter abbreviated as LDS church), a church with high literacy expectations, indicate a positive relationship between education and church activity (Albrecht & Heaton, 1984). However, this and subsequent research have examined these relationships broadly, and have not considered the more subtle distinctions among personal religiosity and literacy levels, and their underlying effects upon church activity.

Historically, and even more recently, the LDS church has focused on both personal religiosity and literacy. A *gospel literacy effort*, instituted by the LDS church in 1992, was an attempt to boost literacy and thus enable more LDS members to share fully the benefits of their religious culture. The literacy program was scripture based and generally regarded helpful to those seeking improvement in reading levels.

Simultaneously, a renewed emphasis was placed on increased personal religiosity and was described by several prominent LDS church leaders, as an effort to "focus on the weightier matters" (p.13) by getting the "gospel into the hearts of the people" (Oaks, 2001, Ballard 2000). More recently (announced March 2001), the LDS church initiated an educational and training opportunity program (called the Perpetual Education Fund) in which the LDS church has granted more than 18,000 loans to young men and women in Latin America, Asia, Africa, and other underdeveloped areas of the world (Moore, 2005; Hinckley, 2003).

Although the LDS church does not provide statistics on their activity rates, Tim Heaton (1992) wrote in the Encyclopedia of Mormonism (1992): "Attendance at [congregational] sacrament meeting varies substantially. Canada, the South Pacific, and the United States average between 40 percent and 50 percent. Europe and Africa average about 35 percent. Asia and Latin America have weekly attendance rates of about 25 percent" (p. 1527). In many parts of the North American church, the number of inactive members in some areas eventually outpaces those who were active by a substantial margin. There are significant numbers of less active members of the LDS faith, who are described by one LDS church leader as those who "drop by the wayside, who find other interests that persuade them to neglect their church duties . . . [and] who are not found in church meetings nor filling church assignments" (Monson, 2003, p. 54).

While there are a variety of mechanisms which might explain the associations among literacy, religiosity and church activity, and although correlations can show no cause and effect, one might still ask the following speculative questions. To what extent

does a lack of literacy relate to a corresponding lack of church attendance or to participation at church activities? Does the culture of the LDS church demand a level of literacy that discourages the less literate from fully participating in church activities? And, to what extent might a member's private religiosity compensate for the potential obstacle of illiteracy?

Research investigating the relationships among literacy, religiosity and activity has yielded mixed and inconclusive findings. Levin et al., (1995) reported that despite the "apparent progress" in substantive religious research, "certain more fundamental issues remain largely unexplored, most notably the conceptualization and measurement of religious involvement" (p. 158). Research conducted by Stanley J. Tarter (1986) analyzed reading comprehension scores of LDS seminary students and the relationship of their post-test reading scores on attrition, amount of scripture reading completed and pre-test/post test scores of scripture knowledge. The results of this research demonstrated that "reading ability *did not* (italics added) have a high relationship to how much of the New Testament students read, or the grades they received for the course . . . and course grades could not be predicted accurately from reading ability" (Tarter, 1986, p. *V*).

In the following decade, Tarter's research conclusions were contradicted by a research study by Ellen Rae Allred (1997). Her research focus was related to LDS literacy and church activity. Her study investigated the functional literacy proficiency of selected adult members of the LDS church in the United States and attempted to determine the relationship among functional literacy proficiency, personal religious behavior and church activity. The Allred study hypothesized how deficiencies in literacy

skills might limit personal religious behavior. Both public and private religious behaviors of those in the low literacy group were found to be consistently lower than the respondents in the total group.

While a relationship between literacy ability and both public and private religious behaviors was found, the Allred study failed to specifically measure these constructs with validated instruments of religious orientation. The study used self reported measures of activity to determine religiousness. In addition, Allred was unable to get a representative sample (only 4% of respondents were in the low literacy group), and "because of sampling bias, the true measure of the functional literacy rate was not found" (Allred, 1997, p.229).

One major reason why research examining these relationships has yielded mixed results is that these studies have usually relied on global or imprecise definitions and measures of religiosity. Some studies have failed to measure these constructs altogether or with any type of validated instruments. But Levin et al., (1995) notes that "without the use of confirmed and validated religious measures, the reliability of findings bearing on the determinants and outcomes of religiosity may be threatened" (p.158). Yet there is now widespread consensus that religiousness is best considered a multidimensional construct which defies simple clear-cut boundaries (Bergin, 1983). A number of problems are associated with research using non-specific or imprecise religious measures since the accuracy of the intended results may inadvertently be changed.

The mixed results cited above would suggest that to further our understandings of the relationships among activity, literacy and religiosity, more careful thought about the

types of religiousness and their respective dimensions should be investigated. Miller and Thoresen (2003) conclude, that "with rare exceptions, the available literature has measured religious . . . rather than spiritual variables" (p. 29). In addition to the importance of measuring the right construct, it is also incumbent upon researchers to select appropriate measures in the investigation of these relations.

Statement of Problem

The results of the research studying relationships among activity, literacy and religiosity are mixed and somewhat confusing. The literature supports the notion that religiosity is a multidimensional construct (Bergin, 1983). However, few studies have assessed how these different measures of religiosity and literacy predict church activity within the LDS community. The prior research efforts on religious activity and literacy constructs have been broadly conceived, without providing specific hypotheses and/or predictive relationships. At present, concludes Thoresen and Harris (2002), the field lacks a body of well-designed studies of spirituality, as distinct from religion. It may be that intrinsic religious orientation acts as a significant covariate in predicting church activity in the presence of literacy.

Statement of Purpose

Given that an important part in any shared culture is universal literacy among its members (Kaestle, 1988), and given that the LDS church has a high literacy demand for church participation, the purpose of this study is to more carefully conceptualize the relationships among literacy, church activity, and intrinsic/extrinsic religious functioning among members of the LDS church.

Research Questions

In accordance with the Statement of Purpose, the following research questions were investigated:

　　1. What are the zero order relationships among church activity, literacy, intrinsic religious orientation and extrinsic religious orientation?

　　2. What is the combined ability of literacy, intrinsic religious orientation and extrinsic religious orientation to predict church activity?

　　3. What are the abilities of literacy, and intrinsic/extrinsic religious orientation in the presence of one another to predict church activity?

Importance of Study

The significance of literacy and church activity is better appreciated as denominations and church religious education systems grapple with understanding which activities to emphasize and which programs to prioritize that will strengthen their laity. Should resources be directed toward literacy activities, or might efforts yield greater results by targeting private religious behavior, or both? The following study will build on previous research in this area and seek to provide quantitative direction in an attempt to answer the above questions. By empirically analyzing the reported activity levels, and types of religiousness and literacy, a more distinct understanding of how these constructs are related could be obtained.

 In addition to providing clarity and understanding of the relationship among these constructs, answers to the questions raised would 1) provide church leaders greater awareness in implementing church programs and resources; 2) help church educators

shape future curriculum needs by revealing effects of literacy/religiosity on activity and attendance; and 3) at the grass roots level, allow church teachers to apply the research findings in making appropriate interventions with students having reading deficiencies.

Review of Literature

This literature review will focus on the identification of the central issues in this field from empirical studies. An attempt will be made to integrate this research literature by drawing relevant conclusions and to build bridges between related topic areas. The literature search was conducted using several electronic databases and sought to identify published and unpublished studies examining the association of religious involvement and church activity.   The literature review is organized as follows:

Definition of Terms

Religiousness/Spirituality

Intrinsic/Extrinsic Religiousness

Reading Ability

Historical Relationship between Literacy and Religion

Literacy and the LDS Church

Church Activity

Studies on Literacy and Church/Group Participation & Social Psychology

Significance/Generalization of Problem

Definition of Terms

When conducting a literature review on the research variables of spirituality, religiousness and literacy, it is useful to begin by providing definitions for these

constructs. This is warranted as some unwittingly consider these distinct constructs as interchangeable. The general definitions of terms provided in this section come primarily from research presented by Miller and Thoresen (2003).

Examining religion and religiosity has been cited as one of the most persistent problems in literature (Levin & Vanderpool, 1987). Hill et al., (2003) contends that "through most of the history of modern psychology, the term religion has been both an individual and an institutional construct" (p. 64). The difficulty in exploring these terms lies in how we define them and the measurements chosen to gauge them.

First, the term religiousness is derived from the word religion. What is *religion*? In one sense, religion has been described as an institutional (and thus primarily material) phenomenon. Although it is often centrally concerned with spirituality and satisfying the human heart, (Smith, 2001) religions are also social entities or institutions, and unlike spirituality, are defined by distinct boundaries. Religions are differentiated by their particular beliefs and practices for membership and their organizational structures.

While a central focus of religion is spiritual or transcendent, religions are also characterized by nonspiritual concerns and goals (e.g. administration, cultural, economic, political and social). Thus, Miller and Thoresen (2003) maintain that "religion can be seen as fundamentally a social phenomenon, whereas spirituality (like health and personality) is usually understood at the level of the individual within specific contexts" (p. 27-28).

In this sense, while religion is a social phenomenon, one can also conceptualize religiousness (or religiosity or even religion) at the level of the individual, as William

James did (1902; 1961) over a century ago. A person can be described (or can describe himself or herself) as being *religious*, implying some form of adherence to beliefs, practices, and/or precepts of religion. Within this view, "it is possible to conceptualize *private* (italics added) as well as *public* (italics added) forms of religiousness, and here the overlap with spirituality becomes evident" (Miller & Thoresen, 2003, p. 28).

Religiousness/Spirituality

The terms *religiousness* and *spirituality* can therefore both refer to an individual's search for what is considered sacred. Religiousness generally implies group or social practices and doctrines while spirituality tends to refer to personal experiences and beliefs. "*Religiousness*, or course, is defined somehow in relation to religion, whereas *spirituality* – at least at the level of the person – may or may not be rooted in religion. This linguistic distinction allows for concepts that would once have seemed rather odd: unspiritual religiousness" (p.28) (e.g. religious attendance for its practical and social benefits) or unreligious spirituality (e.g. mystical experiences of individuals) which can be "transforming or transcendent without a religious context" (Miller & Thoresen, 2003, p.28).

"Furthermore, religiousness may, for some persons, overlap substantially with spirituality, whereas for others, even within the same religion, there may be very little overlap" (Miller & Thoresen, 2003, p.28). One can conceive of religion and its practices as either facilitating or inhibiting a person's spiritual development (Thoresen & Harris, 2004). Thus, spirituality and religiousness may best be described as *overlapping constructs*, sharing some characteristics, but also retaining nonshared features.

A study which illustrates this perspective comes from Woods and Ironson (1999). They conducted semi-structured interviews with 60 people who had serious medical illnesses (e.g. cancer, a myocardial infarction). Of the participants, 43% identified themselves as spiritual, 37% as religious, and 20% as both. These subgroups had much in common (e.g. belief in God or a "higher power," belief in the importance of spirituality and/or religion in their overall lives), but significant differences were also found in participants' behavior and beliefs. For example, those identifying themselves as spiritual viewed God as more loving, forgiving, and nonjudgmental, whereas those regarding themselves as religious saw God as more of a judging creator.

In another study, Shahabi et al. (2002) found further support for this distinction. Although 52% of the 1,422 participants in their stratified national sample of adults (mean age = 45.6 years) viewed themselves as both spiritual and religious, roughly 10% described themselves as only spiritual, another 10% described themselves as only religious, and 28% identified themselves as neither spiritual nor religious. Those designating themselves as only spiritual were younger, more likely to be female, and more educated than the older and larger spiritual and religious group. Those identifying themselves as only religious were found to be more judgmental, more rigid in their beliefs, and more intolerant than all other groups, including those who were neither religious nor spiritual.

Beyond the linguistic legerdemain, groups of scientists working toward operational definitions of *spirituality* or *religiousness* have agreed in at least one regard: These are complex phenomena (e.g. Larson et al., 1998; Pargament, 1997) and attempts

to define these constructs as a single linear dimension are oversimplified and often prove misleading. Research by Gartner, Larson and Allen (1991) found a great deal of variability in the way religious commitment was measured and suggested that a general lack of consensus exists among professionals on how to define religiousness. A metanalysis conducted by Bergin (1983) further suggested that religiousness is best considered a multidimensional construct. Bergin states:

> Perhaps the most definitive thing that can be said is that religious phenomena are multidimensional. As many as 21 factors in religiosity have been identified in one study... In a sense, these measures, and the studies using them, provide a good starting point toward specificity as opposed to global, and necessarily misleading, evaluation of complex phenomenon. (p. 179)

 Rather than assume that religion is a unitary construct, researchers must be very clear about what dimension of religious functioning they are measuring (Fischer & Richards, 1997). However, almost all empirical studies to date have not recognized the distinctions made above but instead have treated religiousness, religion, and spirituality as the same general concept (Miller & Thoresen, 2003). Once one is able to conceptualize spirituality and religion as latent and multidimensional constructs, definitional issues become clearer.

What are the component dimensions that still need to be defined to broaden our understanding of this particular study? First, although general distinctions have been made between religiosity and spirituality, we need to further distinguish between "public" (*extrinsic*) and "private" (*intrinsic*) performances of such.

Intrinsic/Extrinsic Religiosity

In an often-cited definition of religious commitment, Gartner, Larson and Allen (1991) categorized religiousness or religious commitment into four areas: *religious activities* - which measures participation and frequency in church attendance; *religiosity-* which has been described above and which measures perceptions on the value of the religious experience; *orthodoxy-* which measures beliefs in established religious doctrine; and finally *intrinsic* vs. *extrinsic* which compares one religious type to another. The treatment of the latter definitions is of particular important to this study, and are therefore given greater attention.

*Religious Orientation Scale (*ROS*).*   In his seminal work, Allport characterized religious orientation (or sentiment) as a motivational construct that plays a differential role within an individual's life, depending on whether he or she is extrinsically or intrinsically oriented. Once the constructs of intrinsic and extrinsic religiousness were defined, they were measured by Allport and Ross (1967) with the *Religious Orientation Scale* (ROS). Intrinsic religiousness, as measured by the ROS, has in time, become one of the most widely used measures of religiousness (Donahue, 1985).

In explaining the differences between the two, the authors claim "the extrinsically motivated person *uses* his religion, whereas the intrinsically motivated *lives* his religion." They further defined an intrinsically religious person as one who "find[s] their master motive in religion . . . Having embraced a creed, the individual endeavors to internalize it and follow it fully" (Allport & Ross, 1967, p. 434). The differential polarities Allport

contrasted include: "Instrumental versus ultimate," "peripheral versus central," and "servant versus master."

Intrinsic religiosity. Persons with intrinsic characteristics, therefore, tend to internalize religion and follow and live it more sincerely and fully. They act in ways consistent with their religion because they enjoy it. Donahue (1985) provided another useful definition of intrinsic religiousness when he wrote: "Intrinsic religiousness is religion as a meaning-endowing framework in terms of which all of life is understood . . . Intrinsic religiousness serves as an excellent measure of religious commitment, as distinct from religious belief, church membership, liberal-conservative theological orientation, and related measures" (p. 400, 415). As such, intrinsic religious orientation refers to motivation arising from goals set forth by the religious tradition itself, and is thus assumed to have an "otherly," nonmundane, even self-denying quality. "Religion is regarded as a master motive . . . [Whereas] other needs, strong as they may be, are regarded as of less ultimate significance" (Allport & Ross, 1967, p. 434). As indicated, intrinsic religious functioning has been one of the best researched dimensions of religiosity.

Extrinsic religiosity. In contrast, persons with extrinsic characteristics tend to be extrinsically motivated and may be seen as religious out of a sense of obligation or to further their own interests. More formally, extrinsic religious orientation refers to flagrantly utilitarian motivation underlying religious behaviors. Such individuals endorse religious beliefs and attitudes or engage in religious acts only because they might aid in achieving some goal, such as feeling comforted or protected or acquiring social status

and "public" approval. According to recent research by Timothy Smith et al. (2003),

these individuals may be viewed as being religious for the wrong reasons, and

interestingly, may be associated with higher levels of depressive symptoms.

Reading Ability and Functional Literacy

Reading is one of the most important skills acquired through formal education

and has a pervasive affect on performance in other school areas. Reading ability is a vital

skill that enables individuals to make sense of and communicate through written material.

 As a communication skill, it plays an important role in an individual's ability to make

sense of their experiences and to engage in meaningful social interaction. Likewise we

expect to find a similar impact on religious devotion that relies heavily on literacy.

Reading ability defined. Reading ability, as defined by D'Angelo (1982), enables

individuals to conceptualize, to generalize, to draw inferences, and to work out logical

relationships among ideas in ways that would otherwise be impossible. Because of its

important implications, (Stenner, 1996) reading ability is one of the most frequently

tested skills in education, particularly among students aged six to eighteen. Reading

ability is regarded as an important predictor of success in education and employment.

However, many studies of adult literacy in various regions of the United States have been

consistent in finding that a significant proportion of adults having reading difficulties

(Hunter & Harman, 1979).

At the direction of Congress, these adult literacy concerns in the United States

were rigorously studied in the National Adult Literacy Survey (NALS). The NALS,

conducted in 1992, was the most comprehensive source of data on literacy in the United

States with 24, 944 adults interviewed ages sixteen and above. The NALS focused on

functional literacy—those literacy skills most commonly put to use in everyday

activities. Survey design and sampling rigor enabled analysts to estimate that more than

90 million adults in the United States (46 to 51 percent of the adult population) have

extremely limited or limited reading and quantitative skills. It is also estimated that 21 to

23 percent of adults would score in the lowest of five levels and would have difficulty

using reading, writing and computational skills for everyday tasks.

Research on "poor readers" indicates that they tend to focus on decoding words as

opposed to making correct meanings from written material. Poor readers also fail to go

back to correct miscues, but continue to plod on with syntactic errors while ignoring

semantic context and meaning. In general, poor readers are willing to substitute meaning

(or guess at the meaning) in passages that they are unable to read correctly.

Reading ability involves many overlapping skills and abilities. These include oral

reading skills, reading comprehension skills, word attack ability, word-recognition skills,

and reading rate. *Reading comprehension*, one of the factors involved in reading ability,

also involves a number of different skills that gradually develop over time. It has been

defined as the ability to understand and make meaning of what is read and is considered

"the most important aspect of reading ability" (Harris & Sipay, 1985, p. 206). Reading

comprehension is also the ability to understand the text as demonstrated by answering

comprehension subtest questions correctly.

Literacy defined. The variable of literacy is similar to the reading ability construct. For consideration of the current study, the use of the term *literacy* will be that of *functional literacy*, which is defined as:

> The possession of skills perceived as necessary by particular persons and groups to fulfill their own self-determined objectives as family and community members, citizens, consumers, job-holders, and members of social, religious, or other associations of their choosing. This includes the ability to obtain information they want and to use that information for their own and others' well-being; the ability to read adequately to satisfy the requirements they set for themselves as being important for their own lives; the ability to deal positively with demands made on them by society; and the ability to solve the problems they face in their daily lives. (Hunter, 1979, p. 7-8)

Measurement of reading ability. There are various tests and methods used to determine literacy and reading achievement. Some tests are administered individually while others can be administered in group format. Another distinction among assessments of reading ability is the difference between survey tests and diagnostic tests. Survey tests are generally used for broad reading ability assessment in areas such as reading comprehension; whereas, diagnostic tests often assess specific strengths and weaknesses within each general skill area. Research has also demonstrated the appropriateness of using word recognition tests (e.g. the Wide Range Achievement Test) as a measure of overall reading achievement (Masotti, 1997).

The three most popular methods to determine functional literacy levels are: informal reading inventories, cloze tests, and placement test (Farr & Beck, 1984). The type of test to be used is determined by the expertise of the test administrator, the expense, the amount of time available for testing, and other variables.

Another distinction among assessments of reading ability is the use of norm-referenced versus criterion-referenced tests. Norm-referenced tests are designed to compare an individual's performance with the performance of similar individuals. Criterion-referenced tests evaluate performance against a set criteria or set of reading skills.

A final distinction among reading rests is whether they are standardized or more informal. In a standardized test, a systematic sample of performance has been obtained under prescribed conditions, scored according to definite rules, and evaluation is conducted according to referenced normative information. All norm-referenced tests are therefore standardized since they are based on uniformed procedures for administration and scoring.

Historical Relationship between Literacy and Religion

Literacy and religion are historically linked. There is a phrase in the Quran, *ahl al-kitab, —* which roughly translates as "The People of the Book." This term refers to all religions who share a faith that is rooted in a sacred text. According to the Quran, Jews and Christians, like Muslims, qualify as "People of the Book," since they are monotheistic religions who have received and possess divine revelations(s) or scriptures

(hence "book") from God (Wikipedia, n.d.). The Hebrew term, *am hasefer,* also denotes "people of the book" and refers to those of Jewish faith.

Besides possessing and sharing certain divine religious texts, "People of the Book" also share the following characteristics: 1) they recognize and believe in one God; 2) believe that God has created man and living things in a miraculous way and that man possesses a soul granted him by God; 3) they share many of the same prophets, including Moses and Abraham, and they love these prophets; and 4) they recognize life after death, judgement, heaven and hell and angels (Wikipedia, n.d.). All these tenets are founded in their religious texts and, thus, all three "Peoples of the Book," (i.e. Jews, Muslims and Christians) share a common emphasis on the sanctity of the written word.

Historically, these three major religions have been dependent on the literacy of their adherents, or, at the very least, on the literacy of their religious leaders. The Hebraic culture and its religion, was a "religion of the book" in a way that no other ancient tradition was. The reconstruction of Israelite society after the catastrophe of the Babylonian deportation was firmly based on the Law of Moses and written directives that needed to be interpreted by learned scribes and lawyers. Later, the written text was supplemented by exegetical tradition in the rabbinical schools and formed the basis for the continued stability of and adherence to the Judaic faith.

The printed word and revival of antiquity. We can find similar examples of the religious dependence on the written word in the Christian faith as well. Christianity, like Judaism, is based on the written history of prophets before the meridian of time, as well as the recorded discourses of Jesus Christ in New Testament times. The earliest church

was deeply conscious of its solidarity to Israel and the Pharisees were strict in their observance not only of the Mosaic written law, but also of the scribal tradition of interpreting the written law. Later, when persecution threatened the unity of the scattered Christian communities, they learned to depend upon a common faith and worship to keep their solidarity. It therefore became incumbent upon the laity to attend to a service consisting of psalms, readings and prayers, together with those who were not yet baptized but were receiving instruction, called the *catechumenoi* (Grendler, 1989).

Nearly a millennium and a half later, (between 1400 and 1500) dramatic Indo-European changes were occurring. The Renaissance, or re-birth, was characterized by a self-conscious attitude that fostered individualism and the revival of antiquity (Grendler, 1980). The Renaissance period is also noted for a predilection for inculcating religious instruction. The Italian schools during the renaissance era taught reading and writing as well as religion for two reasons. First, according to Grendler, the early Catholic reformers did not envision religious training in isolation, but rather as part of a broader charitable trust. They viewed spiritual ignorance and illiteracy as two aspects of a deprived condition. Secondly, they regarded elementary religious instruction and learning to read as synonymous. The schools "attempted to instill personal and social values based on classical and Christian sources and standards" (p.409). The Papal bull, *In Sacrosancta beati Petri* of 1564, thus required all teachers to make professions of faith.

In the cities of Italy, especially Rome, civic leaders and the wealthy populace showed heightened zeal for the recovery of manuscripts, statues and monuments, which was a movement primarily motivated by religious forces. Pope Nicholas V (1447-1455),

a distinguished scholar, planned the Vatican library for nine thousand manuscripts he had collected. Pope Sixtus IV (1471-1484) built the Vatican library, which remains one of the richest repositories of ancient and medieval documents. The educational revolution of the Renaissance brought about real breaks with the medieval past, which according to Grendler, transformed European culture. The building of these libraries and the revival of antiquity also encouraged the study of Latin classics, furthering the direct need for literacy.

The Renaissance was also shaped dramatically with the development of moveable-type printing by Johannes Gutenberg in 1440. Before then, books had to be slowly and laboriously copied by hand, and only selected nobility could afford to own them. The effects of the invention of movable-type printing were not felt overnight, but within a half century of the publication of Gutenberg's Bible in 1456, movable type brought radical changes. Suddenly, knowledge was within the reach of anyone who could read, and the public as well as private lives of Europeans were transformed (Van Doren, 1991).

Literacy development and connections with various religious traditions. Religion, while at first a restricting literacy force during the Middle Ages, became an impetus for the spread of literacy with the publication of Gutenberg's Bible and Luther's efforts to impart God's word in the vernacular of the common man. As a social institution, religion is perhaps one of the most notable institutions influenced by writing and literacy. As indicated, the religious traditions of the Peoples of the Book all trace their foundations to

confessions of faith and canon, which require their membership to read and understand their religious heritage.

Like Christianity and Judaism, the Islamic tradition is also heavily influenced by a sacred written text. The prophet Muhammad, when about forty-years-old, had a vision in which the Archangel Gabriel told him to preach about one god, who was called Allah. Teachings, together with Muhammad's prophecies were written down into the Quran, the holy book of Islam. According to R. Stephen Humphreys, a professor of Islamic studies at the University of California at Santa Barbara, the Quran is the charter for the community, the document that called it into existence (Lester, 1999). Numerous examples of Islamic contributions to the advancement of literature, mathematics and science could be cited which stem from having a literate group of scholars, called the *ulema*.

Importance of literacy in colonial America. Like Middle Eastern cultures, education was closely connected with religion in colonial America, especially in New England. The early Puritan colonists emphasized the importance of literacy and believed that everyone should have access to the "divine truth" found in the Bible. Thus everyone should know how to read. "There is evidence of a widespread concern almost from the beginning that steps needed to be taken lest the children of settlers grow up untutored in the wilderness" (Tindall & Shi, 1989, p. 155). To achieve this goal, the Puritans created a *primer*, an illustrated textbook that taught children how to read and spell while they memorized the tenets of the Puritan faith. "The Puritan emphasis on scripture reading, which all Protestants shared in some degree, implied an obligation to ensure literacy. The

great proportion of highly educated people in Puritan New England . . . ensured a common respect for education" (Tindall & Shi, p. 155). As a result of such efforts, the literacy rate in the colonies was relatively high, especially in the towns and in New England in general. In insisting on education for all, the Puritans were following Jewish custom and law. According to Oscar Reiss (2004), Jews in colonial America (and their traditions) influenced the inculcation of literacy. The influence of this literacy tradition, however, was centuries old. Ken Spiro (2002) notes, for example, that Maimonides allegedly admonished every city to appoint teachers for the children and to excommunicate the people of the city until they had teachers for their children.

 Literacy efforts by modern churches. Modern churches today continue to emphasize the importance of literacy as a means towards increased material opportunities. An example of this may be seen in the literacy partnership between the Pew Charitable Trusts and local faith-based organizations. This particular collaborative partnership has decided that the best way to help inner-city youth is to provide resources through literacy programs, run through religious-based ministries.

 Aimed at preschoolers to young adults, the literacy efforts began in summer 2000 at nineteen Philadelphia centers overseen by five Catholic, Protestant and Jewish sponsors, including one tied to the Hispanic clergy. While this literacy effort is considered a non-religion-based skill-building program, the centers are not necessarily God-free zones either. The foundation does not object if scripture or other religious materials are used as long as sensitivity to unique faith background differences is maintained.

The student participants are served at "Youth Education for Tomorrow," or YET Centers. Since initiating this faith-based literacy program, one year participants have advanced their reading levels by two grade levels (O'Reily, 2002). These types of efforts provide a dramatic example of how literacy efforts in neighborhoods and churches can unlock the door to secular opportunity.

Literacy and the LDS Church

Another Christian church, The Church of Jesus Christ of Latter-day Saints (LDS church) is one of many faiths vitally interested in improving the literacy of its worldwide membership. Knowledge plays a fundamental role in the LDS faith. Its members (sometimes referred to as "Mormons") have a theological mandate to study things both spiritual and temporal, to "seek [wisdom] out of the best books" (Smith, 1981, D& C 88:77-79) and to attain education. Revelations received by Joseph Smith emphasize the eternal nature of knowledge and the vital role learning plays in human development. Joseph Smith and many of the early Mormon pioneers came from a New England Puritan background, with its reverence for knowledge and learning (Salisbury, 1922). The LDS church has thus been built on a doctrinal conviction, that eternal progress is partly dependent on the attainment of knowledge – the religious and the secular. According to Arrington (1967), the necessity of learning is "probably the most frequently-repeated theme of modern-day Latter-day Saint revelations" (p.137).

In its early history, the LDS church provided both secular and religious education. Wherever the church moved, schools were considered a major priority. Schools were subsequently established and built in all major LDS pioneer settlement locations, such as

Ohio, Missouri, Illinois and finally, the Utah territory. The LDS church remained the sole sponsor of educational institutions until the civil governments became sufficiently mature to assume responsibility for the public schools.

However, the LDS church continued to have a vested interest in education and its endeavors have grown into the current LDS *Church Education System* (CES), which consists of several levels. First is seminary, a daily religious education program held in seminary buildings near schools for grades nine through twelve that provides religious instruction. Second, institutes of religion adjacent to campuses serve students enrolled in post secondary programs by offering religion classes. Third, the LDS church sponsors four institutions of higher education, including providing primary financial support for one of the largest private religious schools in the country, Brigham Young University (Provo, Utah). In addition, the church CES sponsors elementary and secondary Church schools located in Fiji, Kiribati, Mexico, New Zealand, Samoa, and Tonga. Students from these nineteen schools received both a secular and religious education in 2003-2004. Servicing these programs were 1,007 full and part-time employees (CES, 2005).

According to the Church Education System Annual Information Update (2005), in 2003-2004, the LDS church's educational system extended to 125 countries or territories and served about 361,686 seminary students, 365,070 institute students, 41,669 students in Church colleges and universities and 9,255 students in other Church schools. These examples provide tangible support for the LDS church's commitment to education as an essential component of religious life.

The LDS church itself can therefore be viewed as an educational institution. Modern LDS church leaders frequently admonish the laity to acquire as much education as possible. This emphasis on education is aptly illustrated in the following quote from the current President of the LDS church, Gordon B. Hinckley. Speaking at a youth meeting in Kansas City, Mo. (July 14, 1996), he said:

> Education is the key that unlocks opportunity. I hope, my dear young friends, that you will not cut short your education for some frivolous reason. It is so very, very important to you, and it is important to the Church because you will make a contribution to society in terms of your capacity and ability to do so. The Church will be honored and respected more because of the way in which you deport yourselves, having educated your minds and your hands and qualified yourselves for the work of the world. (Hinckley, 1997, p. 2)

Literacy activities also form a significant portion of an individual's participation in the LDS church at a private and community level. Individuals and families are instructed to study from a rich canonical heritage as a resource to know God and His purposes. Their leaders consistently encourage the laity to study from this canon as well as to read from pamphlets, manuals and books. Leaders recognize that such benefits do not come from "a casual, infrequent exposure to the scriptures," (p. 27) but that it requires members to study with diligence (Bateman, 1992).

Latter-day Saints are taught from early childhood that they must read and ponder the scriptures. Reiterating the incumbency of scriptural scholarship, a recent LDS

prophet, Howard W. Hunter, stated the following: "Those who delve into the scriptural library . . . find that to understand requires more than casual reading or perusal—there must be concentrated study . . . One who studies the scriptures every day accomplishes far more than one who devotes considerable time one day and then lets days go by before continuing" (Hunter, 1979, p. 64).

Beyond scripture study, LDS church members do many other things that require literacy. Members of the LDS faith are instructed to keep family records as well as search out the genealogies of their ancestors. They also engage in various literacy tasks as they attend their church services and instruct one another in their lay leadership positions. Such responsibilities require members to read and use lesson manuals, instruction handbooks, as well as maintain records.

A further example of the LDS emphasis on scriptural literacy comes from the Herculean effort undertaken by the church to produce new cross-referenced editions of the Bible and LDS Standard Works in 1979 and 1981. Scholars credit those editions of the scriptures with helping change the way church member's worship on Sundays. When the work was completed, President Thomas S. Monson of the First Presidency said the project had "changed the lives of church members. You've affected the church and you've affected the youth. I said in private this is one of the major contributions during my service as a general authority" (Walch, 2005, p. B01).

Unlike many denominations, Latter-day Saints have a lay ministry which relies upon its membership to assume various callings in a variety of roles and positions. There

is no formal training or theological seminary required for this lay ministry, in which all are potential teachers of the word. The burden of scriptural and literary knowledge is more evenly distributed throughout the laity as there is not a focus on a single paid clergy member having received graduate theological training. As a result of frequent shifts in lay members' responsibilities, there are higher functional literacy demands on members of the LDS church than on religions where paid clerics permanently assume the majority of responsibility for doctrinal exposition of the flock (Hoyle and Crawford, 1994). The lay leadership of the LDS church is also required to read and efficiently process numerous manuals and correspondence from church headquarters. Printed materials serve as the major medium through which the church's prophet directs the church's leadership.

As the LDS members study their canon, one of the problems faced is being able to read and comprehend the style of language being used, especially in the Bible, such as the King James Version (KJV), which is written in the Old English style (Yeatts, 1983). The LDS church has adopted the KJV version for its worldwide church membership, which Yeatts concluded was "less comprehensible" (p.432) than other modern versions he had studied. His study indicated that the modern versions of the Bible facilitated better recall of facts than did the King James Version.

Because of the high literacy demand on LDS members, those lacking adequate literacy skills may find themselves unable to participate as fully as they would like, or they may feel unqualified and unable to accept lay callings to serve in various church assignments (Hoyle and Crawford, 1994). A special emphasis on "gospel literacy" has come about in part to address these literacy concerns in the LDS church.

The *gospel literacy effort*, prepared by the Church Education System, helps leaders and teachers provide the gift of reading and writing to those who cannot read the word of God. A portion of the program is administered through an auxiliary organization of the LDS Church called the Relief Society. Established in 1842, the Relief Society is one of the oldest and largest women's organizations in the world. In addition to a spiritual emphasis, it also has a humanitarian mandate to help the sick, the poor, and others in need of compassionate service. During its weekly Sunday meetings and monthly "enrichment meetings," the organization may provide instruction on a variety of topics including theology, home management and family education.

Understanding the benefits of literacy and its broader implications, the gospel literacy effort already provides literacy materials for English and Spanish speakers. French and Portuguese materials are also being developed. The purpose of the literacy effort is to teach basic reading and writing skills to those who cannot read and write and to promote lifelong study and self-improvement in its worldwide membership (Allred, 1997).

Regionally, the literacy concerns of the LDS church have led to the creation of a pilot program which offers basic language skills to thousands of Latinos residing in the state of Utah. The pilot curriculum called "Daily Dose" is being offered at area LDS churches. Local Utah Hispanics are given opportunities to learn basic English at designated local chapels. M. Russell Ballard, one of the LDS church's top leaders, encouraged the development of this literacy initiative which was designed "specifically to work with and serve the Hispanic community" (Moore, 2004, p. B01).

Similar literacy efforts in other developing countries (e.g. Peru and Central America) are also occurring where low literacy levels are considered a hindrance to church development. Thus the LDS church continues to demonstrate a profound interest in the literacy of the general community as well as its own laity.

Church Activity and Religiosity

The research association between church activity and religiosity continues to be problematic. Several studies cited in this section of the literature review underscore the importance of using precise, rather than global measures of religiosity and activity. Different studies report different results because they have measured different dimensions of a single construct. While some researchers have attempted to use more precise terminology, others have used broader definitions, such as "highly religious," "organizational religiosity," and "less committed." In addition, a number of investigators have relied primarily on "bivariate statistical procedures, making it difficult to control for competing theoretical explanations" (Krause, 1995, p. 236). As indicated, the resulting definitions foster confusion and may result in competing or apparent contradictory findings.

Adding to the confusion of activity definitions are the omission of intrinsic and extrinsic religiosity variables. Albrecht & Heaton (1984) aptly illustrated this by stating that "much religious participation is social in nature and is without any real commitments to what would typically be defined as a set of religious beliefs. Attendance at church, in other words, is simply another form of participation in a type of voluntary association such as a club, business association, and so on" (p. 48).

Some studies have dealt with the question of the role of higher education on religious inactivity and many of the studies have found the link to be positive. Caplovitz and Sherrow (1977) found that attending college did, indeed, increase the probability of inactivity. But, they also found that "highly religious" students were largely impervious to the college environment, while finding inactivity rates higher among those who were less committed.

Levin et al., (1995) suggested some factors to be taken into consideration when measuring religious involvement. Among the factors considered by Levin et al., were education, "organizational religiosity" (i.e. extrinsic religiosity) and "nonorganizational religiosity" (i.e. intrinsic religiosity). One of the conclusions of Levin's research was that "education is positively associated with organizational religiosity in both subsamples" (p. 166-167). This was inconsistent with the conclusions of Allport and Ross (1967) who found that "the extrinsic subscale . . . negatively correlated with degree of education (r = -.32)" (p. 435).

In her 1994 study, Harsha Mookerjee defined public religiosity as participatory religion and private religiosity as devotional religious behavior. Mookerjee (1994) chose to measure public religiosity based on church membership and frequency of church attendance. Private religiosity was measured by assessing the respondent's frequency of prayer, frequency of bible reading and a cumulative score of devotional intensity.

The affects of public and private religiosity upon activity were also observed by Rodney Stark, a non-Mormon sociologist at the University of Washington. Stark studied the LDS church to discover the sociological conditions that led to its success, and

developed a theory of LDS church growth based specifically on the LDS church (Stark, 1984). James Duke (1998) has summarized the following social conditions observed by Stark as necessary for church growth and activity.

Stark noted for church activity and resulting growth to occur, the church needed private and public conditions. The private or intrinsic conditions result as the church is able to motivate its members to give service to the church and fulfill private religious obligations. The public conditions result in the feeling by members that they *participate* in the system of authority. The church must therefore *socialize* the youth effectively and must build strong bonds of friendship among its entire membership. In order to accomplish this, the LDS church must also appeal to people of all socioeconomic classes and must unite people from diverse countries and cultures. In a related extension of Stark's conclusions, one could also argue that the LDS church would also need the ability to include people from diverse literacy levels as well.

Other Factors Relating to Literacy and Church/Group Participation

There are also social psychology factors that influence the individual responses to literacy and subsequent church activity. In a broader sense, individuals define themselves (and are defined by others), by the social roles they perform (Burke, 1980; Burke & Tully, 1977; Stryker & Statham, 1985). Considerable research has shown that those individuals who claim multiple roles or aspects of self enjoy many more benefits than do those who have only a few defining identities. Sarbin and Allen (1968), for instance, observed that people who have a larger number of self-defining identities are better prepared to face changes and stress in life.

Religious affiliation may be seen as one these identities or aspects of self. Lipson (1983) reported that religious affiliation was a powerful factor when testing students enrolled in religion classes. He found that students made fewer errors in recall and took less time to read passages that contained materials familiar to them from prior religious contact.

Some social psychologists have argued that membership in groups, such as what occurs in churches, is due to their ability to fulfill members basic needs (cf. Forsyth 1990, Mackie & Goethals, 1987; Moreland, 1987; Shaver & Buhrmester, 1983). Groups satisfy members psychological needs by allowing them to affiliate with others, avoid loneliness, and exercise power.

Levine and Moreland (1995) argue that groups also satisfy member's informational needs by clarifying the rewards and costs of particular behaviors and allowing members to evaluate themselves through comparison with others. Levine and Moreland also indicate that although group membership does not always produce need fulfillment, the rewards of group membership are usually great enough to ensure that most people belong to groups of some kind. It might be argued therefore, that activity in a church may also result from a sense of belonging felt by the members.

Of the many concerns that come up periodically in counseling is the need for a sense of belonging. That one can establish a pattern of relating to others, through various interpersonal relationships and social networks, is an important matter (Berlin & Johnson, 1989; Gilligan, 1982). The desire or need to belong was characterized by

Maslow as third in his hierarchy of needs, preceded only by safety needs and physiological needs (Reber, 1985).

Social support. Having researched the concept of belonging, Hagerty, et al., (1992) generated this definition:

> Building on the definition of belonging . . . we have defined sense of belonging as the experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment. A system can be a relationship or organization, and an environment can be natural or cultural. Through the process of concept analysis, we have delineated two dimensions of sense of belonging: (1) valued involvement: the experience of feeling valued, needed, accepted; and (2) fit: the person's perception that his or her characteristics articulate with or compliment the system or environment.
>
> (p. 173)

According to this definition, the more a person feels valued or accepted and the more his or her attributes are alike with other group members; there is greater likelihood that individuals will feel a sense of belonging. Religious involvement may provide people opportunities for social support. People who are involved in religion have substantially more informal social contacts and are more active in civic engagements than people who are not (Putnam, 2000).

Church group connectiveness.   Demerath (1965) quoted some less active, working class members of the Protestant faith as expressing the following: One said, "I feel just awful and ashamed, but we never go [to church]. The reason people don't go to

church as much as they used to is lack of discipline in the home and lack of interest. "There's other things [too]: unless a person is prominent in the church or socially, people in the church have no interest in her" (p.13).

Another was quoted as saying, "There's too much dressing up for church these days; he used to go in his overalls just as good as anybody. But now it won't do for people to go without being all dressed up and we just haven't got the clothes for that" (p. 13-14). Most individuals will not be a perfect fit into a social group or congregation. The more that they feel like they do not fit, the more likely they will be to dissociate themselves from the group. However, it is important to understand that the other members of the congregation are not actively rejecting these members. The sense of belonging (or lack thereof) is an individual experience, mitigated by external factors.

Forging social connections is quite difficult for individuals who experience high levels of anxiety when in social situations (Leary & Kowalski, 1995). Those who become anxious when meeting new people, talking to individuals in social group activities may be barred from the benefits of close personal relationships and group membership. Their basic needs for belonging may therefore go unmet. A related question from this research could raise the question of the potential level of anxiety created for the less literate. Might their basic needs for belonging be unmet as well?

LDS group activity and literacy. Members of the LDS church are not excluded from the phenomenon of group connectiveness. The individual's perception of their own adequacy and contribution within the group affects their sense of belonging and their participation level. Hoyle and Crawford (1994) suggested that members of a group who

perceive themselves as less powerful than other members may cope by withdrawing from the group. If the less educated members perceive themselves as less valuable to the church, they may choose less active involvement.

Albrecht & Heaton (1984) found that contrary to the trend in other religious denominations, among members of the LDS church, those with more education were more likely to be deeply involved in religious practices and activity in the church than those members with less education. The authors suggest the fact that the LDS church has a lay clergy may be a partial explanation for this finding:

The idea in the Mormon Church [LDS] is for every capable member to have a calling. Successful performance in these callings requires a great variety of skills including bookkeeping, teaching, organizational management, and interpersonal relations. Some of these skills are acquired through the educational system. All things being equal, we would expect education to be positively associated with the acquisition of these types of skills. As a result, people with more education may be among the first to be considered for any given calling, and they may also have greater success in their callings. Since success in one's calling is such a central aspect of church participation, the link between education and participation comes as no surprise. (p. 56)

Therefore, within the LDS church, with its high literacy expectations for its laity, the members perceived sense of belonging and actual activity levels may be closely linked to their level of education. Literacy can then be seen as an effective medium to study the religiousness of individuals who belong to the LDS church. There is a

particularly strong emphasis on the social aspect of the LDS religion, as members are encouraged to associate with one another, and as frequent congregational meetings create a natural social environment. Vogt (1992) explains further how literacy can have an influence in a social context:

> Language has a socially integrative function. Societies are, among other things, units whose members are capable of communicating with one another . . . . Whether its Masonic passwords, street slang, technical jargon, or psychobabble, people use language to exclude as well as include. It is not necessarily a question of the amount of knowledge of language as much as it is of the kind. (p. 323)

While one may be reluctant to assume that more literate members of the LDS church are deliberately trying to exclude less literate members with the use of their skills of language and understanding, it may be assumed that less literate members may feel less a part of the group since they are significantly different from other members on a salient variable.

Prentice and Miller (2002) demonstrate that homegrown stereotypes or generalizations that groups develop about their own typical characteristics may reflect "group members attempts at self-preservation" and "represent desired self-images" (p.352). These researchers contend that these homegrown stereotypes can be "significant sources of comfort or alienation for individual group members, depending on how the individuals see themselves in relation to the stereotypes" (p.352).

This explanation may also apply to the sense of belonging that members of the LDS church may experience in varying degrees. If some members are less educated than

others, and do not feel like they can make a significant contribution to their church unit, they may be likely to be less active in their participation. Likewise, if the more educated are more likely to receive a church calling and perform it well than those who are less educated, the less educated may perceive this as a power differential and therefore choose to dissociate from the church.

A conclusion illustrating this potential problem has emerged from the social psychology literature reviewing the formation of "in-group stereotypes." These in-group stereotypes develop under conditions that heighten the salience of group identity. This insight comes from research in the traditions of social identity theory (Tajfel & Turner, 1986) and self-categorization theory (Turner, Hogg, Oakes, Reicher & Wetherell, 1987). According to these theories, self-conceptions incorporate both personal and social identities.

Prentice and Miller (2002) note that personal identities refer to "*self-conceptions that define the individual in relation to other individuals*" (p. 353). While *social identities* refer to "self-conceptions that derive from membership in emotionally significant social groups" (353). They note that when circumstances render a particular group membership, and hence a particular social identity, salient for individuals, "those individuals self-stereotype" (p. 353). However, the information used to form these stereotypes *is not* always accurate. Prentice and Miller state that the potential danger is that "often they misinterpret why people are doing what they are doing – that is, they misunderstand what the behavior signifies. In these cases, home-grown stereotypes are systematically inaccurate" (p. 354).

These developed stereotypes are reminiscent of Nisbett and Wilson's (1977) and Gazzaniga and LeDoux's (1978) proposition that individuals can come to feel certain ways about stimuli and can even construct rationalizations for their feelings, although not really knowing why they come to feel as they do about people, objects, or events around them.

In conclusion, the LDS culture and lifestyle manifest an interesting combination of positive and negative influences upon group functioning. Some possible negatives include some tendencies toward perfectionism and self-negation that inevitably accompany failure to match unreasonably high expectations. People "out of step" are easily recognized in a culture where conformity is valued highly. These tendencies have the potential affect of alienating low-readers who may have implicitly endorsed a homegrown stereotype that equates literacy with "apposite" church activity.

Additional activity and literacy constraints. There have been other studies which have investigated the relationship between academic achievement and religiousness and have concluded that the relationship between these two variables is negative. That is, as a person becomes more educated or achieves more academically, their level of religiousness goes down. Thalheimer (1985) suggested the following: "There exists an apparently widely shared impression among academicians and other members of the intellectual community that their peers are distinctly less religious than the members of others professions or the general population" (p.101).

Stark (1963) found this phenomenon is not so much a question of how much education one has achieved, but how one perceives his or her own commitment to

academic pursuits. In a study of graduate students in America, he found a negative relationship between the self-perception of being an intellectual and involvement in a religion. Of those students who considered themselves intellectuals (ascertained by asking them if they think themselves as an intellectual), only twenty-six percent reported they were not intellectuals, fifty-five percent said they were highly involved in a religion. The author concluded that these relationships were due to the inherent incompatibility of religion and science. However, there are other studies which provide additional evidence and contradict this otherwise simplistic explanation.

In a study which examined the relationship between social class and education and church attendance, Marty et al., (1968) found evidence that appears to contradict Stark's conclusions. In their study, forty-one percent of those with a college education attended church every Sunday, while only thirty-three percent of those with less than an eighth grade education attended church weekly. Marty et al., also found church attendance positively related with social class and status. Those with higher incomes and who were categorized as "white collar" (which included professional occupations, proprietors, managers and other assorted white collar occupations) reported attending church more often than their lower income and blue collar (identified as service workers, manual workers, and farmers) counterparts at a rate of about forty-three percent to thirty-three percent, respectively.

Glock and Stark (1965) found the same results in their study of the relationship between church attendance and social class. "Seventy-three percent of the upper-class

respondents reported attending church at least now and again, while only thirty-nine percent of the working class responded similarly" (p. 193).

Apparent contradictions due to definitions. While these studies seem to contradict each other with regard to intellectualism and religiousness, much of the difference (as described earlier in chapter) can be explained by the definition of religiousness. Upon closer examination of the literature investigating the relationships between religiousness and any other variable, the field is very disparate on how to define religiousness. The research by Gartner, Larson and Allen (1991) also found a great deal of latitude in the way religious commitment was measured and suggested that a general lack of consensus exists among professionals on defining religiousness. As previously indicated by Bergin (1983), religiousness is best considered a multidimensional construct.

Consequently, different studies report different results because they have measured different dimensions of a single construct. Mueller and Johnson (1975) found this to be the case in their review of the literature:

> It is now generally accepted that the relationship between socioeconomic status and religious involvement is either negative, positive, curvilinear or random, depending upon which dimension of religious involvement is examined. Thus, religiosity is apparently not a single dimension. It has various facets which are given various emphases by various social classes (Deerath, 1965, p. 26). Studies of socioeconomic status and religious participation (ritual involvement), however, generally are interpreted to show a positive relationship—that higher status persons are more frequent participants than lower status persons. (p. 786)

However, those persons of lower status may choose to participate in other aspects of religiousness than popularly measured. Davidson (1977) reported the following:

People in lower social strata have less education, less occupational security, and less income than people in higher social strata. They have fewer resources to control the course of personal and societal occurrences; . . . As a result, lower status church members might turn to religion -- particularly certain aspects of religion --for consolation and answers to the problems they face. (p. 467)

Existence of a general positive relationship between religiousness and education. Although there are not many studies which have investigated the relationship between literacy and aspects of religiousness, there is now a great evidence to support the positive relationship between literacy and education, and literacy and socioeconomic status. It appears that the relationship between literacy and education is strongly positive, as literacy is primarily a function of education. The research on the relationship between literacy and socioeconomic status also supports the positive nature of that relationship. Leseman (1994) reported a statistically significant difference between the socioeconomic position of adult literates and adult illiterates, where the higher socioeconomic position corresponded to the literate adults, and vice versa.

Another factor is that higher education may facilitate an understanding of gospel principles and scripture. A study by Stott (1984) found that those subjects with a graduate degree had significantly more knowledge of the Bible than those subjects who did not graduate from high school. Although such a result seems fairly intuitive, it does not provide information regarding the sense of belonging of less educated members of the

LDS church. If a member is unable to understand the talks being given or unable to deliver an address which shows some understanding of scripture, it is possible they may choose not to associate with the church group. To associate would be to risk exposing their lack of knowledge and perhaps become somewhat embarrassed; to dissociate would be to protect themselves by avoiding disclosure.

Significance/Generalization of Problem

To speak of these phenomena in general terms lends itself to theory, but more rigor is required of practice. As was discussed earlier, religiousness is a multidimensional construct. In order to be measured with complete efficacy, each dimension must be considered and measured separately. This is not possible. Even if all the dimensions of religiousness were defined (which they are not) and if reliable and valid measures were developed for each of those dimensions (which has not been done), few researchers would have the time, interest or resources to investigate all aspects of this phenomenon. Instead, two specific dimensions of religiousness were considered for this study. The case for how church attendance is related to economic status and education has already been examined. Several studies have investigated the relationship between religiousness and functional literacy levels. One study by Sexton (1979) investigated the relationship between formal education and other variables among residents of highland Guatemala. The study found a statistically significant ($p<.05$) positive correlation between formal education and literacy. The author also found a statistically significant ($p<.05$) negative correlation between formal education and participation in traditional religion. However, the author failed to define how he

measured literacy, and was very loose in his definition of traditional religion. With such conditions, it is difficult to make conclusions based on the results of this research.

Another study which looked at the relationship between religiousness and literacy was conducted by Gomathinauagam (1972). This study investigated, among others things, the relationship between religious observance and literacy. The author found that individuals who were less literate were more likely to respond favorably to religion. However, there were also significant problems with the definition of variables. The author never mentioned how the literacy variable was defined. The religious observance variable was defined and measured as follows: "A statement regarding ritual ceremony was given and they [the subjects] were asked to say whether they agreed or disagreed. The statement is 'lavish spending on religious festivals, rituals and ceremonies of life cycle like marriage is a waste of money' " (p. 227). It seems to be a substantial jump in logic to equate a statement primarily concerned with financial investment with religious observance. Again, it is difficult to make any conclusion based on this study, as the measurement of the variables is either not described or lacks validity.

There are a number of studies which examine the difference in motives for being religious between the various social classes, and the more and less educated. Regarding social class, Wilson (1978) noted the following:

> The middle class person 'does' his religion and looks upon it as a public activity
> that is bound up tightly with other aspects of his life (see Fukuyama, 1961). The
> lower-status person, on the other hand, has a more private religion, one that is
> oriented more to devotion . . . The higher-status groups look to religious

participation to legitimate their status publicly; the lower-status groups look to religion in a more private way to provide moral support, catharsis, and comfort. (p. 231)

As has been discussed, the "public" type of religiousness which Wilson suggests is associated with higher-status groups has the characteristics of extrinsic religiosity, while the "private" type of religiousness associated with lower-status groups has the characteristics of intrinsic religiosity.

There are, however, no studies which have looked at religious motive as it relates to literacy levels. Khullar and Reynolds (1985) examined the relationship between life satisfaction and religious participation across a number of demographic variables in a sample from central Arkansas. One of their findings is quite interesting as it relates to the meaning of church participation with regard to education. "The data indicate that church participation leads to a substantial decline in the life satisfaction of the less educated, and adds to the life satisfaction of the more educated. Higher education appears to add to the meaning of church participation" (p. 59). These results suggest that those who are more educated may find deeper or more significant meaning in their religious beliefs, which may lead to the adoption of an intrinsic style of religiousness. Their findings would be in conflict with the findings of Wilson (1978) which have been previously reported.

As far as the intrinsic/extrinsic religiosity phenomenon is related to members of the LDS church, Albrecht and Heaton (1984) noted that "highly educated Mormons are more likely to pray frequently, to have strong religious beliefs and to attend meetings,

suggesting that devotion is even more important for those with higher levels of education than those with lower education" (p. 54). Although these results do not speak much to the motive for why the highly educated are more devoted, it would be an interesting subject to examine.

In the context of LDS church members, this intrinsic/extrinsic phenomenon is also in harmony with another LDS research study, finding "that private religious behaviors, such as personal prayer, personal scripture reading, and fasting, were even more influential in preventing delinquency than public religious behaviors such as attendance at meetings, family prayer, and family home evening" (Top & Chadwick, 1999. p. 30). Top and Chadwick note, however, that "public and family religious practices continue to be important because they lead youth to internalize gospel principles and reinforce private religious behavior" (p.30).

The Allred (1997) study previously mentioned has made an attempt to investigate the relationship between functional literacy proficiency and personal religious behavior. But as noted, there were significant sampling problems. The population was highly literate, older, more educated and had a higher socioeconomic status. Her measure of religious orientation was undefined.

This review of literature suggests research investigating the relationships among literacy, religiosity and activity has yielded mixed and inconclusive findings. This would suggest the need for further research investigating the interplay among these constructs.

CHAPTER 2

METHODS

The significance of the current study is seen in its relationship to a pilot study

conducted in Springville in 1998. This chapter will first describe the methods used to

obtain data from the pilot study. This data was then used in refining questions and in

preparing the instrumentation used in the current study. This chapter will then describe

the current study's methods and instruments.

Pilot Study-Springville

A pilot study was conducted by Dr. Dennis Wright in May-August 1998 in

Springville, Utah. The title of the pilot study was, "Literacy as a Factor of Religiosity."

While this pilot study is not the focus of this current dissertation, a brief review of this

preliminary study is in order to provide the necessary historical framework for the

present study conducted in Spanish Fork, Utah. The pilot study created the initial

instrument used for the current study and to determine the *activity* variable. In addition,

the pilot study established a similar population which was replicated in the current study.

A final reason for inclusion of the pilot study in the current study was that the findings

were refined with the addition of a new variable.

Population and Sample

The Springville pilot sample consisted of 200 Latter-day Saints, which were

drawn from the city of Springville. Both *active* and *inactive*, male and female church

members of adult age were included. (Definitions of *activity* were defined previously in

Chapter 1). The only basis for excluding a particular participant was being under 18 years of age and non-membership in the LDS church.

The following procedure was used to select the participants in the pilot study. The participants were selected via a random sampling format (Borg & Gall, 1989), using a 1998 map of the Springville city limits. The Springville city map was made into a grid, using 125 numbered blocks. A random table of numbers was then used to select particular city blocks from the original 125 sample blocks. Once the city-blocks were identified, all homes located in the selected block were surveyed. The examiners continued with the pilot study in the identified city blocks until they had obtained a sample of 200 participants. As indicated, only those subjects who were members of the Church of Jesus Christ of Latter-day-Saints were selected to participate in the study. The subjects were all given an informed consent letter, and participation in the study was voluntary. The majority of identified participants agreed to become involved in the research study.

The following research questions were the guide for the pilot study:

Question 1   What is the general literacy level of the sample group identified for the study? This information was gathered from an administration of the Wide Range Achievement Test 3: Reading sub-test.

Question 2   To what extent does literacy explain variation in religiosity? To what extent are there interactions among literacy and other variables?

Instruments

Given the subject matter of the study, a number of self-reported measures of church activity and literacy are included in the pilot study. A questionnaire/survey was developed by faculty from the BYU Religion Department consisting of seventy-three items. While some categories of the survey variables were available for analysis, they were deemed worthy of a separate research study. And since this questionnaire and pilot study are not the focus on the current research, only descriptive data from this survey are included. Generally, however, the pilot questionnaire (Appendix A) consisted of six categories and provided measurement in the following areas: biographical information, religious beliefs, church activity, reading attitudes, reading habits and personal attitudes. Permission was granted to proceed with the study and administer the questionnaire and the reading achievement test by the Dean of Religious Education, and University Institutional Review Board (IRB) approvals were obtained.

In order to gather data on the reading ability of the subjects, the research examiners were trained by BYU faculty members to administer the survey along with the Wide Range Achievement Test (WRAT3). (The reliability and validity measures on the WRAT3 are provided in "Instruments" section). The WRAT3 is a norm-referenced measure of academic achievement, providing a level of performance in relation to one's age peers. The test consists of three subtests: reading writing and arithmetic. Only the reading portion of the WRAT3 was administered to the subjects. On the reading subtest, subjects are asked to recognize and name letters, and pronounce printed words.

The WRAT reading subtest is a standardized word recognition test that is commonly used in research settings as a measure of general reading ability. According to Masotti (1997), the WRAT3 scores in reading, arithmetic and spelling predicted academic grades in reading, arithmetic and spelling. Masotti's results lend support for the use of the WRAT3 as a measure of achievement for specific academic subject areas, as well as its potential to predict achievement in specific academic subjects.

Data Collection

The data from the pilot study was collected in May 1998. After reviewing the intent of the research and receiving informed consent, examiners administered the WRAT3 to all subjects. This portion took approximately five minutes. Following administration of the WRAT3, subjects took the final portion of the administration by completing a 15-20 minute survey.

The administration of the survey and the WRAT3 was conducted by three examiners who were undergraduate students at Brigham Young University. The examiners received extensive training to increase the reliability of their efforts. Prior to conducting the administration, the examiners met for three training sessions. In the pre-training session, the three examiners received guidance in informed consent, WRAT3 test administration, and received a guidance sheet of instructions. The second training session involved prepared role-play scenarios, followed by allowing the examiners to contact several trial subjects and practice the skills acquired through role-play training.

Following some initial contact with subjects, the examiners returned for a final post-training exercise, prior to the actual city-wide administration.

The examiners were paid an hourly student wage during their time spent administering the research items. The subjects, however, were not compensated, but voluntarily participated in the study. The examiners contacted the home of each randomly selected subject and requested their permission to proceed with the study. The subjects were given a letter of instruction regarding the study's intent which they were instructed to read. Following the reading of the instruction sheet, informed consent was received by the subjects.

<div align="center">Current Study- Spanish Fork</div>

After reviewing the data from the pilot study, the research team began a data analysis of the pilot study. The attempt of the research team was to refine and improve the existing survey to measure more accurately the intended research questions for this current dissertation study (i.e. does literacy lose its predictive power on the dependent variable of church activity when intrinsic religiosity is factored into the equation?).

First, using Cronbach's alpha and classical item analysis procedures, several questionnaire items were deleted when existing items did not increase internal consistency reliability of the subscale or when they were found to contain low item to total score correlations. In addition to deleting several questionnaire items with poor correlations, the original questionnaire was further modified by eliminating duplicate questions.

The revision also included the addition of several biographical questions that asked more detail regarding participant's exact level of education. Finally, twenty items from the *Religious Orientation Scale* (ROS) were included in the modified survey (Appendix B).

Population and Sample

In the pilot study, the initial site was selected based on demographics, social economic status, and population. Similar criteria were used to select a location for the current study. A preliminary review of nearby Utah county cities was undertaken with criteria considerations given for similarity in total population, as well as heterogeneity in social economic levels. As with Springville, in order to replicate the original study as much as possible, it was important to select a city with roughly equivalent demographics to ensure comparability. As a result, several cities which matched the criteria were identified. Subsequently, consultations occurred with a university sociologist (Howard Christensen) and a political scientist (David Magleby) to confirm the compatibility of the selected site (Spanish Fork) with the pilot site (Springville).

Once demographic compatibility with the pilot city was determined, the researchers made efforts to obtain a stratified sample of Spanish Fork city limits by contacting city officials. The researchers also requested demographic research from exit polls. Conducting a stratified sample was not possible since there was insufficient information which precisely described the population; therefore, a decision was made to conduct a simple random sample by replicating the methods and procedures which were followed in the pilot study.

Paralleling the procedures done in Springville, subjects were selected via a random sampling format, using a map of the Spanish Fork city limits. The city map was also made into a grid, using 125 numbered blocks. A random table of numbers was then used to select particular city blocks from the original 125 sample blocks. Once the city-blocks were identified, all homes located in the selected block were surveyed. The examiners continued the study by contacting subjects in the identified city blocks until they had obtained a sample of 208 subjects. Only subjects who were members of the Church of Jesus Christ of Latter-day-Saints were asked to participate in the study. The subjects were also given an informed consent letter and participation in the study was voluntary.

Two undergraduate examiners were also used in the second study, but the training requirements were not as intensive as the initial pilot study since the same examiners used in the pilot study were involved. The examiners were all compensated for their time, and subjects were also asked to volunteer their time. Examiners were informed about the need to maintain confidentiality of the participants and the method of insuring data collection and standardization procedures were also reviewed (See Appendix C and D).

Instruments

Religious Orientation Scale (ROS). The Religious Orientation Scale (Appendix E) is a twenty-item measure based on Allport's early (1950) conceptual work which is designed to determine the nature of the subject's religious orientation, whether it be extrinsic or intrinsic (Allport & Ross, 1967). The ROS is a widely recognized measure

and most frequently used in measuring intrinsic and extrinsic religious motivation. It was selected because of its sound psychometric properties and the subsequent research generating since its inception in 1967.

Allport and Ross's (1967) normative sample is essentially ecumenical and the original sample consisted of 309 members of six different church denominations (i.e. Roman Catholic, Lutheran, Nazarene, Presbyterian, Methodist, Baptist) scattered across eastern United States. The intrinsic subscale has proven to be psychometrically sound, while the extrinsic subscale has some psychometric difficulties (Richards, 1994). The ROS has demonstrated internal consistency reliability coefficients ranging from .79 to .86, while the personal extrinsic and social extrinsic have shown reliability coefficients of .62 and .54 respectively (Genia, 1993). Concurrent validity studies have shown a relationship between the ROS and measures of religious beliefs yielding a validity coefficient of .76 (Donahue, 1985). The data from the intrinsic as well as extrinsic subscales were analyzed for the purpose of this study.

Wide Range Achievement Test Revision 3 (WRAT3). In order to gather data on the reading ability of the subjects, examiners were also trained to administer the survey along with the Wide Range Achievement Test (WRAT3). As previously indicated, the WRAT3 is a convenient test for assessing achievement (in children or adults) to determine a person's level of performance in relation to age peers. The three subtests (reading, writing and arithmetic) may also used to determine other aspects of achievement. Only the reading portion of the WRAT3 was verbally administered to the subjects in this study. The reading subtest is a standardized word recognition test that is

commonly used in research settings as a measure of general reading ability. On the reading subtest, subjects are asked to recognize and name letters, and pronounce printed words. The purpose of the WRAT3's reading subtest is to measure basic reading skills. The scoring form used may be found in Appendix D.

According to the WRAT3 administration manual (1993), "the WRAT3 Combined test standard scores and the WISC-III subtest scale scores and the Verbal, Performance and Full Scale scores were correlated…" accordingly: "The Reading, Spelling and Arithmetic standard scores from the COMBINED form correlated at the .66, .66 and .73 level with the WISC-III Full Scale score. These are moderately positive correlations" (p.179).

The administration manual of the WRAT3 (1993) also provides data on the content and construct validity of the instrument. For each test of the WRAT3, the highest item separation scores possible, 1.00, is found (for Rasch Scaling, see Bond & Fox, 2001). Additional statistical item analysis provides "strong evidence that there is content validity on each of the WRAT3 measures" (p.176).

Questionnaire. As previously indicated, under the auspices of the research team, (author, faculty from BYU College's of Education and Religious Education), the pilot study was revised. The new revised survey questionnaire consisted of seventy-eight items and measured seven categories (Appendix B). Clearance to administer the survey was obtained from the dean of religious education and from the BYU Human Subjects Review Board. The seven categories measured in the survey included: biographical information (questions 1-7), religious beliefs (questions 8-22), church activity (questions

23-36), reading attitudes (questions 37-43), reading habits (44-51), personal attitudes

relating to social desirability (questions 52-58) and finally the addition of the religious

orientation scale (ROS) (questions 59-78). The primary focus from the reading attitudes

and reading habit categories dealt primarily with either religious reading habits or non-

religious reading interests.

Data Collection and Analysis

The data collection procedures were also the same as in the pilot study. The data

from the study were collected in June 1999. After reviewing the intent of the research

and receiving informed consent, examiners administered the WRAT3 to all participants

in the study. Following the WRAT3, participants completed a 15-20 minute survey.

A factor analysis of the combined Springville and Spanish Fork data was

conducted. This factor analysis identified those questions that coalesced to best represent

church activity.∗ That subset was used in the final regression analyses as the criterion

variable. Descriptive statistics (i.e. ranges, potential ranges, means, and standard

deviations) were used to describe subject's scores on the various measures. Zero order

correlation coefficients were computed to estimate the relationships among literacy,

intrinsic religiousness, extrinsic religiousness and activity. A multiple regression

analysis including partial correlation coefficients was also used to predict church activity

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∗ Activity = a23 + a24 + a25 + a26 + a27 + a28 + a29 + a31 + a33 + a34 + a35 +a36.
Questions a30 and a 32 were not included in the score because they were used to
calculate the religious reading score and contained information related to reading
scriptures and church materials. Without these two questions, the activity questions
summed to 43.

by literacy, intrinsic and extrinsic religious orientation. According to Cronk (2002), multiple regression analysis allows the prediction of one variable from several other variables. It thus allows for many correlations between a single dependent variable and combinations of predictor variables, while partial correlations are used to describe the strength of relationships between variables after the influence of other variables have been controlled. The multiple regression analysis helped clarify the relationship of literacy to predict church activity in the presence of religious orientation. The multiple regression analysis used list wise deletion of data. It was felt that consistent data from a subset of the total sample would be more trustworthy than inconsistent data from the entire sample. All statistical functions were performed using both SAS and SPSS.

CHAPTER 3

RESULTS

This chapter provides the descriptive statistics from the pilot study and the results

from the statistical analysis of the current study. Prior to running the regression models,

the collected data were recoded, and screened for accuracy and completeness. Without

proper data screening, the researcher will not be able to discern the extent to which the

results are valid. Along with the data screening, the means, standard deviations, and

ranges were computed and this information is provided. Finally, the multi-regression

analyses are presented to respond to the three research questions and their respective

hypotheses.

Inferential Statistics from Pilot Study-Springville

Pilot Study results indicate significant correlation between the variables Reading and

Activity (r = .455).

Table 1

Pilot Correlation Between Reading and Activity

		WRAT	ACTIV
WRAT	Pearson Correlation	1	.455**
	Sig. (2-tailed)		.000
	N		185

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

The Springville subject pool consisted of 200 participants who completed the survey and WRAT3 administration.   There were 121 females which represented 65.5 % of the participants, compared to 79 males or 39.5 % of participants. The ages of the participants ranged from 18 to 90 with a mean of 42.7 and a SD of 19.9. The WRAT3 reading abilities ranged from 27 (3rd grade score equivalent) to 57 (post high school equivalent) with a mean of 47.4 (high school equivalent) and a SD of 5.9. The average reading ability in this sample is similar to the WRAT3 reading norm of 48.9 for the median age of 35 years.

Table 2

Descriptive Statistics-Pilot Study

	N	Min	Max	Mean	Std.Deviation
WRAT	200	27.00	57.00	47.47	5.91
AGE	200	18.00	90.00	42.74	19.92
ACTIVITY	185	12.00	60.00	44.97	11.84

The correlation between WRAT3 and age was -.051, which was not significant. This indicates that the measure of reading ability was not confounded by the age of the subjects (i.e. we are not inadvertently predicting activity by age since age is not associated with reading ability in our pilot sample).

Table 3

Pilot Correlation between Reading and Age

		AGE
WRAT	Pearson Correlation	-.051
	Sig. (2-tailed)	.476
	N	200

As in other studies, the results of the pilot study demonstrated that literacy was a significant predictor of activity at the zero order. While the results of the pilot study were accurate (at the zero order), it remained to be seen whether the relationship would continue, or literacy's predictive power would remain constant, when other variables such as intrinsic religiosity were factored in.

Analysis Current Study-Spanish Fork

A factor analysis of the Spanish Fork study was conducted on the entire questionnaire. Our *a priori* assumption was that fourteen questions would represent the factor labeled *activity*. As described in the prior chapter, twelve of the fourteen questions clustered together suggesting a good fit between our *a priori* assumptions and the empirical results. Items a30 and a31 did not cluster with the other twelve questions and were therefore omitted from the total activity score. The excluded items had a relatively poor item-to-total correlation as compared with the other activity subscale items. The

twelve questions resulting from the factor analysis were then summed to create a

statistically sound activity variable.

Descriptive Statistics

Means, standard deviations and sample sizes were computed for each variable.

The results are presented in Table 4, along with the distribution of subjects by sex.

Table 4

Descriptive Statistics-Current Study

	N	Range	Min	Max	Mean	Std.Deviation
Age of subject in years	157	66.00	16.00	82.00	35.41	14.69
WRAT (reading)	158	26.00	32.00	58.00	49.92	4.17
ROS Intrinsic	158	34.00	11.00	45.00	36.55	6.15
ROS Extrinsic	158	33.00	14.00	47.00	27.76	6.03
ACTIVITY	158	48.00	12.00	60.00	45.72	11.64

The original Spanish Fork subject pool consisted of 208 subjects, who completed

the survey and WRAT-3 administration. Of these, 51 were male, constituting 32 percent,

and 106 were female, representing 67.5 percent of the sampled population. Relying on a

list-wise deletion of data, participants were removed from the analysis if they were

missing any data. One participant did not report age and gender. This resulted in a final

sample of 157 total participants. While 51 participants were deleted in this process, it was

believed that the remaining 157 participants consisted of a robust enough sample to

support the multiple regression analysis. The ages of the participants ranged from 16 to

82 with a mean of 35.4 and a SD of 14.7. The WRAT 3 reading abilities ranged from 32

(4th grade score equivalent) to 58 (post high school equivalent) with a mean of 49.9 (high

school grade equivalent) and a SD of 4.2. The average reading ability in this sample is

similar to the WRAT 3 reading norm of 48.9 for the median age of 35 years.

Table 5

Spanish Fork Correlation Between Reading and Age

		AGE
WRAT	Pearson Correlation	-.130
	Sig. (2-tailed)	.060
	N	208

The correlation between WRAT3 and age was -.130, which was not significant.

Again, this indicates that the measure of reading ability was not confounded by the age of

the subjects (i.e. we are not inadvertently predicting activity by age since age is not

associated with reading in our sample).

Pre-Analysis Data Cleaning

The data was first screened by checking the linear relationship between each of

the variables. Assumptions of normality, linearity and homoscedasticity were examined

for all variables.

Zero Order Correlation Matrix and Scatter Plots
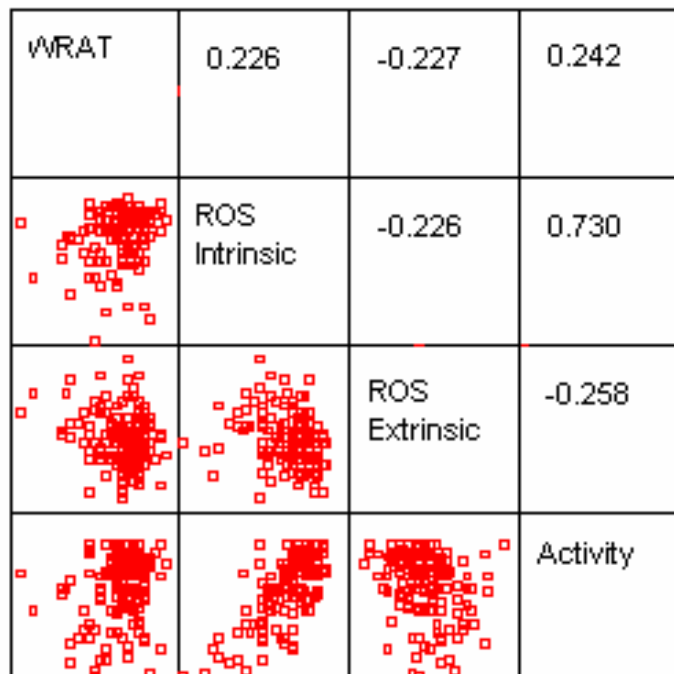
Figure 1. The bi-variate scatter plots demonstrate that the assumption of linearity was met, as they appear to be linear and elliptical and not quadratic in shape.

Visual inspection of the activity variable (Figures 2 and Figures 3 below) showed it to be negatively skewed and the QQ plot of activity as not being linear. Statistical tests of normality confirmed the visual impressions. The Kolmogorv-Smirnov statistic was 0.154 which was significant. Various transformations of the data were imposed to correct for the skew. Although regression using Activity squared transformations provided a more linear plot, the results were almost identical to those which used "un-squared" activity values. Hence, all analyses reported herein are based on the original untransformed data.
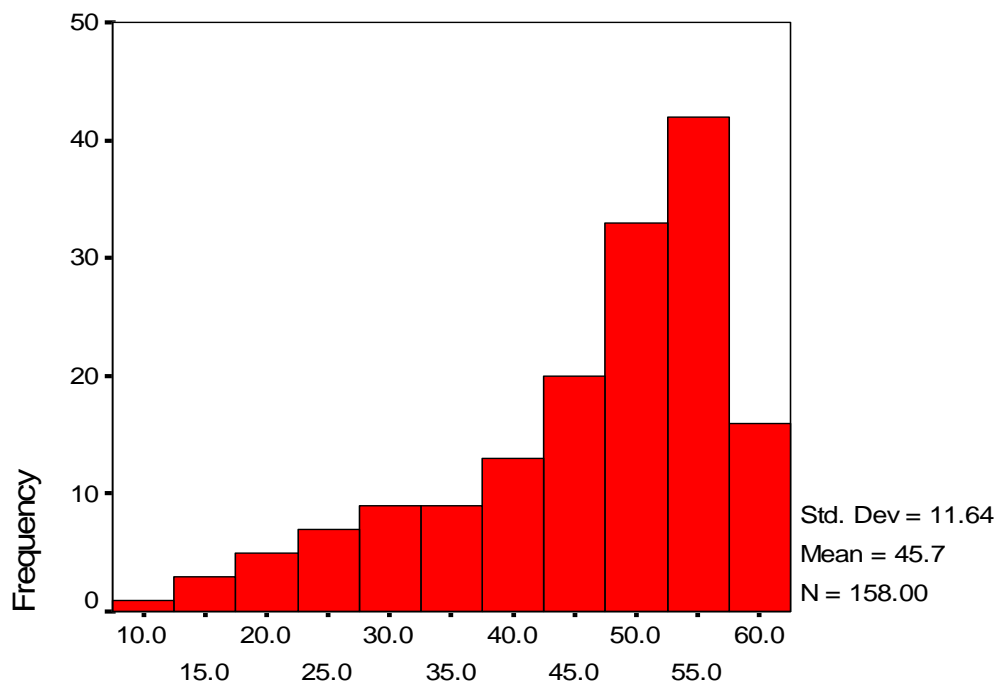
ACTIVITY

Figure 2. Histogram of Activity Scores
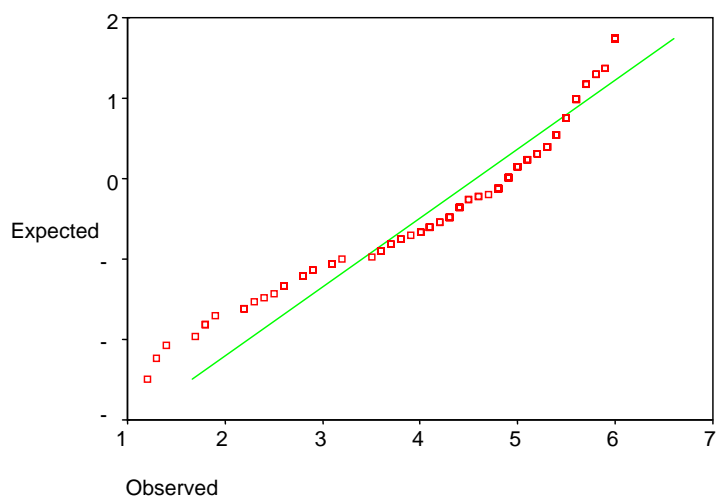
Figure 3. Normal Q-Q Plot of Activity Scores

Inferential Statistics Used to Answer Research Questions #1, #2 and #3

The first research question asked whether any of the predictor variables would show significant zero-order relationships among church activity, literacy, intrinsic religious orientation, and extrinsic religious orientation. Zero-order correlations represent the relationship between a single predictor variable and the criterion variable in the absence of other predictor variables.

The second question investigated the combined ability of church activity, literacy, intrinsic and extrinsic religious orientation to predict church activity. The coefficient of determination (R^2) is a good estimate of this combined predictive ability. It represents the variance shared by literacy and the overlapping of intrinsic religiosity, extrinsic religiosity and activity.

The third research question investigated the prediction of church activity by literacy, intrinsic and extrinsic religious orientation in the presence of one another. This third research question helps determine whether any significant zero order relationships among the predictors and criterion were sustained when accounting for the other terms in the model.

Table 6 presents these correlations using a regression analysis where *activity* serves as the dependent variable, and intrinsic and extrinsic religiosity and reading achievement are the predictors.

Table 6

Correlations Between Predictor Variables and Activity

	R^2	F	P	β	P	ZO	P	Partial Cor	t	P
Model	.54	61.76	.000							
ROS Intrinsic				1.32	.000	.730	.000	.703	12.28	.000
ROS Extrinsic				-0.17	.129	-.258	.001	-.122	-1.525	.129
WRAT				0.18	.256	.242	.001	.092	1.141	.256

Table 6 shows the predictors, the coefficient of determination and their zero-order and partial correlations. The overall model accounted for .54 of the total variance with an F of 61.76 which was statistically significant. As can be seen from Table 6, all predictor variables in the model are significantly correlated with a*ctivity*. The correlation between intrinsic religiosity and Activity is 0.73, which demonstrates that as intrinsic religiosity increases, Activity level also increases. The correlation between extrinsic religiosity and Activity is – 0.258 suggesting that higher extrinsic religiosity is associated with lower activity. Finally, the data shows a positive relationship (r =.242) between reading achievement and church activity.

The partial correlation (partial) is also shown for each of the predictors. This correlation shows the relationship between the predictor variable and the criterion variable when the predictor variable is in the presence of all other variables.

In the presence of the others, only intrinsic religiosity maintained its significant predictive ability. The partial correlation between intrinsic religiosity and activity was .703. The partial correlation between extrinsic religiosity and activity was -.122 which was not statistically significant. Finally, the partial correlation between reading ability and activity was .092, which again was also not statistically significant.

CHAPTER 4

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to carefully conceptualize the relationships among literacy, church activity, intrinsic and extrinsic religious functioning among members of the LDS church. This study used ROS methodology that has been used successfully in numerous other studies. The study assessed how different measures of religiosity and literacy influence LDS church activity. It was assumed that literacy would correlate positively and significantly, but the addition of religiosity was unknown.

The sections of the chapter will be organized according to the following sections: (a) the results of the study are briefly summarized; (b) theoretical and practical implications of results are examined; (c) suggestions for further research are proposed.

Summary of Results

Statistical analysis of the model indicated that 54% of the variability was accounted for in the model ($R^2 = .54$). In addition, the strength of the zero order correlations revealed that all variables in the model were significantly related to activity. A finding of this study is that the association between religiousness and activity differed by the type of religiousness measured. Specifically, the zero order correlation between intrinsic religiosity and activity is + .73. This positive relationship would indicate that as the measure of the intrinsic religiosity variable increases, the activity level increases as well. Higher intrinsic values are associated with higher church activity levels. Secondly, the zero order correlation for *extrinsic religiosity* (i.e. which assess the extent to which people involve themselves in religion for public or self-seeking ends) and activity is a

negative association with a value of -.258. This was similar to the conclusions of Allport and Ross (1967) who found that "the extrinsic subscale . . . negatively correlated with degree of education (r = -.32)" (p. 435). This would indicate that higher extrinsic religiosity values are associated with lower activity values. Third, there is also an additional positive relationship between reading achievement and activity with a value of +.242. This finding is consistent with the findings of the pilot study which did not include a measure of religious orientation (r = +.455).

Discussion

The review of literature indicates that for Latter-day Saints, activity in the church involves a broad range of public and private religious practices intended to enhance the spiritual well being and accomplishment of good works. Thus, when Latter-day Saints refer to being "active in the church," they "have reference to observing a full religious lifestyle of attendance, devotion, service and learning" (Cunningham, 1992, p. 14).

While one would expect most measures of religiousness to have a positive association with activity, measures of extrinsic religious motivation have a significant negative association with activity. The clear contrast between intrinsic and extrinsic religious motivations provides additional emphasis to the conclusions of others (Smith et al., Bergin, 1983; Burris, 1994; Donahue, 1985; Pargament, 1997; Richards & Bergin, 1997) and strongly suggests that researchers continue considering the specific religious motivations of individuals.

In the context of LDS church members, an extension of this study's findings is in harmony with another research study, finding "that *private* (italics added) religious

behaviors, such as personal prayer, personal scripture reading, and fasting, were even *more influential* (italics added) in preventing delinquency *than public* (italics added) religious behaviors such as attendance at meetings, family prayer, and family home evening" (Top & Chadwick, 1999, p 30). Top and Chadwick note, however, that "public and family religious practices continue to be important because they lead youth to internalize gospel principles and reinforce private religious behavior" (p.30). Therefore, intrinsic and extrinsic religious behaviors do not appear to be mutually exclusive.

In the context of a non-LDS population, the findings of the study also have practical relevance worthy of further investigation. In Catholicism, for example, the church provides an alternative method which enables the illiterate to still mediate upon the "mysteries." This practice, which began in the middle ages, utilizes mental imagery, the great prayer (i.e. the Rosary) and the recitation of the 150 Psalms as a source of prayer. Those unable to read the Psalms because of illiteracy adopted the practice of reciting prayers and using beads to keep count. The Rosary, made up of both mental and vocal prayer, thus provides an *intrinsic method* of enhancing private religious behavior for the less literate Catholic members.

The study results confirmed the results of the literature which conclude that there is an important relationship between reading ability in predicting church activity. However, this relationship may be more limited and complex than what has been suggested by the literature and the pilot study. While relying upon global measures, at the zero order literacy *is* a significant predictor of church activity. But when intrinsic religiosity is entered into the equation, literacy *loses* its predictive power in the model.

Thus, intrinsic religious orientation acts as a significant covariate in predicting church activity in the presence of literacy.

Despite the use of global measures, previous research suggests some possibilities that have informed investigative efforts. Several studies (including the pilot study) have demonstrated a surprisingly robust positive relationship between literacy and church activity. This research study, however, has examined the relationships more carefully by investigating the personal religiosity construct as a covariate to literacy in predicting activity outcomes.

The results provide additional clarity in the relationships among activity, literacy and religiosity. It adds a unique explanatory power to the prediction of activity. The robust association between literacy and activity which was demonstrated in the pilot study weakens when additional aspects of spirituality are examined. Therefore, the results of the pilot study, while accurate, may be misleading because it was missing a key component (i.e., the personal religious construct).

In addition, the results support the notion that religiosity is a multidimensional construct, one which also serves as a significant predictor of church activity. Rather than a broad conceptualization of religious activity and literacy constructs, this research provides a specific hypothesis of a predictive relationship.

A related issue is why all the predictors had a significant relationship with activity, but when the partial correlations are taken into account, only intrinsic religiosity maintains its significance. We still don't know if attending regularly helps you become

more intrinsically religious or if intrinsic motivation helps you attend more regularly or if there are other unaccounted variables that may affect both.

It might be argued that the zero order correlation of 0.73 between activity and intrinsic religiosity is so strong that the instruments were almost identical in their language. An observation of the two instruments, however, revealed that the questions were in fact quite dissimilar. A much more likely explanation is that both instruments measure the same underlying construct, but do so from different perspectives. The loss of predictive power associated with literacy in the multiple regression equation may be due to this artifact. Any such variable in the presence of two measures with the same construct would need to be quite independent of the predictor to maintain its own predictive power. Literacy may have been "swamped" by the huge overlap between two measures of the same construct.

It might also be argued, that by definition, one would expect intrinsically religious individuals to be more active (and hence more participative) as a result of their inherent traits. While one would expect such an association, the question remains as to why intrinsic religiousness was such a powerful predictor of activity, and why extrinsic religiousness was not a predictor.

One possible explanation, as noted by Powell et al., (2003) is that "regular church attendance may encourage meaningful social roles that provide a sense of self-worth and purpose through the act of helping. This is in contrast to the more common conceptualizations of social support where the emphasis is on being helped" (p. 48). Another explanation is that the members' behavior might create a sense of *cognitive*

dissonance stemming from the discrepancy between what individuals are trying to be publicly with what they think privately.

Intrinsic religiousness was defined as a state of commitment to one's religion where their primary purpose for living the religion derives from internal factors. Religiousness becomes an end in itself, rather than a means to different ends. Individuals with this orientation are most likely internally committed to those beliefs, and may derive solace and satisfaction from adhering to them. If a person is less committed to internal constructs, it follows that there would be less of a likelihood for the individual to remain active in a church with high literacy demands. Moreover, as noted by Prentice and Miller (2002), correspondence between stereotypical qualities and members' private qualities can emerge as group members internalize their self-presentations.

Speculating, one might ask to what extent does a lack of literacy relate to a corresponding lack of church attendance or in participation in a church with high literacy demands? And do these demands of literacy discourage the less literate from fully participating in church activities? It would appear that while literacy is associated with church activity, a worshiper's private religiosity may compensate for the potential obstacles of illiteracy.

The results of this study would suggest, that although literacy forms a central role in the LDS church, the less educated members will maintain their activity if their motivations are intrinsically driven. Despite the ostensible importance placed upon literacy in the LDS church, its significance may be surprisingly limited in influencing religious involvement. Perhaps when an adherent is intrinsically motivated, they truly

view their spirituality as a constant, not as a set of practices devoid from everyday life or applied just in social settings. But rather, their spirituality has become a way of life which sustains them constantly, despite personal limitations or weaknesses (Smith, Book of Mormon, Ether, 12:27).

This trend portends well for a growing world-wide church membership with significant expansion in many underdeveloped countries experiencing literacy problems. Less literate church members should not feel marginalized or subscribe to a false "homegrown stereotype" which equates literacy with spirituality or with a corporate white-collar church.

One might therefore ask if church education should then be solely interested in spiritual development, trusting that it will somehow compensate for any other obstacles. On the other hand, while a member's private testimony appears to "level the playing field," the study still demonstrated a significant relationship between literacy and activity. This would warrant continued church support of the "gospel literacy effort" and in creating literacy materials. More literate church members are apt to find deeper or more significant meaning in their religious beliefs, which may lead to the adoption of an intrinsic style of religiousness. Furthermore, the high literacy expectations of the LDS church were also validated by this study. In conclusion, the study results would support the LDS church's *dual emphasis* with literacy *and* religiosity in an effort of getting the "gospel into the hearts of the people" (Oaks, 2001, Ballard 2000).

Limitations of Study

There are several limitations in this study which should be considered. This was an observational study and the subjects were encouraged to volunteer from a randomized sampling of Spanish Fork, Utah. In as much as this study was correlational in nature, we can therefore not imply causality. The different relationships between predictor and criterion variables do not mean a change in one causes a change in the other, only that the two variables are related.

In addition, there is also some evidence that religiously oriented people may have a need to maintain a socially desirable appearance, (Richards, 1994) and this may have influenced the subjects desire to participate in this study and this could possibly confound the results. Social desirability may cause participants to respond according to what they think others will want to hear. Furthermore, those inactive in the LDS faith might have chosen to not participant because of aroused suspicions.

While a significant zero order correlation (.242) was found between reading and activity, the correlation could be spuriously deflated. A larger range of literacy scores may have generated a more robust zero order correlation that may have maintained its predictive power in the multiple regression equation.

Another feature associated with the range of literacy scores was observed in Figure 1 (p. 69). It was observed that the lower literacy scores tended to show more scatter in activity than did the higher reading achievement scores. It is unclear what the full pattern would have looked like and what the effect would have been on the correlation if a broader range of low literacy scores had been sampled.

There are also several limitations to the generalizability of this study. The sample was taken from a fairly representative LDS community, and as expected, the sample results were fairly homogeneous. Therefore, some caution is warranted in the validity of results outside of the state of Utah. The homogeneity of the Springville and Spanish Fork populations might differ from other LDS populations that are less homogeneous. There may have been some relations found with specific ethnic populations, but the variation in ethnicity was extremely restricted in the sample. Consequently, some caution is warranted in generalizing the findings to those living outside of predominately Caucasian and middle class backgrounds.

Recommendations for Further Research

The finding that literacy loses its predictive power upon church activity (i.e. when intrinsic religiosity is examined) is not consistent with previous research to date and warrants continued and careful investigation. A better understanding of the relationship among these various constructs could further our understanding. Additional research is needed that encompasses stronger research methodology, including a greater attempt to include more aspects of religiosity/spirituality dimensions.

This additional analysis would be useful to investigate the potential impact of this association in individuals who are not from Judeo-Christian backgrounds. Likewise, what relationships might emerge between literacy and church activity if a similar study was conducted in a underdeveloped country? Would the ability of intrinsic religiosity to compensate for a developed church characteristic be sustained in underdeveloped countries? Does literacy account for the high inactivity rates found in some of these

countries? How do intrinsic beliefs mitigate these variables? Finally, what is the significance of literacy for a church that baptizes more new converts from less educated and lower socio-economic levels? These questions raised warrant the need for further analysis regarding the concepts of intrinsic religiousness, literacy and church activity.

As further research refines our understanding of these relationships, a more clear understanding of these constructs will emerge. As indicated, future studies should attempt to establish a more religiously heterogeneous sample in order to expand the range of inclusiveness to other denominations. Further research is also needed to determine if there is a causal relationship between intrinsic religiousness, literacy, and church activity as measured in this study.

Conclusions

The findings from this study suggest that literacy is related to activity, but in a way that is more complex than many investigators have considered.

1. The correlations between intrinsic religiousness and church activity and literacy and church activity were both positive and statistically significant.

2. A statistically significant negative correlation (as manifested by the zero-order correlation) was found between extrinsic religiousness and activity.

3. The present results of this study indicate that individuals with higher intrinsic religiosity scores tend to have higher activity scores. A relatively strong predictive relationship was found to represent this relationship. For every one unit increase in the intrinsic score on the ROS, the corresponding activity variable tends to increase by 1.32 units.

4. The results of this study indicate that those with higher extrinsic religiosity scores tend to have lower activity scores.

5. While at the zero order literacy is a significant predictor of church activity, when intrinsic religiosity is entered into the equation, literacy loses its predictive power in the model. Thus, intrinsic religious orientation acts as a significant covariate in predicting church activity in the presence of literacy.

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APPENDIX A

SURVEY

The survey requires that I read the items to you. Please follow along as I read each question or statement.
Mark your answer on the sheet.

1. Are you male or female?
        1. Male
        2. Female

2. How old were you on you last birthday? _____ Years

3. To which ethnic group do you belong?
        1. White
        2. Black
        3. Asian
        4. Hispanic
        5. Other

4. How many years of formal schooling have you completed? _____ Years

5. How many years have you been a member of the LDS church? _____ Years

6. How old were you when you were baptized into the LDS church? _____ Years

7. What church callings in the LDS church have you held in the past, or that you are presently holding.
(This is a non-exhaustive list.)

        ____ Member of the bishopric, State presidency, or Stake High Council
        ____ Elders quorum president or Relief Society President
        ____ Elders quorum, Relief Society, or Sunday School teacher
        ____ Member of Sunday School Presidency
        ____ Sunday School Teacher
        ____ Member of the Primary Presidency
        ____ Primary Teacher
        ____ Member of the activities committee
        ____ Stake Missionary
        ____ Member of the Young Men's or Young Women's Presidency
        ____ Young Women's leader
        ____ Young Men's leader
        ____ Ward Music Committee
        ____ Home teacher
        ____ Visiting teacher
        ____ Secretary or Clerk
        ____ Full Time Mission
        ____ Other (please describe)_____

THIS SECTION ASKS ABOUT YOUR RELIGIOUS BELIEFS AND YOUR CHURCH ACTIVITY

I am going to read you some statements. I want you to tell me to what extent you agree or disagree with the idea expressed in the statement.

	Strongly Agree	Agree	Mixed Feelings	Disagree	Strongly Disagree
8. God lives and is real.	1	2	3	4	5
9. Jesus Christ is the divine Son of God.	1	2	3	4	5
10. Satan actually exists.	1	2	3	4	5
11. There is a life after death.	1	2	3	4	5
12. God really does answer prayers.	1	2	3	4	5
13. The Book of Mormon is the word of God.	1	2	3	4	5
14. Joseph Smith actually saw God the Father and Jesus Christ.	1	2	3	4	5
15. The president of the LDS Church is a prophet of God.	1	2	3	4	5
16. The Lord guides the Church today through revelations to Church leaders.	1	2	3	4	5
17. During the past year, I have really tried to live the standards of the Church.	1	2	3	4	5
18. I have a strong testimony of the truthfulness of the gospel.	1	2	3	4	5
19. There have been times in my life when I felt the Holy Ghost.	1	2	3	4	5
20. I know what it feels like to repent and to be forgiven.	1	2	3	4	5
21. I have been guided by the Spirit with some of my problems or decisions.	1	2	3	4	5
22. There have been times when I have disagreed with a teaching of the Church.	1	2	3	4	5
23. I sometimes feel like an outsider in the Church.	1	2	3	4	5
24. I seem to fit in very well with the people in my ward.	1	2	3	4	5
25. I am well liked by members of my ward.	1	2	3	4	5

	Strongly Agree	Agree	Mixed Feelings	Disagree	Strongly Disagree
26. Personal scripture study is a very important aspect of my spirituality.	1	2	3	4	5
27. Reading the conference reports is important because what the brethren say is like scripture for our day.	1	2	3	4	5
28. I feel like I have something to add to the Lord's Kingdom; my contribution is important.	1	2	3	4	5
29. Speaking in Sacrament Meeting is a good opportunity to share the doctrine of the gospel and to bear my testimony.	1	2	3	4	5
30. I do not like to speak in front of other people, even in a Sunday School class.	1	2	3	4	5

HOW OFTEN DO YOU DO THE FOLLOWING ACTIVITIES?

	Very Often	Often	Sometimes	Rarely	Never
31. I participate in Church social activities.	1	2	3	4	5
32. I attend Priesthood Meeting or Relief Society.	1	2	3	4	5
33. I attend Sacrament Meeting.	1	2	3	4	5
34. I attend Sunday School.	1	2	3	4	5
35. I fast on Fast Sunday.	1	2	3	4	5
36. I pay tithing on the money I earn.	1	2	3	4	5
37. I bear my testimony in Church.	1	2	3	4	5
38. I read the scriptures by myself.	1	2	3	4	5
39. I pray privately.	1	2	3	4	5
40. I read Church magazines and books.	1	2	3	4	5
41. My family holds Family Home Evening.	1	2	3	4	5
42. My family reads the scriptures together.	1	2	3	4	5
43. My family has family prayer.	1	2	3	4	5
44. I attend the Temple.	1	2	3	4	5

READING ATTITUDE SURVEY

		Strongly Agree	Agree	Mixed Feelings	Disagree	Strongly Disagree
45.	I enjoy reading in my spare time.	1	2	3	4	5
46.	Reading is part of my job.	1	2	3	4	5
47.	I am confident when asked to read to learn how to do something.	1	2	3	4	5
48.	I am comfortable when reading aloud to others.	1	2	3	4	5
49.	I like to receive books as gifts.	1	2	3	4	5
50.	I enjoy reading the scriptures.	1	2	3	4	5
51.	I enjoy reading church magazines.	1	2	3	4	5
52.	I enjoy reading books about church topics.	1	2	3	4	5

READING HABITS SURVEY

		Very Often	Often	Sometimes	Rarely	Never
53.	I read to learn about things	1	2	3	4	5
54.	I read church materials	1	2	3	4	5
55.	I read to do my job better	1	2	3	4	5
56.	I read newspapers	1	2	3	4	5
57.	I read church books	1	2	3	4	5
58.	I am required to read as part of my job	1	2	3	4	5
59.	I read to others	1	2	3	4	5
60.	I enjoy reading	1	2	3	4	5
61.	I enjoy the scriptures	1	2	3	4	5
62.	I read for entertainment	1	2	3	4	5
63.	I read magazines	1	2	3	4	5

Listed below are a number of statements describing personal attitudes and characteristics. Read each item & decide whether the statement is TRUE or FALSE as it pertains to you personally. Mark "T" or "F" for each statement.

64. T   F   I never hesitate to go out of my way to help someone in trouble.

65. T   F   I sometimes feel resentment when I don't get my way.

66. T   F   There have been times when I felt like rebelling against people in authority even though I knew they were right.

67. T   F   I'm always willing to admit it when I make a mistake.

68. T   F   I sometimes try to get even rather than forgive and forget.

69. T   F   I am always courteous, even to people who are disagreeable.

70. T   F   I have never been irked when people expressed ideas very different from my own.

71. T   F   I always feel good about accepting whatever church assignment I'm given.

72. T   F   I never have doubts about my religious beliefs.

73. T   F   I never miss a day reading scriptures.

APPENDIX B

SURVEY

The survey requires that I read the items to you. Please follow along as I read each question or statement. Mark your answer on the sheet.

1. Are you male or female?
    1. Male
    2. Female

2. How old were you on your last birthday? _____ Years

3. To which ethnic group do you belong?
    1. White
    2. Black
    3. Asian
    4. Hispanic
    5. Other

4. Circle the highest grade or year of school that you have **completed**.
    1. None
    2. Elementary School
    3. High School
    Circle "Yes for each type attended   **Total Number of Years Attended**
    4. Vocational, Technical or Trade School?   Yes   Years attended: _____
    5. Business college or secretarial?   Yes   Years attended: _____
    6. Two year junior, religious, or community college? Yes   Years attended: _____
    7. Four year college or university?   Yes   Years attended: _____
    8. Professional or graduate school?   Yes   Years attended: _____

5. How many years have you been a member of the LDS church? _____Years

6. How old were you when you were baptized into the LDS church? _____Years

7. What church callings in the LDS church you have held in the past, or that you are presently holding.
   (This is a non-exhaustive list.)
            ____Member of the bishopric, Stake presidency, or Stake High Council
            ____Elders quorum president or Relief Society President
            ____Elders quorum, Relief Society, or Sunday School teacher
            ____Member of Sunday School Presidency
            ____Sunday School Teacher
            ____Member of the Primary Presidency
            ____Primary teacher
            ____Member of the activities committee
            ____Stake Missionary
            ____Member of the Young Men's or Young Women's Presidency
            ____Young Women's leader
            ____Young Men's leader
            ____Ward Music Committee
            ____Home teacher
            ____Visiting teacher
            ____Secretary or Clerk
            ____Full Time Mission
            ____Other (please describe)

THIS SECTION ASKS ABOUT YOUR RELIGIOUS BELIEFS AND YOUR CHURCH ACTIVITY
I am going to read you some statements. I want you to tell me to what extent you agree or disagree with the idea expressed in the statement.

		Strongly Agree	Agree	Mixed Feeling	Disagree	Strongly Disagree
8.	God lives and is real.	1	2	3	4	5
9.	Jesus Christ is the divine Son of God.	1	2	3	4	5
10.	There is a life after death.	1	2	3	4	5
11.	God really does answer prayers.	1	2	3	4	5
12.	The Book of Mormon is the word of God.	1	2	3	4	5
13.	Joseph Smith actually saw God the Father and Jesus Christ.	1	2	3	4	5
14.	The president of the LDS Church is a prophet of God.	1	2	3	4	5
15.	The Lord guides the Church today through revelations to Church leaders.	1	2	3	4	5
16.	During the past year, I have really tried to live the standards of the Church.	1	2	3	4	5
17.	I have a strong testimony of the truthfulness of the gospel.	1	2	3	4	5

		Strongly Agree	Agree	Mixed Feeling	Disagree	Strongly Disagree
18.	There have been times in my life when I felt the Holy Ghost	1	2	3	4	5
19.	I have been guided by the Spirit with some of my problems or decisions.	1	2	3	4	5
20.	Personal scripture study is a very important aspect of my spirituality	1	2	3	4	5
21.	Reading the conference reports is important what the brethren say is like scripture for our day.	1	2	3	4	5
22.	Speaking in Sacrament Meeting is a good to share the doctrine of the gospel and to bear my testimony.	1	2	3	4	5

How often do you do the following activities?

		Very Often	Often	Sometimes	Rarely	Never
23.	I participate in Church social activities.	1	2	3	4	5
24.	I attend Priesthood Meeting or Relief Society.	1	2	3	4	5
25.	I attend Sacrament Meeting.	1	2	3	4	5
26.	I attend Sunday School.	1	2	3	4	5
27.	I fast on Fast Sunday.	1	2	3	4	5

	Very Often	Often	Sometimes	Rarely	Never
28. I pay tithing on the money I earn.	1	2	3	4	5
29. I bear my testimony in Church.	1	2	3	4	5
30. I read the scriptures by myself.	1	2	3	4	5
31. I pray privately.	1	2	3	4	5
32. I read Church magazines and books.	1	2	3	4	5
33. My family holds Family Home Evening.	1	2	3	4	5
34. My family reads the scriptures together.	1	2	3	4	5
35. My family has family prayer.	1	2	3	4	5
36. I attend the Temple.	1	2	3	4	5

READING ATTITUDE SURVEY

	Strongly Agree	Agree	Mixed Feeling	Disagree	Strongly Disagree
37. I enjoy reading in my spare time.	1	2	3	4	5
38. I am confident when asked to read learn how to do something.	1	2	3	4	5
39. I am comfortable when reading aloud to others.	1	2	3	4	5

		Strongly Agree	Agree	Mixed Feeling	Disagree	Strongly Disagree
40.	I like to receive books as gifts.	1	2	3	4	5
41.	I enjoy reading the scriptures.	1	2	3	4	5

		Strongly Agree	Agree	Mixed Feeling	Disagree	Strongly Disagree
42.	I enjoy reading church magazines.	1	2	3	4	5
43.	I enjoy reading books about church topics.	1	2	3	4	5

READING HABITS SURVEY

		Very Often	Often	Sometimes	Rarely	Never
44.	I read to learn about things.	1	2	3	4	5
45.	I read church materials.	1	2	3	4	5
46.	I read church books.	1	2	3	4	5
47.	I read to others.	1	2	3	4	5
48.	I enjoy reading.	1	2	3	4	5
49.	I read the scriptures.	1	2	3	4	5
50.	I read for entertainment.	1	2	3	4	5
51.	I read magazines.	1	2	3	4	5

Listed below are a number of statements describing personal attitudes and characteristics. Read each item and decide whether the statement is TRUE or FALSE as it pertains to you personally. Mark "T" or "F" for each statement.

52.	T	F	I never hesitate to go out of my way to help someone in trouble.
53.	T	F	I sometimes feel resentment when I don't get my way.
54.	T	F	There have been times when I felt like rebelling against people in authority even though I knew they were right.
55.	T	F	I am always courteous, even to people who are disagreeable.
56.	T	F	I have never been irked when people expressed ideas very different from my own.
57.	T	F	I always feel good about accepting whatever church assignment I'm given.
58.	T	F	I never miss a day reading scriptures.

The following items deal with various types of religious ideas and opinions. Please indicate the response you prefer or most closely agree with by circling that answer.

59. What religion offers me most in comfort when sorrows and misfortunes strike.
    a. I definitely disagree
    b. I tend to disagree
    c. I tend to agree
    d. I definitely agree

60. One reason for my being a church member is that such membership helps to establish a person in the community.
    a. Definitely not true
    b. Tends not to be true
    c. I tend to agree
    d. I definitely agree

61. I try hard to carry my religion over into all my other dealings in life.
    a. I definitely disagree
    b. I tend to disagree
    c. I tend to agree
    d. I definitely agree

62. The purpose of prayer is to secure a happy and peaceful life.
    a. I definitely disagree
    b. I tend to disagree
    c. I tend to agree
    d. I definitely agree

63. It doesn't matter so much what I believe so long as I lead a moral life.
    a. I definitely disagree
    b. I tend to disagree
    c. I tend to agree
    d. I definitely agree

64. Although I am a religious person I refuse to let religious considerations influence my everyday affairs.
    a. Definitely not true of me
    b. Tends not to be true
    c. Tends to be true
    d. Definitely true

65. Quite often I have been keenly aware of the presence of God or the Divine Being.
    a. Definitely not true
    b. Tends not to be true
    c. Tends to be true
    d. Definitely true

66. My religious beliefs are what really lie behind my whole approach to life.
    a. This is definitely not so
    b. Probably not so.
    c. Probably so
    d. Definitely so

67. The church is most important as a place to formulate good social relationships.
    a. I definitely disagree
    b. I tend to disagree
    c. I tend to agree
    d. I definitely agree

68. The prayers I say when I am alone carry as much meaning and personal emotion as those said by me during services.
    a. Almost never
    b. Sometimes
    c. Usually
    d. Almost always

69. Although I believe in my religion, I feel there are many more important things in my life.
    a. I definitely disagree
    b. I tend to disagree
    c. I tend to agree
    d. I definitely agree

70. If not prevented by unavoidable circumstances, I attend church.
    a. More than once a week
    b. About once a week
    c. Two or three times a month
    d. Less than once a month.

71. I pray chiefly because I have been taught to pray.
    a. Definitely true of me
    b. Tends to be true
    c. Tends not to be true
    d. Definitely not true of me

72. If I were to join a church group I would prefer to join (1) a Bible Study Group or (2) a social fellowship.
    a. I would prefer to join (1)
    b. I probably would prefer (1)
    c. I probably would prefer (2)
    d. I would prefer to join (2)

73. Religion is especially important to me because it answers many questions about the meaning of life.
    a. Definitely disagree
    b. Tend to disagree
    c. Tend to agree
    d. Definitely agree

74. A primary reason for my interest in religion is that my church is a congenial social activity.
    a. Definitely not true of me
    b. Tends not to be true
    c. Tend to be true
    d. Definitely true of me

75. Occasionally I find it necessary to compromise my religious beliefs in order to protect my social and economic well-being.
    a. Definitely disagree
    b. Tend to disagree
    c. Tend to agree
    d. Definitely agree

76. I read literature about my faith (or church).
    a. Frequently
    b. Occasionally
    c. Rarely
    d. Never

77. It is important to me to spend periods of time in private religious thought and meditation.
    a. Frequently true
    b. Occasionally true
    c. Rarely true
    d. Never true

78. The primary purpose of prayer is to gain relief and protection.
    a. I definitely disagree
    b. I tend to disagree
    c. I tend to agree
    d. I definitely agree

APPENDIX C

LETTER TO PARTICIPANTS

Dear Survey Participant,

Thank you for helping our student with a research survey. As they explained, this research helps us better understand the relationship between literacy skills and religious behaviors and feelings.

The survey will take approximately thirty minutes and involves questions regarding your religious feelings and behaviors and a simple reading skill test. The results of the survey are completely anonymous. The student will not even record your name. As a result of participating in the survey you will not be contacted by Church, University or commercial interests. The survey does not have any expectations other than helping our student for thirty minutes.

The research is sponsored by Religious Education at Brigham Young University. The purpose of the research is to help us understand how to provide better religious education for our students. Your part in this project is most important as you help us broaden our perspective on what religious education involves.

Thank you for your cooperation. We are most willing to discuss the project with you. Please note the number below for future reference.

Sincerely,

Dennis A. Wright
For the research committee
378-8931

APPENDIX D

Letter to Student Researchers

Dear Student Researcher,

Thank you for helping with our research survey. This research helps us better understand the relationship between literacy skills and religious behaviors and feelings.

The survey will take approximately thirty minutes and involves questions regarding religious feelings and behaviors and a simple reading skill test. The results of the survey are completely anonymous. You do not record any names. As a result of participating in the survey the participants will not be contacted by other Church, University or commercial interests. The survey does not have any expectations other than participating for thirty minutes.

The research is sponsored by Religious Education at Brigham Young University. The purpose of the research is to help us understand how to provide better religious education for our students. Your part in this project is most important as you help us broaden our perspective on what religious education involves.

The steps in completing the survey as outlined below:

1. Introduce yourself as a student researcher for Brigham Young University. Show them your badge and letter of introduction. Determine if they are members of the Church.
2. Try to alternate male and female respondents. The first person to come to the door will usually be the one that you survey. If you need to alternate male and female, you can request another person in the home take the survey.
3. Ask them to help you with the survey. Explain that you are paid for each survey and would appreciate their help as you are earning money for your schooling.
4. Explain that the survey requires thirty minutes. It involves questions regarding religious feelings and behaviors and a brief skill test.
5. Inform them that the test is completely anonymous and they will not receive any other contact as a result of the test.
6. If the person at the door agrees to take the survey, follow these steps.

    a. select a survey and reading response sheet and place the same number on each.

    b. provide them with a numbered copy of the survey to follow and mark as you read

    c. read them the survey questions. Have them mark their answers on the numbered sheet.

    d. complete the reading assessment

    e. clip the numbered reading and survey response and place in envelope.

    f. Return each completed packet to Dennis A. Wright (275 E)

7. Complete the report of contact results sheet
8. Move on to the next house

Your salary for the project is $1200. The expectation is that you will gather survey information from 100 participants. That is $12.50 per 30 minute survey. You may complete the surveys as quickly as you desire. You are guaranteed the $1200 for 170 hours work in the event you cannot gather 100 responses. Payment per participant encourages you to be more focused and finish more quickly, thus making more money. But in recognition that the task is a difficult one, you will be paid the $1200 either for the 100 response or after working 170 hours. Full payment will be made during the month of August according to the BYU student payroll system. Work may be completed during months of August and September 1998.

You will be given a map of Springville with your streets marked. You are to make door to door contacts on the street. You should only allow one survey per family. They must be over 18 and a member of the Church. Make every attempt to have an equal number of men and women.

       Thank you for your help with this project. We are here to help you succeed. Please don't hesitate to contact us.

APPENDIX E

WRAT Score Sheet

READING SCORE SHEET
Check each mistake.

Compute score at bottom.

___ in
___ cat
___ book
___ tree
___ how
___ animal
___ even
___ spell
___ finger
___ size
___ felt
___ split
___ lame
___ stretch
___ bulk
___ abuse
___ contemporary
___ collapse
___ contagious
___ triumph
___ alcove
___ bibliography
___ horizon
___ municipal
___ unanimous
___ benign

#

___ discretionary
___ stratagem
___ seismograph
___ heresy
___ itinerary
___ usurp
___ irascible
___ pseudonym
___ oligarchy
___ covetousness
___ heinous
___ egregious
___ omniscient
___ assuage
___ disingenuous
___ terpsichorean

_____TOTAL ERRORS

 57
-Total Errors

Raw Score

APPENDIX F

Religious Orientation Scale (ROS)

Religious Orientation Scale

INQUIRY CONCERNING SOCIAL AND RELGIOUS VIEWS

The following items deal with various types of religious ideas and social opinions. We should like to find out how common they are.

Please indicate the response you prefer, or most closely agree with, <u>by writing the letter corresponding to your choice in the right margin</u>.

If none of the choices expresses exactly how you feel, then indicate the one which is closest to your own views. If no choice is possible, you may omit the item.

There are no "right" or "wrong" choices. There will be many religious people who will agree with all the possible alternative answers.

1. What religious offers me most is comfort when sorrows and misfortunes strike.
    a. I definitely disagree
    b. I tend to disagree
    c. I tend to agree
    d. I definitely agree

2. One reason for my being a church member is that such membership helps to establish a person in the community.
    a. Definitely not true
    b. Tends not to be true
    c. I tend to agree
    d. I definitely agree

3. I try hard to carry my religion over into all my other dealings in life.
    a. I definitely disagree
    b. I tend to disagree
    c. I tend to agree
    d. I definitely agree

4. The purpose of prayer is to secure a happy and peaceful life.
    a. I definitely disagree
    b. I tend to disagree
    c. I tend to agree
    d. I definitely agree

5. It doesn't matter so much what I believe so long as I lead a moral life.
   a. I definitely disagree
   b. I tend to disagree
   c. I tend to agree
   d. I definitely agree

6. Although I am a religious person I refuse to let religious considerations influence my everyday affairs.
   a. Definitely not true of me
   b. Tends not to be true
   c. Tends to be true
   d. Clearly true in my case

7. Quite often I have been keenly aware of the presence of God or the Divine Being.
   a. Definitely not true
   b. Tends not to be true
   c. Tends to be true
   d. Definitely true

8. My religious beliefs are what really lie behind my whole approach to life.
   a. This is definitely not so
   b. Probably not so
   c. Probably so
   d. Definitely so

9. The church is most important as a place to formulate good social relationships.
   a. I definitely disagree
   b. I tend to disagree
   c. I tend to agree
   d. I definitely agree

10. The prayers I say when I am alone carry as much meaning and personal emotion as those said by me during services.
    a. Almost never
    b. Sometimes
    c. Usually
    d. Almost always

11. Although I believe in my religion, I feel there are many more important things in my life.
    a. I definitely disagree
    b. I tend to disagree
    c. I tend to agree
    d. I definitely agree

12. If not prevented by unavoidable circumstances, I attend church.
    a. More than once a week.
    b. About once a week.
    c. Two or three times a month.
    c. Less than once a month.

13. I pray chiefly because I have been taught to pray.
    a. Definitely true of me
    b. Tends to be true
    c. Tends not to be true
    d. Definitely not true of me

14. If I were to join a church group I would prefer to join (1) a Bible Study group, or (2) a social fellowship.
    a. I would prefer to join (1)
    b. I probably would prefer (1)
    c. I probably would prefer (2)
    d. I would prefer to join (2)

15. Religion is especially important to me because it answers many questions about the meaning of life.
    a. Definitely disagree
    b. Tend to disagree
    c. Tend to agree
    d. Definitely agree

16. A primary reason for my interest in religion is that my church is a congenial social activity.
    a. Definitely not true of me
    b. Tends not be true
    c. Tends to be true
    d. Definitely true of me

17. Occasionally I find it necessary to compromise my religious beliefs in order to protect my social and economic well-being.
    a. Definitely disagree
    b. Tend to disagree
    c. Tend to agree
    d. Definitely agree

18. I read literature about my faith (or church).
    a. Frequently
    b. Occasionally
    c. Rarely
    d. Never

19. It is important to me to spend periods of time in private religious thought and meditation.
    a. Frequently true
    b. Occasionally true
    c. Rarely true
    d. Never true

20. The purpose of prayer is to gain relief and protection.
    a. I definitely disagree
    b. I tend to disagree
    c. I tend to agree
    d. I definitely agree