THE EFFECTS OF RELIGION ON MENTAL HEALTH:
IMPLICATIONS FOR SEVENTH-DAY ADVENTISTS

By
Cindee M. Bailey, Ph.D., M.P.H., A.C. S.W.
Associate Professor
Department of Sociology and Social Work
Walla Walla College
College Place, Washington, USA

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Silver Spring, MD 20904 USA
Introduction

Christianity has been the basis for an abundance of research done under the broader concept of religion; and religion has shown to have both positive and negative effects on mental health. Although psychotherapists have often been dubious about the effects of religion on mental health, there is sufficient evidence to suggest that religiousness has a positive effect on overall mental health and well-being.

Seventh-day Adventists (SDA) as an evangelical denomination has few studies to assess how its focus effects different aspects of mental health. Even less, if any, work has looked at how religion impacts those in the mental health field who are SDA. This study proposes to assess associations between religious orientation, denominational loyalty, religious commitment and purpose in life in a social work program made up of both SDA's and non-SDA's. Trends in religious research

A recent review of the empirical literature looked at trends in the data on religious commitment and mental issues, finding some associations with religiousness and psychopathology, but much more with religiousness and mental health (Gartner, Larson, & Allen, 1991). Although the literature has a predominance of positive outcomes from religiousness, there are some areas in which there has been mixed findings. In an often-cited meta-analysis by Bergin (1983, as cited in Gartner, Larson, & Allen, 1991), 30% of the findings showed no relationship with religiousness and mental health, 47% showed a positive effect, and 23% of the studies showed a negative association.

To define religious commitment Gartner, Larson and Allen (1991) categorized religiousness or religious commitment into four areas: religious activities which measure participation and frequency in church attendance; religiosity measures perceptions on the value of religious experience; orthodoxy measures beliefs in established religious doctrine; and intrinsic (I) vs. extrinsic (E) which compares one religious type to another.

After categorizing the measures of religiousness, Gartner found an additional four trends based on that review of over 200 articles. The first trend of Gartner's (Gartner, Larson, & Allen, 1991) was that most of the studies, which linked religiousness with psychopathology, used questionnaires, which attempted to appraise theoretical constructs of personality through "paper and-pen" tests. Gartner called these "soft variables"; and considered these measures to be of limited validity and reliability. Such "soft measures" showed a link between religious commitment and psychopathology in the mental health aspects of authoritarianism, suggestibility, dependence, dogmatism, tolerance of ambiguity, self-actualization, temporal lobe epilepsy and rigidity. In comparison, many studies associating religiousness and mental health used what Gartner (Gartner, Larson, & Allen, 1991) termed, "hard variables" - those methods which use unambiguous behavioral measures by observing and testing "real life".

The second trend Gartner found was that lower levels of religiousness were more often linked with disorders of impulse "under-control", such as, anti-social behavior, drug abuse, or suicide; while higher levels of religiousness were linked with "over-control" disorders, such as rigidity, authoritarianism, or dogmatism.
Gartner's third trend was that operationalizing religious commitment through behavioral measures of religious activities, such as church attendance, were stronger in identifying mental health than were measures testing attitudes of religiosity. In other words, measuring real behaviors was a more valid means of assessing positive mental health than were "paper-and-pencil" tests.

The final trend of Gartner's was that operationalizing religiosity by means of intrinsic and extrinsic definitions clarified previously inconsistent findings. Succinctly, "extrinsically motivated (persons) use (their) religion, whereas the intrinsically motivated live (their) religion" (Allport & Ross, 1967, p. 434). Intrinsic religiousness in not correlated with negative aspects of mental health, and mostly correlated with positive aspects of mental health. Extrinsic religiousness is more often associated with negative characteristics of personality (Begin, Masters, & Richards, 1987).

**Positive outcomes of religion and health**

Gartner, Larson and Allen (1991) reviewed the literature and found numerous variables, which had positive correlations with religiousness. These will be followed and discussed.

Of physical health, religiousness was related to decreased smoking and alcohol consumption, as well as positively effecting heart disease and blood pressure. A confound was that, at least in the elderly, physical health supported religious activities, more than the other way around. Religious commitment and participation seemed to effect longevity, as well, especially in men.

Suicide rates were consistently found to have a negative correlation with religiosity. Suicide ideology was also lowered, as well as, more disapproving attitudes towards suicidal behavior. An interesting finding was that church attendance was a major predictor in suicide prevention, even more than employment.

There is a negative correlation between drug use and religiousness. Church attendance was found to be more of an indicator of drug abstinence than parents' religiosity or feelings about religion.

Most research findings support that religious affiliation, especially participation, lowers the rate of alcohol consumption. The best defense against overuse of alcohol was modeling disciplined drinking habits by the religion. This was found because different denominations had different rates of alcoholism (Jews the lowest, Catholics the highest, and Protestants somewhere in-between), and that even in conservative Protestant homes there were found some higher rates of alcoholism, so some concluded that the religious tradition had more impact than the home.

**Positive outcomes of religion and mental health**

Continuing with Gartner's review, delinquency showed no relationship with religion and religious beliefs, or church attendance with crime rates in the community. Yet, there was a negative correlation with both religious commitment and church participation.

Church attendance also predicts a low divorce rate. There is also a reported higher level of marital satisfaction. Enduring marriages report that religion is the most essential predictor for a happy marriage. There is no research available on those who stay in an unhappy marriage due to their belief that divorce is unacceptable.
Religious commitment has a positive correlation with psychological well-being. Well-being has been studied with many differing variables, from meaning, life satisfaction and purpose. These will be discussed in more depth later in this paper. Further there is a negative correlation between distress and religious participation.

**Ambiguous outcomes of religion and mental health**

Gartner's findings demonstrated mixed result in regards to anxiety. Some research showed greater anxiety with religiosity, while other research showed less anxiety. Some people were less anxious and showed less somatic symptoms with public religious activities, yet more so with private devotions. Intrinsic religion was associated with lower anxiety, while higher levels were found with extrinsic religion. There was also mixed results on death anxiety and religiosity.

Of the controversial findings on self-esteem, one study found that loving portrayals of God were positively correlated with higher self-esteem, and negatively correlated with God portrayed as vindictive and punitive. The mixed results may be from confusion between humans as sinful, as held by conservative Christians, which might result in a misdefinition of what self-esteem is.

The literature on sexual disorders showed that more male clients in sex therapy were from religious homes. A replication failed to find this. Some research has looked at denomination and sex, but little research has included the variable religion or religious commitment.

Several studies have found a weak positive correlation with education, others found a negative correlation. "It seems, therefore, that religious participation is positively associated with education, but religious conservatism, possibly because of its association with lower social class, is negatively associated with measures of intellectual achievement" (p. 13). There seems to be some consensus on a negative correlation between intelligence and religious conservatism; and possibly a positive correlation between intelligence and church participation.

Early findings found that there was more prejudice from religious people. More recent studies have suggested a curvilinear relationship between prejudice and church attendance; so that those who attended church often and those who never attended were less prejudiced than those who attended infrequently. Intrinsic religiosity was negatively correlated with prejudice, as was religious commitment. Extrinsic religiosity has been found to have a positive correlation with prejudice.

**Religion and psychopathology**

Overall, Gartner's review seems to support the positive relationship between religiosity and authoritarianism. There does not seem to be a general relationship between these variables. Conservatism is related to authoritarianism, thus it might not be religious commitment that effects this variable, but orthodoxy.

Closely related to authoritarianism is the concept of dogmatism, which corresponds with rigidity and close-mindedness. There was a positive correlation with orthodoxy and dogmatism. Further, people who have little contact outside one's own religion are more likely to be dogmatic. There is also a correlation with religiosity and inability to tolerate ambiguity. Those people were also found to be less autonomous.
A decrease in autonomy may also be defined as dependent; and there is a clear correlation between being suggestible (suggestibility) by another and religiosity. Diverse measures all found similar data: that religious people tend to be more submissive and dependent. On the other hand, the variable of religious commitment showed less dependency.

The variable self-actualization has consistency been found to be negatively correlated with religious commitment. All the literature supporting this finding used a scale, which penalized people for answering in the positive about anything religious, so discretion should be used in interpreting this data.

A final negative correlation with religiosity was temporal lobe epilepsy, which in some studies was not differentiated from other seizure disorders. But findings that religious experience was crucially connected with temporal lobe activity, suggest that religious obsessions, scrupulosity and guilt, can be found in patients with temporal lobe epilepsy. Further, patients with this kind of epilepsy have reported more religious feelings than controls from psychiatric or normal populations.

**Intrinsic and extrinsic religiosity**

Allport's Religious Orientation Scale (ROS) has provided a coherent basis from which to better understand religion; and has provided the greatest impact on the empirical literature (Donahue, 1985). Allport's concepts of intrinsic religiosity can be defined as a religion, which is "a meaning-endowing framework in terms of which all of life is understood" (Donahue, 1985, p. 400). Allport found intrinsic religiosity to be associated with being unprejudiced, tolerant, mature, and integrative, as well as it being unifying, and associated with church attendance and mental health. Extrinsic religiosity "is the religion of comfort and social convention, a self-serving, instrumental approach shaped to suit oneself" (Donahue, 1985, p. 400). It has been associated with being compartmentalized, prejudiced, exclusionary, immature, dependent, utilitarian, and defensive and with infrequent church attendance.

Allport (1950, as cited in Wicklin, 1990) originally conceptualized I and E to be opposites on a linear continuum; but it has since been shown to be two separate variables. He later changed it to a fourfold typology which included people who were high on both scales ("indiscriminate") and those who were low on both ("nonreligious") The 20 item ROS, has been revised by Gorsuch and his colleagues to have 14 questions and three scales: intrinsic, extrinsic personal and extrinsic social; and is more universal in its language (Gorsuch & McPherson, 1989).

A study done at Brigham Young University (Bergin, Masters, & Richards, 1987) found students to be positively correlated with most healthy attributes on a personality inventory. These included items such as sociability, sense of well-being, responsibility, self-control, tolerance and intellectual efficiency. Intrinsicness was negatively correlated with unhealthy attributes, such as anxiety and irrational beliefs. Extrinsicness in this population was rare, but did show positive relationships with anxiety and self-acceptance (although this was a weak association); and negative correlations with items such as capacity for status, well-being, tolerance, good impression, self-control and intellectual efficiency.

On the well-being scale of the same study (Bergin, Masters, & Richards, 1985), I was associated with diminishment of worries, respite from self-doubt, and a happy disposition. E scores were associated with the opposite findings.
Tolerance and prejudice have respectively been associated with intrinsicness and extrinsicness. Prejudice, as reviewed by Donahue (1985) was found to be mostly uncorrelated with the intrinsic variable across measures, while it is positively related to extrinsicness. Antiblack measures included racial conservatism, anti-Negro, antiblack and symbolic racism scales. Prejudice against Jews was also studied in quantity, with similar findings towards both groups: no or a negative relationship with I, and a positive relationship with E.

As with prejudice, Rokeach's (1960) dogmatism scale found little correlational strength in intrinsicness. This might possibly be due to the subscales of projectivity, aggression, cynicism, good versus bad people, conventionalism, stereotypy and superstition, which intrinsicness only correlated with the latter three variables, rather than the whole scale of dogmatism. In contrast, extrinsicness was positively correlated with dogmatism (Donahue, 1985).

Also in Donahue's review (1985) it was found that research results assessing fear of death and religious orientation were mixed. It would be assumed that because extrinsicness can be a "defense against anxiety" and intrinsicness a matter of health (Allport, 1963, as cited in Donahue, 1985) that I would be negatively correlated and E positively associated with fear of death. Most findings were in these directions except for a negative correlation between intrinsicness and "afterlife of reward"; which might be explained by the strong negative relationship between intrinsicness and religious orthodoxy (Donahue, 1985).

Following Donahue's review, other variables showed similar patterns of mentally healthy trends with intrinsicness, such as a relationship with internal locus of control, and purpose of life. The pattern of extrinsicness as less desirable continued with a positive correlation with perceived powerlessness; but shows no association with intrinsicness. Further, there was a negative correlation between intrinsicness and feminism; and evidence that females score higher on intrinsicness than do males. There were no sex differences in extrinsic scores.

Still more findings described a belief in grace and an intrinsic religiousness that were related to less depression, manipulativeness, hopelessness, and individualism; and also related to more belief in authority, and emotional empathy (Wicklin, 1990). In contrast, extrinsicness and beliefs about guilt were correlated with "less adequate self-functioning" (Wicklin, 1990, p. 29).

These patterns were not always found to be consistent. Wicklin, (1990) discussed an intrinsic religiosity as having traits of "differential conventionalism" and "close-mindedness".

This review of I/E religiosity demonstrates a "moderator variable" in studying how religious types are associated with mental adjustment. Both the I and the E add to understanding about the complexity of religious orientation, rather than seeing only conventional or elementary concepts of conviction and commitment (Wicklin, 1990). The use of this test in this study will further assess the effects of religious types on mental health in a particular denomination.

**Religion and well-being**

Well-being can be defined in many ways and may be found in many ways. Religion appears to be one important way of having a sense of well-being. There may be three means to which mental health and well-being could be affected by religiousness (Pollner, 1989, as cited in Chamberlain & Zita, 1992):

First, religion could provide a resource for explaining and resolving problematic situations. Second, religion may operate to enhance a sense of self as empowered or efficacious.
Third, religion may provide the basis for a sense of meaning, direction and personal identity, and invest potentially alienating events with meaning (p. 139).

Additionally, Peterson and Roy (1985, as cited in Chamberlain, & Zita, 1992) discussed that religion offers an "interpretive scheme" that people may use to make sense of life. Religion them may not be the direct cause of well-being, but may indirectly influence well-being through offering a direction and a framework for life meaning (Chamberlain, & Zita, 1992).

Religion may be only one of many ways in which meaning is assessed. Meaning may come from God and a religious model, or from an existential, humanistic or self-transcendent model (Battista & Almond, 1973, as cited in Chamberlain, & Zita, 1992).

There is evidence that a religious model offers purpose and meaning, giving an effect of well-being. Intrinsic religiousness is linked with a sense of life meaning (Crandall, & Rasmussen, 1975). In a review by Chamberlain and Zita (1992) people with higher religious commitment were found to have a greater sense of meaning than less committed people. Also, for people experiencing religious conversion, and for those who were conservative versus not religious, there was more meaning to life. Further, having strong religious beliefs and a sense of self-transcendence were correlated with a sense of meaning.

Although the construct of meaning may be vague, there seems to be evidence supporting that in a variety of its definitions, there is a relationship between itself, mental health and wellbeing. More specifically if well-being is defined as life satisfaction, then religion continues to play an important role. Religious people state having greater satisfaction in life and also more happiness (Poloma, & Pendleton, 1990, as cited in Myers, & Diener, 1995). People high in spiritual commitment more often agreed that religious faith was the most valuable aspect of their existence; and they considered themselves "very happy" 50% more often than less spiritual people (Myers, & Diener, 1990).

Among adults and elderly people, there was found to be a greater sense of well-being when they were religiously committed (Gartner, Larson, & Allen, 1991). Furthermore, religion was found to be the more valuable model from which to glean meaning as people age (Teker, & Guppy, as cited in Chamberlain, & Zita, 1991). In contrast, psychological distress was greater in those who did not participate in religion.

Another dimension to well-being is how to cope. Studies showed that faith in recently widowed women offered them a greater sense of joy in life than in those having no faith (Sugel, & Kuykendall, 1990, as cited in Myers, & Diener, 1995). Also, mothers of disabled children who had a religious faith were less subject to depression than those who did not have faith (Friedrich, Cohen, & Wiltburner, 1988, as cited in Myers, & Diener, 1995). A strong faith was also shown to allow people to hold onto happiness after unemployment, serious illness, divorce, or bereavement (Ellison, 1991 McIntosh, Silver, & Wortman, 1993, as cited in Myers, & Diener, 1995).

Myers and Diener (1995) proposed a need for discovering in more detail why well-being is correlated to religiousness.

What explains these positive links between faith and well-being? Is it the supportive close relationships often enjoyed by people who are active in local congregations (of which there are 258,000 in the United States)? Is it the sense of meaning and purpose that many people derive from their faith? Is it a religious worldview that offers answers to life events? Is it the hope that faith affords when people suffer...? (p. 16).
Whatever the reason, and whatever the conceptual construct meaning and well-being are given, there is sufficient evidence to support religion as a crucial and valuable attribute in mental health, and the attainment of well-being.

**Purpose in life**

As meaning is an important part of well-being, so is the more specific construct, purpose in life. Viktor Frankl (1969), early on, discussed the connection between well-being and purpose in the ideas of "existential frustration" and "noogenetic neurosis". These have to do with a diminished sense of meaningfulness. He thought that if people could find meaning in their lives, they would have purpose.

Crandall and Rasmussen (1975) found that people who had high scores on a Purpose-in-Life (PIL) scale were more likely than low scorers to report having an "enjoyable, leisurely life", a "stimulating, active life", a "comfortable, prosperous life", and believed in being saved with an "eternal life". The subjects with a low PIL score showed a tendency towards hedonism. This seems to support Frankl's ideas in the sense that purpose will lead to service and an orientation towards others. Frankl (as cited in Crandall, & Rasmussen, 1975) suggested that people move directly towards happiness and pleasure would only find an "existential vacuum". He continued that selfish effort towards fulfillment was antithetical to attaining purpose and meaning.

The importance of salvation in the high PIL scorers supports the concept that religious orientation is related to meaning in life. It was further found that an intrinsic religious orientation was positively correlated with purpose in life. There was no correlation between PIL and extrinsicness (Crandall, & Rasmussen, 1975). Therefore, "religious values apparently contribute to increased meaningfulness of life among a normal range of lay people (p. 485).

**Application**

It has been shown that religiousness can be related to psychopathology, but is more often a benefit to mental health. Well-being through meaning, and having a purpose in life can be found through the framework of religion.

In assessing intrinsic and extrinsic religiousness, areas of health, and areas in need of health and growth can be found. Then, research on religious orientation can assist educators and therapists in their own lives, on the micro level of dealing with students and clients, and, also, show any macro level, denominational areas of strength, or needs for church improvement towards religious commitment.

The purpose of this proposal is to ascertain if a religious population of Seventh-day Adventist students would be high in intrinsincness and in purpose in life. It was expected that due to the focus on service and ministry SDA students would be high PIL scorers. Further correlations between religious orientation, denominational loyalty, purpose in life, and religious commitment were assessed.

As SDA's desire to leave a Christian legacy behind them though Spirit-moving service, this study hopes to find that religion enhances mental health in a denomination. This psychological adjustment may lead to a pride in people's religious commitment and a passion to share their faith through these achievements.
Method

Participants

This pilot study involved 29 masters of social work students in a two year and advanced standing program at Walla Walla College during summer quarter 1997. Some data sets included only 28, as one student did not fill out her survey completely. There were 5 males, and 24 females, with a mean age of 32 years. Eight SDA's completed the survey, and 21 non-SDA's.

Materials

There were four instruments given to each student to complete.

I. Religious Orientation was measured using Gorsuch and McPherson's (1989) Intrinsic/Extrinsic Measure: I/E-Revised. It has 14 items with a Likert-type scale of 1) "1 strongly agree" to 5) "1 strongly disagree". Dividing the items into three subscales of intrinsic, extrinsic-social, and extrinsic-personal scores it. For the purpose of this study, extrinsic-social and extrinsic-personal were also combined into a total extrinsic score. The lower the score the more that particular variable is demonstrated.

II. The second measure used was Denominational Loyalty (Kija, 1993). It included three multiple-choice questions asking how devoted a person is to his/her denomination. Each question was scored as one for not loyal, to 5 for very loyal. These were then totaled with the higher scores meaning higher loyalty to one's denomination.

III. The third instrument that was intercorrelated was Crumbagh and Maholick's (1969) Purpose-in-Life test. Only part of this was used, and that containing 20 Likert-type attitude statements. Twenty to 140 was the range of possible scores, with higher scores showing higher purpose.

IV. The final measure was a three-item survey of religious commitment. This asked Ss to state how many worship services they attend. Options are given. Two other questions are on a 9-point scale asking how religious and spiritual they perceive themselves to be. This abbreviated person of religious commitment is from Gorsuch and McFarland (1972).

Demographics included questions on sex, age, religion, and length of time in SDA schools.

Design and Procedure

This correlational and group comparison design utilized available social work graduate students at Walla Walla College during summer quarter. They were asked to fill out the combined survey. A procedure was employed to maintain anonymity while maintaining identities, for when further data will be collected on a larger sample, and a second "mailing" is required. The above-mentioned variables were intercorrelated; and these were the dependent variables with SDA's compared with non-SDA's as the independent variable.

Results

All statistics were done on Systat 5 statistical package. The Pearson correlation was used to analyze the correlations between all the continuous variables. (See Table 1.) These were: age; religious orientation, which was measured using four variables of intrinsicness, extrinsic-social, extrinsic-personal, and extrinsic-total; religious commitment was measured with three variables which were amount of services attended, importance of spirituality, and importance of religion; denominational loyalty; purpose in life; and SDA education which looked at how many years at SDA schools one attended.
A t-test was used to analyze differences between SDA's and non-SDA's on all the applicable variables. (See Table B). There was not enough of any one religious group to categorize each religion separately.

**Religious orientation**

Remembering that the religious orientation scale was scored so that the lower the score the stronger that variables was, negative correlations actually show a positive association.

The findings which were significant showed that the more intrinsic people were in their religious orientation the greater their purpose in life ($r(28)=-0.376, p=0.05$); the more religion was deemed important ($r(28)=-0.711, p=0.000$); the more spiritual was reported to be important ($r(28)=-0.370, p=0.05$); and the more church-related services they reported attending ($r(28)=-0.615, p=0.001$). Also, as intrinsicness grew stronger, so did denominational loyalty in a near significant correlation ($r(28)=-0.366, p=0.060$).

There were no significant correlations with intrinsicness, and age, amount of SDA education, or extrinsicness.

The total extrinsic score had no clear significant correlations. It neared significance when the more services people attended the more extrinsic they were ($r(26)=0.486, p=0.01$). There were no significant correlations with SDA education, denominational loyalty, extrinsicness, or importance of religion or spirituality.

**Purpose in Life**

Purpose in life, as already mentioned, increased along with intrinsicness. It was also positively correlated with the amount of church services attended ($r(28)=0.486, p=0.01$). There were no significant correlations with SDA education, denominational loyalty, extrinsicness, or importance of religion or spirituality.

Table 1

<table>
<thead>
<tr>
<th>Selected Intercorrelations Between Various Measures</th>
<th>Age</th>
<th>SDA</th>
<th>Demol.</th>
<th>Intrinsic</th>
<th>Church</th>
<th>Religiosity</th>
<th>Spiritual</th>
<th>PIL</th>
<th>Extrinsic</th>
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<tbody>
<tr>
<td>Age</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>SDA</td>
<td>-0.254</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loyalty</td>
<td>-0.044</td>
<td>0.223</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrinsic</td>
<td>0.089</td>
<td>-0.321</td>
<td>-0.366</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Attend</td>
<td>-0.128</td>
<td>0.252</td>
<td>0.225</td>
<td>-0.635</td>
<td>1.000</td>
<td></td>
<td></td>
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<tr>
<td>Belief</td>
<td>-0.203</td>
<td>0.103</td>
<td>0.430</td>
<td>-0.711</td>
<td>0.696</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spirituality</td>
<td>0.301</td>
<td>0.017</td>
<td>0.317</td>
<td>-0.770</td>
<td>0.591</td>
<td>0.141</td>
<td>1.000</td>
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<td></td>
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<tr>
<td>PIL</td>
<td>-0.094</td>
<td>0.091</td>
<td>0.058</td>
<td>-0.367</td>
<td>0.485</td>
<td>0.295</td>
<td>-0.041</td>
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<tr>
<td>Extrinsic</td>
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<td>0.026</td>
<td>-0.245</td>
<td>0.261</td>
<td>-0.367</td>
<td>-0.266</td>
<td>-0.055</td>
<td>-0.158</td>
<td>1.000</td>
</tr>
</tbody>
</table>

**Note.**

- $a$ Nearing Significance
- $b$ $p \leq .05$
- $c$ $p \leq .01$
- $d$ $p \leq .001$
Denominational loyalty

The last main variable assessed for intercorrelations was denominational loyalty. As already noted, it was positively correlated with intrinsicness with a near significant correlation. It was also positively correlated, at a significant level, with how important one considers religion to be ($r(28)=0.430, p=0.025$).

Incidental correlations

Two divers correlations were found. These included a positive correlation between reports of religious importance and spiritual importance ($r(28)=0.413, p=0.03$); and as importance of religion increased, the amount of church services attended increased ($r(28)=0.696, p=0.000$).

SDA's vs. Non-SDA's

Seventh-day Adventists compared with all other religions together (including atheists) showed no significant differences on any variable as assessed by t-tests. (See Table 2.) Only one variable near a significant difference, and this was that SDA's attended church services more often than non-SDA's ($t(27)=1.802, p=0.08$).

Although the following variables were not significant in probability, they do show a trend Seventh-day Adventists scored as more intrinsic than non-SDA's, thus SDA's had a lower mean (M=16.125, and M=19.550, respectively). The total extrinsic score was lower (meaning more extrinsic) for non-SDA's (M=18.947) compared with SDA's (M=19.375). Purpose in life was scored higher by SDA's (M=116.75) than by non-SDA's (M=114.43). Denominational loyalty was also higher for SDA's (M=13.0) than for non-SDA's (M=10.55). Lastly, SDA's reported religion to be more important (M=6.625) than did non-SDA's (M=5.905).

Table 2

<table>
<thead>
<tr>
<th>Measurements</th>
<th>SDAs’ (N=8)</th>
<th>NonSDAs’ (N=21)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services attended</td>
<td>3.259</td>
<td>2.238</td>
</tr>
<tr>
<td>Importance of religion</td>
<td>6.625</td>
<td>5.905</td>
</tr>
<tr>
<td>Importance spirituality</td>
<td>7.875</td>
<td>7.714</td>
</tr>
<tr>
<td>Denominational loyalty</td>
<td>13.000</td>
<td>10.550</td>
</tr>
<tr>
<td>Intrinsicness</td>
<td>16.125</td>
<td>19.550</td>
</tr>
<tr>
<td>Extrinsicness</td>
<td>19.375</td>
<td>18.947</td>
</tr>
<tr>
<td>Purpose in life</td>
<td>116.750</td>
<td>114.429</td>
</tr>
</tbody>
</table>

Note
- *Lower scores indicate the more that variable is demonstrated*
- $^a N=20$
- $^b N=19$

Discussion

Religious orientation

The intercorrelations between various measures of religious commitment, years of SDA education, and purpose in life showed some anticipated results. It is evident that intrinsic religiousness – living one's religion – remains associated with positive outcomes, such as a greater sense of purpose in life. Other positive connections with intrinsicness were feeling loyal to one's denomination, regularly attending church, and reporting a commitment to both religion and spirituality. Although correlations can show no cause and effect, it is interesting to speculate that intrinsic religiousness as a framework for meaning (Donahue, 1985) may come from attending church habitually, which then leads to loyalty to
one's denomination. If this were so, it would follow that when a denomination can meet the transcendent needs of its parishioners, there should be minimal attrition. Equally, when a church offers meaning to a community, there should be church growth.

Also related to intrinsicness were the findings that as commitment to religion and to spirituality grew, the more intrinsic the sample became. This, along with church attendance, seem to promote the assumption that mental health may be enhanced through the corporate body of Christ, and fellowship with a community of believers.

The amount of years attending SDA schools did not affect levels of intrinsic religiousness. The validity of this finding is questionable due to the small number of SDA's who responded to the survey of whom even less consistently attended Adventist schools. This question of validity may also explain why there were no clear differences between SDA's and non-SDA's on any of the variables. A larger sample would offer a fairer representation. Also, including categories of specific religions rather than grouping atheists in with born-again Christians could present clearer differences between different religions and the lifestyles/beliefs they offer.

Intrinsicness was not negatively correlated with extrinsicness. This supports the concept that they are two distinct variables, rather than opposite ends of a continuum.

It is interesting that age did not correlate with intrinsicness. This infers that finding meaning and purpose through religion does not require the experiences or insights of age, but is available to anyone open to a pervasive worldview derived through a religious life.

Extrinsic religiousness had no significant correlations with other variables, but did near a significant correlation with church attendance. Although intrinsicness and church attendance was very significant, attending church approached significance with extrinsicness. It appears that attending church, which was not measured by participating other than being present, assists one in both gaining more meaning from religion (intrinsicness), and meeting more personal and social needs (extrinsicness). Whether one lives one's religion or uses one's religion, these findings suggest that going to church regularly is an important means in attaining one's goals.

There was no correlation between importance of religion and extrinsicness. This implies that although extrinsicness is a form of religiousness, it is defined differently than a general sense of how important religion is.

**Purpose in life**

Purpose in life was found to correlate with intrinsicness. As one finds meaning through religion, it appears to translate into a general application of raison d'être in all of life. Also the finding that the amount of church attendance increased with purpose in life focuses on how fellowship may offer a sense of community; which may lend itself to a security in goal attainment.

Of equal interest are the variables, which showed no correlation and thus cannot be associated with attaining meaning and thus, purpose in life. These were: amount of SDA education, denominational loyalty, importance of religion or spirituality, and extrinsicness. Again, the small sample of SDA's in the study may limit the validity on whether SDA education is or is not related to purpose in life. It would be expedient to study further how SDA education compares with regular church attendance in gaining both intrinsicness and purpose in life. Is it the family's socialization, the home life, which assist a person in attaining meaning in religion and in life? Is family support of the tradition of church attendance more vital
in purpose in life than where a person went to school? There will be no further implications discussed for this until a larger sample is assessed.

Neither loyalty to a particular denomination nor considering religion as important or valuable contributed to purpose in life. Reporting spirituality as important also did not contribute towards a sense of purpose; yet intrinsic religiousness did. Maybe these non-correlating variables represent a more external form of religiousness, which do not relate to the internality demonstrated through the religious orientation variable. Possibly measuring locus of control with religious commitment and religiosity would be helpful in further determining relationships between these variables.

Extrinsicness as using one's religion to meet one's needs did not lead to well-being through purpose in life. This interesting because it would be desirable if religiousness, no matter at what level, would offer guidance and direction in life. From these findings it appears that using one's religion offer no hope in attaining purpose; while living one's religion does offer that hope.

The question that arises is how to move from extrinsicness to intrinsicness. How can a church, a pastor, or a congregation help its members to achieve a healthier level of religiousness? Which leads to which? Does one find purpose in life, which then lends itself towards intrinsic religiousness; or it the other way around? Is the aim, then, to help people find purpose to gain intrinsicness; or to live their religion to find purpose? Since they are correlated, it may be that they work together, so efforts towards this mental health could possibly start at either place. An experimental design, though methodologically difficult, would prove better to answer these questions.

Both intrinsicness and purpose in life seem founded in having and maintaining a personal guidance system, which allows one to see life through "a bigger picture". When a satisfactory system is in place, then possibly that is when one can find meaning in the little activities, happenings and ideas of life, as well as in the overwhelming, tragic and joyous ones.

**Church attendance**

Attending church seems to be a valuable aspect of religious commitment, as seen through correlations with intrinsicness, extrinsicness, and importance of religion. Attending church also correlated with purpose in life. Perhaps attending church services assists in developing a guidance system, or framework, from which goals may be set and aimed towards, and from which meaning can be attained. Getting people to church may be an initial and crucial step towards the correlates of mental health.

**SDA's and non-SDA's**

Although SDA's did not differ from non-SDA's on any variable, they did score higher in intrinsicness, purpose in life, denominational loyalty, and in reporting that religion was important to them. Seventh-day Adventists approached a significant difference from non-SDA's by attending church more often; and as previously stated, church attendance seems to be a common variable for many positive outcomes. Seventh-day Adventists, though not statistically different in this sample, proved themselves as having the basis for good mental health because of their religion. Seventh-day Adventists scored high in
purpose in life and in intrinsicness, both of which show that Adventism offers meaning to its members. This is confirmed, as well, by SDA's having a higher score on denominational loyalty.

**Conclusion**

It is a hope that through this study mental health professionals may better understand the function of religion in achieving and maintaining mental health, specifically for themselves, and indirectly for their clients. It is also desired that SDA's, as well as other religious denominations, may find pride in their beliefs, which have so often been considered psychopathological by this profession.

This research supported previous literature's findings that intrinsic religiousness is related to many positive outcomes (Bergin, Masters, & Richards, 1987), including purpose in life (Crandall, & Rasmussen, 1975). Also, the more church services people attended, the more there was a sense of loyalty to one's denomination, an intrinsic religiousness, and a sense of purpose in life. Seventh-day Adventists were stronger than non-SDA's on all the positive variables; yet, a larger sample needs to be attained for greater validity. It appears that mental health professionals who live their religion and who attend church regularly have a greater chance of finding purpose in life than do those who do not.

This study offers evidence that Christians, especially Seventh-day Adventists, have a framework of meaning from their religion, which contributes to good mental health. This research gives Christians scientific reasons for having confidence and joy in their religion, and a passion to share this Good News.

**References**


