Internal Versus External Locus of Control & Religious Preference

Thomas McGloshen Jr.
Western Kentucky University
McGloshen,

Thomas H., Jr.

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AND

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Thomas H. McGloshen, Jr.

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AND

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# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>iii</td>
</tr>
<tr>
<td>List of Illustrations</td>
<td>v</td>
</tr>
<tr>
<td>Abstract</td>
<td>vi</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Review of Literature</td>
<td>3</td>
</tr>
<tr>
<td>Statement of Problem</td>
<td>19</td>
</tr>
<tr>
<td>Method of Study</td>
<td>20</td>
</tr>
<tr>
<td>Results</td>
<td>27</td>
</tr>
<tr>
<td>Discussion</td>
<td>30</td>
</tr>
<tr>
<td>References</td>
<td>35</td>
</tr>
<tr>
<td>Appendix A. Rotter's Internal-External Locus of Control Scale</td>
<td>41</td>
</tr>
<tr>
<td>Appendix B. Church Sorting Questionnaire</td>
<td>46</td>
</tr>
<tr>
<td>Appendix C. Results of Church Sorting Questionnaire</td>
<td>47</td>
</tr>
<tr>
<td>Appendix D. Church Ranking Questionnaire</td>
<td>48</td>
</tr>
<tr>
<td>Appendix E. Instructions for Internal-External Control Scale</td>
<td>50</td>
</tr>
<tr>
<td>Appendix F. Personal Data Sheet</td>
<td>52</td>
</tr>
</tbody>
</table>
List of Illustrations

Table 1. Results of Church Ranking Questionnaire. . . . . . . . . . . . . 23
Table 2. Treatment and Adjusted Means of I-E Scores . . . . . . . . . . . . 28
Figure 1. I-E Scores and Churches' Rank Order . . . . . . . . . . . . . . . . . 29
Members of adult Sunday School classes from seven churches in Bowling Green, Kentucky, were administered Rotter's Internal-External Locus of Control Scale. The seven churches were also ranked by ministers on a continuum of doctrinal closedness-openness. The hypothesis stated that there would be a difference among churches according to mean internal-external control scores. It was also hypothesized that the members of the more doctrinally closed churches would tend to score as more externally controlled. Analysis of covariance indicated that the churches did differ significantly on the internal-external control scale but the doctrinally closed churches tended to be more internal than the doctrinally open churches.
Introduction

In recent years, the concept of locus of control of reinforcement has been explored to determine the kinds of behaviors which are characteristic of individuals who are internally controlled, i.e., individuals who see reinforcement as resulting from their own behavior, and those who are externally controlled and see their successes and failures as resulting from chance, fate, or other sources outside and beyond their own control. Research has found that internal-external locus of control (I-E) is related to such factors as conformity (Crowne & Liverant, 1963), risk taking (Phares, 1957), social activism (Gore & Rotter, 1963; Strickland, 1965), and even to the decision to quit smoking (James, Woodruff, & Werner, 1965). Membership in racial (Lefcourt & Ladwig, 1965), socio-economic (Franklin, 1963), and ethnic groups (Graves, 1961) also seems to be related to the locus of control variable.

Other entirely separate lines of research have dealt with variables which seem to influence an individual's choice of religious denomination or to predict behavior relating to religion. Such variables as self-concept (Brown & Ferguson, 1967), personal adjustment (Warner & Kawamura, 1967; Rice, 1971), socioeconomic level (Goode, 1966), and powerlessness (Seeman, 1959, 1963) have been studied. In addition, certain characteristics of churches, ministers, and religions have been examined to determine whether they influence an individual's choice of religion. Such factors as styles of authority (Beech, 1970)
intrinsic and extrinsic religious styles (Strickland & Shaffer, 1971),
and consensual and committed religion (Allen & Spilka, 1967) have been studied.

Very little research has been done attempting to relate aspects of religious behavior to the internal-external locus of control variable, although it seems reasonable that this factor is important. It might be hypothesized that the person who is externally controlled, i.e., conforming, inactive with regard to social issues, and less striving in his orientation to life, would choose a church which would complement those characteristics. The internally-controlled individual, likewise, who is less conforming, more active concerning social issues, and resistant to attempts by others to shape his behavior would choose a church which would allow him more opportunity for self-expression. The present research was an attempt to determine whether an individual's choice of a particular religious group is related to his score on a measure of internal-external locus of control of reinforcement.
Review of Literature

The literature review will be presented in three parts: internal-external locus of control, pertinent research into religion and personality, and pertinent research into personality and religious preference.

Internal-External Locus of Control

In Rotter's social learning theory (1954), any behavior (whether overt or covert in nature) has the potential of recurring in relation to a single reinforcement or set of reinforcements. The degree to which that reinforcement is seen by the individual as a function of his own behavior is known as the individual's level of expectancy. The expectancy of reinforcement, however, is independent of the value of that reinforcement for the individual. Value of reinforcement is a matter of preference of one over all other reinforcements, with everything else remaining constant. The individual who perceives reinforcement to be a product of his own behavior is said to be internally controlled. He looks to himself for his own success and failure. When reinforcement is seen by a person as being out of his hands, as being a matter of fate or chance, he is said to be externally controlled.

In early research, attempts were made to relate behavior changes to a set which corresponded to internal or external control of success at difficult tasks. Belief in one's ability to succeed at such tasks and the willingness to take risks based on that belief were believed to reflect internal control. Phares (1957) sought to measure the effect
of situational variables on expectancy changes. The subjects (Ss) were presented with two tasks: to match colors and to match lengths of lines. At the same time, the Ss were divided into groups with one being presented instructions to establish a set related to "skill" and the other to establish a set related to "chance." To establish the skill conditions, Ss were told that even though the task was difficult, the differences in Ss' scores depended upon their skill. Conditions of chance expectancy were established by telling the Ss that the tasks were so difficult that success at matching the colors (or lines) was purely a matter of luck. All Ss were reinforced at a fixed sequence of reinforcement regardless of task. Thus, reinforcement bore a chance relationship to performance for all Ss. The measure of expectancy was a betting technique wherein the S would bet one to 10 chips on whether she thought she would be correct in her matching. The results were that there was a greater change in expectancy under skill conditions than under chance as measured by number of chips bet, and the frequency of those changes were also greater under skill than under chance conditions. That is to say, Ss under the set of skill instructions were willing to bet more chips and more often following positive reinforcement and after those occasions when reinforcement did not occur. Subjects operating under skill conditions are reflective of the internally-controlled person, who believes his success or failure is a product of his own ability. The externally-controlled person, whose orientation to success is related to chance, is less likely to reflect expectancy changes in his betting on success, which he believes to be outside his power.
Rotter, Liverant, and Crowne (1961) had similar results with regard to increments and decrements in verbalized expectancy under skill and chance conditions. An experimental task contrived to reflect motor skills of Ss was used. Subjects were to attempt to raise a platform with a steel ball on it as high as possible without allowing the ball to roll off. The platform, however, was slanted and the ball was held on only by an electromagnet controlled by the experimenter (E), who would release the ball according to a predetermined schedule. The "chance" experimental task was one in which Ss were shown a number of stacks of cards with X's and O's on them, and they were to try to guess correctly each card in each stack of five cards. The goal was to get at least four cards correct of the five. Subjects in both experimental conditions would, before each trial, give an estimate on a scale from zero to 10 of their degree of expectancy of success. It was also found that under chance experimental conditions, generalized expectancy previously reinforced at a 50% level of positive reinforcement was more difficult to extinguish under continuous negative reinforcement than that related to 100% positive reinforcement. Under skill conditions, generalized expectancy previously reinforced at a level of 100% positive reinforcement was more resistant to extinction than that related to 50% positive reinforcement. The measure for extinction was two consecutive trials with verbalized expectancy at a level of zero or one. This is to suggest that the chance-oriented, externally-controlled person will not only demonstrate less fluctuation in verbalized expectancy for success but also will not relinquish his expectancy for success so rapidly under 50% reinforcement as under 100% reinforcement. Under a set of skill conditions, reflective of internal control, greater fluctuation
of expectancy was in evidence and extinction was effected more rapidly following 50% than 100% reinforcement.

Later, Phares (1962) demonstrated that the decrease from pre- to post-experimental recognition thresholds for shock-associated nonsense syllables will be greater under skill conditions where escape from the shock actually depends upon the Ss' ability than under the chance conditions where it does not. This is to suggest that internally-controlled persons (who are skill-oriented) are more alert to environmental cues that would enable them to extricate themselves from painful situations than are externally-controlled (chance-oriented) persons.

Research done principally by Phares (1957; 1965), Neff (1956), James (1957), James and Rotter (1958), Rotter (1954; 1960; 1966), and Rotter, Seeman, and Liverant (1962) has sought to conceptualize and then to scale the differences among Ss on a continuum designed to represent locus of control. The Internal-External Control Scale (I-E Scale) is a product of that research. The I-E Scale (Rotter, 1966) is a forced-choice questionnaire with a total of 29 items, including six filler items, designed to reflect the respondent's belief or generalized expectancy. Those persons who score above the median of a given population are considered more externally controlled and those who score below the median are more internally controlled.

A number of studies have been conducted to determine the kinds of behaviors which characterize the internally- and externally-controlled persons. Phares (1965) found differences between internally-controlled Es and externally-controlled Es in terms of their ability to effect attitudinal changes in Ss. The true Ss in this experiment were, in
reality, the Es who had been divided according to their scores on a previous administration of the I-E Scale into internal and external groups. The Es were asked simply to read to Ss arguments against answers given by Ss on a so-called College Opinion Survey prior to a second administration of the survey. Phares discovered that the internally-controlled Es effected attitudinal changes in the Ss to a significantly greater degree than did the externally-controlled Es.

Some research (Crowne & Liverant, 1963; Rosner, 1957; Strickland & Crowne, 1962) has sought to correlate a S's willingness to yield to the unanimous but rather clearly erroneous judgment of a group with feelings of internal-external locus of control and with measures of social desirability and self-confidence. For example, Crowne and Liverant (1963), using an Asch-like (cf. Asch, 1956) conformity situation, studied the relation between degree of conformity and level of expectation of success. Clusters of dots were presented tachistoscopically for one-second intervals to groups of five introductory psychology students, four of whom were confederates and one of whom was the critical S. In each of 20 trials the Ss were to indicate aloud which of the two clusters (A or B) was larger. The confederates would agree erroneously on the critical trials, leaving the critical S either to declare himself in the noticeable minority or to acquiesce to a judgment he felt almost certainly to be incorrect. (Independent judges had correctly assessed which of the clusters of dots was larger on 90% to 100% of the trials.) The Ss were also measured by means of the Marlow-Crowne Social Desirability Scale and a 60-item, forced-choice internal-external control scale (Liverant & Scodel, 1960). Crowne and Liverant concluded
that conformers have a lower self esteem, lower expectancy of personal adequacy, and a lower feeling of personal control. Colclough (1972) also found that Ss who were externally controlled, as measured by the I-E Scale scored higher on an Asch-type (line judging) task. Thus, there is evidence of a relationship between a tendency toward conformity and an external locus of control.

While Strickland and Crowne (1962) found that Ss with a high need for social approval would more likely conform than Ss with a lower need for approval, and even though it has been demonstrated, as reported above, that external control and conformity are positively related, Lefcourt (1966) insists that there is only a questionable relationship between locus of control and social desirability.

A study was conducted by Gore and Rotter (1963) on a S's willingness to commit himself to social action. Students at a southern Negro college were asked to complete the I-E Scale and, later, were asked to indicate their preferences among the following social action options: (a) attend a rally on social justice, (b) sign a petition regarding racial grievances, (c) participate in a silent protest march, and/or (d) join a freedom ride. The more internally-controlled students committed themselves to more decisive social action.

Taking her cue from that study, Strickland (1965) followed up with another study at a southern Negro college which had been active in the civil rights movement. She noted that Gore and Rotter had measured commitment before the fact, so she sought to measure the commitment after the fact. She asked the students to indicate the kind of civil rights activity in which they had already participated,
including number of arrests. She, too, found a high positive relationship between internal control and active social commitment.

The apparent active commitment of internally-controlled persons has been demonstrated in other ways as well. Franklin (1963) showed that among school children, the more internal the person, the more likely he was to be more ambitious, a better student, more sure about vocational plans, more religious, and from a higher socio-economic group. Crandal, Katkovsky, and Crandal (1965), using an Intellectual Achievement Responsibility (IAR) scale (a measure of internal-external control related to academic achievement) found IAR scores to bear a moderately positive relation to intelligence and achievement but an inconsistent relation to social class.

Battle and Rotter (1963) found lower-class Negro children to be more external than middle-class Negro children and more external than both middle- and lower-class white children. Consistent with the socio-economic aspects of the Battle and Rotter report, Lefcourt and Ladwig (1964) demonstrated in a study of prisoners (all of whom tended to be at the lower end of the socio-economic scale) that Negroes were more external than whites. Graves (1961) found evidence among high school students that whites were most internal, followed by Spanish Americans and Indians. It appears, then, that there is some relationship between socio-economic status and/or ethnic background and internal-external locus of control.

Doctor (1971) sought to measure the effect of social influence on behavior and to correlate that influence with locus of control. All Ss had completed the I-E Scale three months prior to the experiment, so the two events would not be connected. Using 68 female Ss, he
presented 80 stimulus cards containing six randomly-ordered pronouns and six past-tense verbs. The Ss were to construct one sentence from each of the cards, using one noun and one verb from each card. During the first 20 trials (sentences) responses were recorded without any feedback from E and a baseline was established. For the next 60 trials E gave positive reinforcement (via saying, "Good") following sentences beginning with "I" or "we". For the last 60 trials Ss were given a predetermined random (noncontingent) schedule of reinforcement. Doctor concluded that internal Ss were more resistive to influence and that external Ss were more compliant and cooperative. Similar findings have been reported by Gore (1963) and Getter (1963). Doctor also found that the internal E came across to the Ss as more "self-confident" and as having more control over his own destiny than did the external E. However, contrary to the findings of Phares (1965), the internal-external status of the E did not affect the response of the Ss.

In summary, the internally-controlled individual may be characterized by his reliance upon his own skill for his success and failure. He manifests more frequent and more significant change in his expectancy of success at tasks following his being positively reinforced for success at a previous trial at the same task. He is alert to environmental cues and makes use of them in achieving his goals. He is more socially active to make positive changes in his environment. He is less conforming and less likely to be influenced by social pressure. It was also reported above that a person's behavior previously reinforced (under an experimental set related to skill) at a 100% level of reinforcement is more difficult to extinguish than that reinforced at a 50% level.
The externally-controlled person, contrariwise, looks not to himself but to forces and persons outside of himself, to fate or chance, to bring him whatever those forces have in store. He gives evidence of less change in either the frequency or degree of expectancy in response to a variable schedule of reinforcement. He is less alert to environmental cues than the internal person, more conforming, and less committed to social action. It was also noted that the behavior of a person operating under chance experimental conditions will be extinguished more slowly following 50% reinforcement than 100% reinforcement.

Religion and Personality

Religion's capacity for multifarious expression of individuals' personalities has been the subject of some research on religion. Brown and Ferguson (1967) found that religion-related responses on a test which sought 20 responses to the question, "Who am I?" (cf. Kuhn & McPartland, 1954) bore a positive relationship to an eight-item religious-attitude scale. Such a finding supported their contention that intensity of religious belief is reflected in one's self-concept.

Dittes (1971) points out that the intrinsic-extrinsic typology developed by Allport was to separate true from adulterated religion. The intrinsically-religious person is said to internalize the teachings of the church. He is committed to the religious function of his church. The extrinsically-religious person's church membership, conversely, is for selfish, instrumental, and nonreligious ends.

An extremely important contribution to research on religion was the study done by Strickland and Shaffer (1971) on the relationship between intrinsic-extrinsic religion and internal-external locus of control of
reinforcement. The Ss were male and female members of two Presbyterian churches in Atlanta, Georgia. All Ss were asked to complete the I-E Scale, the Religious Orientation Scale (a measure of intrinsic-extrinsic religion), a Facism scale, and a personal data sheet. The results of their study demonstrated a positive relationship (r = .30, p < .01) between an intrinsic religious posture and internal locus of control.

Warner and Kawamura (1967) found little support for religious persons' being either better adjusted or being any more socially responsible. At the same time, Becker (1970) found no confirmation for the notion that indiscriminately proreligious persons were any more insecure or anxious than others. In relating religious orientation to social adjustment, ego strength and perception of reality, Rice (1971) did find indiscriminately antireligious and intrinsically religious persons to manifest healthier social adjustment. Rokeach (1968) insists that a predominance of extrinsic rather intrinsic orientation to religion lends itself to psychological maladjustment.

Other differences between intrinsic and extrinsic styles have been accented by Feagin (1964) who identified the intrinsically religious person as having successfully internalized his faith, as being mystical and devout and living for his religion. The extrinsic person bore a more external, social relation to his faith, finding it to be protective and offering status and security. The extrinsic person was also more prejudiced. From a similar study, Tisdale (1966) is able to add that the extrinsic person tends to avoid strife and accepts without question (or, perhaps, comprehension) the tenets of his faith. Such an accentuated difference between intrinsic and extrinsic religious styles is
especially significant in the light of the Strickland and Shaffer (1971) study reported above documenting the positive relationship between intrinsic-extrinsic religion and internal-external locus of control.

Research done by Allen and Spilka (1967) on consensual and committed religion does not differ appreciably from the work done on intrinsic-extrinsic religion, but it does seem to add some dimension to the personality variables. Consensual religion may be characterized as concretistic, restrictive, prejudicial, and bifurcated. Committed religion will manifest itself as abstract but having a clarity with regard to multiplex ideas and will be flexible and meaningfully related to daily life.

In terms of behavioral differences among persons, McClain (1970) discovered that the most independent and self-sufficient persons are the least frequent in church attendance among college students. In measuring church attendance against the scales of the Edwards Personal Preference Schedule, he came to suggest that nonattendance may also point to independence and self-sufficiency, free thinking, experimentation, an inquiring attitude, and creativity.

In summary, it may be said that intensity of religious attitude is reflected in self-concept. Of importance in the research is the finding of a relationship among intrinsic-extrinsic religion, committed-consensual religion, and internal-external locus of control. A religious person who describes himself as internal may also be assumed to have successfully internalized his faith, as being mystical and devout, living for his religion, as being flexible in his thought system and as meaningfully relating his religion to his daily life. A religious person who
describes himself as external seems to bear more of a superficial relationship to his faith, finding it protective, offering him status and security. He is more prejudiced, avoiding strife, and accepting without question and, perhaps, without understanding the tenets of his faith. He is concretistic, restrictive, and bifurcated in his religious thought. The more extrinsic he is, the more personal maladjustment is likely in evidence.

It has been demonstrated that some personality variables are important in relation to church-related behavior and choice of religion. It remains to be shown the extent of the influence of many as-yet-to-be-studied variables.

**Personality and Religious Preference**

In attempts to assess differences among the major faiths such as Protestantism, Catholicism, and Judaism, Keene (1967) and Vaughan (1965) discovered that what differences there are lie primarily in religious beliefs and not in conduct. Within the household of Protestantism, however, Beech (1970) found a marked difference, by denomination, in a study on styles of authority in pastoral counseling. Thirteen out of 18 pastors in the United Church of Canada permitted their counselees a full range of decision-making authority, whereas the other five offered only a restricted range in which the counselees could make decisions affecting themselves. In the Anglican-Lutheran-Presbyterian group, eight counselors were permissive and 11 were restrictive. In the Baptist-Evangelical group, nine pastors were permissive and 20 were restrictive. Such findings may reflect not only the bias of the pastor but also the wishes of the parishioners who seek out those very pastors
with their own style of counseling. In that regard, Monaghan (1967) found three different types of parishioners within one fundamentalistic congregation: the authority-seeker, the comfort-seeker, and the social participator. The authority-seeker actively submits to authority. The comfort-seeker is in search of peace and comfort. The social participator enjoys a friendly and social interaction with other church members.

A construct that seems to be related to internal-external locus of control is that of powerlessness. An individual is said to be powerless, according to Seeman (1959, 1963) and Seeman and Evans (1962), when his expectancy is that the reinforcements he seeks are not determined by his own behavior. Seeman adds, however, that the individual's sense of powerlessness is not necessarily congruent with objective reality so much as it is a measure of his own expectancies. The concept of powerlessness does not take into account the value of having control and makes no ethical judgment regarding the situation of powerlessness. While powerlessness may be related to psychological maladjustment (Butterfield, 1964; Hersch & Scheibe, 1967), it may also be a very realistic (and psychologically healthy) appraisal of a given situation. Dean (1968) found powerlessness to bear a significant curvilinear relationship with the influence a person felt his religion had on his life, the regularity of church attendance, and his level of financial support of his church. Photiadis and Schweiker (1970) assert that powerlessness is positively associated with authoritarian churches, and they identify the authoritarian churches as those which are rigidly bureaucratic, ethnocentric, conservative, and employing severe sanctions.
Schweiker (1969) argues that an individual's religion influences the way in which he addresses himself to the world, however, such an influence may not always be a positive one. For example, Nelsen, Yokely, and Madron (1973) found southern (white) churches actually to be fostering racism due to factors such as their racially exclusive membership policies, their tacit approval of the "southern way of living," and the example set for the youth who come into that society. Others (Estus, 1968; Goode, 1966; Riesman, 1954; Warner & Kawamura, 1967) treat religion as principally a psycho-social phenomenon and inappropriate as a factor to distinguish one individual from another. Goode (1966), for example, points out that middle-class people participate in church in much the same way they participate in any other voluntary organization.

Rotter (1966) alludes to (but does not describe) a study which found no denominational differences among college students when measured by the I-E Scale. Without documentation, however, one cannot be clear as to the potentially confounding effect of the probable socio-economic similarity of college students on the study.

In summary, it is argued by some that what differences there are between religious groups lie principally in beliefs and not in conduct. In fact, there is agreement by a number of researchers that religion is primarily a psycho-social phenomenon and that persons participate in religion in ways similar to their participation in other voluntary organizations. Differences of styles of authority have been noted in counseling done by pastors of several different denominations within Protestantism as well as differing degrees of authority, comfort, and
social participation sought even within a single fundamentalistic congregation. Finally, powerlessness has been associated differentially with churches, specifically with authoritarian churches which have been described as rigidly bureaucratic, ethnocentric, conservative, and employing severe sanctions.

**Summary of Literature Review**

The concept of internal-external locus of control had its beginnings within social learning theory. A person who perceives himself to be internally controlled sees himself as being ultimately responsible for most of his own success and failure. He does not feel himself to be grossly manipulated by forces outside himself and actually resists subtle attempts by others to change him unless he believes that change to be in his own best interest. He is alert to his environment and will act to change it. It may be hypothesized that, religiously, the internal person will have also internalized his faith, which will be flexible and meaningfully related to his daily life. Furthermore, he will not describe himself as powerless, but as effectively powerful in controlling his reinforcements. It is reasonable to assume that these characteristics would influence the internally-controlled person to choose a church which allows him freedom of choice regarding beliefs and religious practices and one which involves itself in social issues rather than purely sacred, intraecclesiastical exercises without necessary in-the-world application.

The externally-controlled person relies more on chance and luck than on skill for his reinforcements. He is less alert to environmental
cues, more conforming and less active in bringing changes in his environment. It may be hypothesized that he has an external, superficial relation to his religion, from which he gains status and security. He does not see himself as being effectively in control of his environment and will, thus, see himself as powerless and will probably be associated with a doctrinally closed church which requires little in the way of social initiative or theological inquiry and which views man largely as subject to the whims of God.

While there is some agreement that churches differ only in terms of theology and not in terms of behavior, other research suggests personality and behavioral differences not only between churches but also within them. It was also noted that there seems to be some difference between persons' religious preferences in respect to the construct of powerlessness, with the most powerless seemingly associated with the more authoritarian churches.
Statement of Problem

The task of the present study was to determine how persons completing the I-E Scale from selected churches distributed themselves on that scale. The hypothesis tested was that religious groups differed on the I-E Scale, with members of more doctrinally closed churches tending to manifest external control and members of more doctrinally open churches tending to manifest internal control.
Method of Study

Preliminary Study:

Selection and Ranking of Churches

In an effort to arrive at a consensus for selecting a variety of churches, a Church Sorting Questionnaire (CSQ) was completed by 14 members of the Bowling Green (Kentucky) Ministerial Association. The CSQ (Appendix B) asked the respondents to sort the 18 churches on a given list into one of three categories to indicate degree of closedness-openness to questions of doctrine. The three categories used represented (a) doctrinally closed, (b) mid-range, and (c) doctrinally open churches. Churches allocated to the doctrinally closed category were those who membership, the ministers felt, would subscribe to the statement: "The teachings of the church are clear and are not open to question." To the mid-range category were allocated the churches whose membership, it was felt, would subscribe to the statement: "Some teachings of the church are not open to question, but others are." Churches allocated to the doctrinally open category were those whose membership, the ministers felt, would subscribe to the statement: "Most of the teachings of the church are always open to question."

Some churches seemed rather clearly to fall into one of the three categories (cf. Appendix C), and those used in the study were the two or three churches most frequently allocated to each of the three categories. Churches most frequently allocated to the doctrinally closed category were the Church of Christ (allocated 14 times to that category)
and the Seventh Day Adventist (allocated 10 times). The Lutheran Church
and the Baptist Church were allocated to the mid-range category nine
times and six times respectively. The Presbyterian Church was 10 times,
the Unitarian Fellowship was 11 times, and the Methodist Church was
seven times allocated to the doctrinally open category. These, then,
were the churches used to examine the hypothesized differences between
closed and open doctrinal postures as measured by the I-E Scale.

Once the churches were selected and sampled but before the analysis
was performed, a Church Ranking Questionnaire (CRQ) was submitted to the
membership of the Bowling Green Ministerial Association for the purpose
of ranking the churches on a scale of doctrinal closedness-openness.
The CRQ (Appendix D), completed by 18 ministers, asked the respondents
to rank seven denominations (those sampled) on a scale from the most
doctrinally closed to the most doctrinally open. A doctrinally closed
church was defined as one in which the teachings of the church are
clearly stated and are not open for the membership to question. A doctri-
nally open church was defined as one in which most of the teachings of
the church are always open for the membership to question. The churches
were listed alphabetically and the ministers were asked to assign a
ranking number (from one to seven, with no ties) to each of the seven
churches in order to scale the relative openness of the churches. The
most closed church was given a rank of 1, the next most closed, a rank
of 2, etc. The most open church was given a rank of 7, the next most
open a rank of 6, etc. There seemed to be a tendency for a minister to
rank his own church as more open doctrinally than it was ranked by most
of the other ministers. To control for the likely confounding of the
ranking procedure due to that tendency, the ranking data provided by a
given denomination's ministers were not included when the rankings of
that church were tabulated. The process did tend to lower the degree
of doctrinal openness on most churches. The results of the CRQ are sum-
marized in Table 1, where it may be noted that in addition to pro-
viding a rather clear ranking order, the results of the CRQ study tend
to corroborate the previous sorting of the churches by way of the CSQ. 
<table>
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<td>Methodist</td>
<td>5.23</td>
<td>6</td>
</tr>
<tr>
<td>Unitarian</td>
<td>5.94</td>
<td>7</td>
</tr>
</tbody>
</table>
Main Study

Subjects

The Ss were members of adult Sunday School classes (Sabbath School in the Seventh Day Adventist Church) in seven churches in Bowling Green, Kentucky. The classes were representative of the congregations at large according to the ministers and/or directors of Christian education.

Design

Seven churches were used to test the hypothesis that there would be variation between churches in terms of their mean responses on the I-E Scale. The churches were ranked on a continuum from the most doctrinally closed to the most doctrinally open.

Procedure

Explanation of the research procedure was made to the minister of each church in an effort to gain his cooperation and that of his teachers. The teachers were also contacted when possible, but they had little more information than was on the instruction sheet (Appendix E) given them with the I-E Scale and Personal Data Sheet (PDS) for their classes. The PDS (Appendix F) was a means of collecting personal, social, and economic data about each S and was used to measure and factor the four socio-economic variables of age, sex, education and family income in the comparison of religious groups.

Giving only basic information was an effort to control for the teachers' possibly confounding the study with an experimental bias of their own during their introductory remarks and reading aloud of the
instructions. When questions were raised by the Ss, the teacher only
reread the instructions to the Ss for clarification. A pilot study was
conducted at the First Presbyterian Church of Auburn, Kentucky, on
Sunday, June 24, 1973. It was determined through that experience that
the instructions were clear and the entire testing procedure could be
completed in about 15 minutes.

All the data were collected in the course of one week. The
Seventh Day Adventists completed the I-E Scale and the PDS on
Saturday, June 30, 1973, with the standardized instructions having
been read to them by the experimenter. All other Ss, except the
Unitarians, completed the I-E Scale and PDS on the next day, Sunday,
July 1, 1973. Standardized instructions were read to the Ss by the
class teacher. The Unitarian Fellowship was not meeting during the
summer, so the I-E Scale, PDS, and written instructions were taken
to 17 members of the Unitarian Fellowship identified by the president
of the group as the "regular" members. All 17 I-E Scales and PDSs
were completed by the Unitarians and returned by mail.

Scoring and Analysis

To examine the hypothesis, the analysis of covariance was used to
assess the mean difference between I-E Scale scores from each of the
churches. The analysis of covariance was used to parcel out the
effects of age, sex, education, and family income. In setting up
the covariance analysis, the data on age were considered in ranges of
10 years, and ages 10-19 were scored 1; ages 20-29 were scored 2;
ages 30-39, 3; 40-49, 4; 50-59, 5; 60-69, 6; 70-79, 7. Sex was scored
with 1 for male and 2 for female. Education completed was scored as
follows: elementary, 1; high school, 2; vocational school, 3; college, 4; graduate school, 5. Family income was considered in categorical ranges similar to an analysis reported by Feagin (1964). Income under $3000 a year was scored 1; income from $3000 to $6000 a year was scored 2; $6000 to $10,000 a year, 3; $10,000 to $20,000 a year, 4; over $20,000 a year, 5.
Results

A total of 187 I-E Scales and PDSs were at least partially completed, but 30 Ss had to be eliminated because they failed to answer some of the questions, leaving a working total of 157 Ss. When socio-economic data were incomplete on the PDSs, data were interpolated in the following manner: if Ss omitted his income, for example, he was given an interpolated income consistent with the mean of the Sunday School class of which he was a member. Of the 157 Ss who completed the I-E Scale, 132 answered all the questions on the PDS. There were only 23 interpolations out of a total of 628 items under consideration from the PDS. Six interpolations were required to determine age, one for sex, four for education, and 12 for family income.

The analysis of covariance indicated that churches sampled in this study did differ according to their mean I-E Scale scores, $F(6,130)=2.9634$, $p<.01$. It is further apparent that the differences lie in a direction opposite to that hypothesized. The two most doctrinally closed churches tended to be the most internal, while the more doctrinally open churches tended to be more external. The level of significance is tempered, however, by the fact that the percentage of variation accounted for in the analysis of covariance was only $\omega^2=.0774$. The treatment and adjusted means of I-E Scale scores are presented in Table 2 and are plotted in Figure 1 according to the churches' rank order.
Table 2

Treatment and Adjusted Means of I-E Scores

<table>
<thead>
<tr>
<th>Church</th>
<th>Treatment mean</th>
<th>Adjusted mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seventh Day Adventist</td>
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<tr>
<td>Church of Christ</td>
<td>6.84</td>
<td>6.54</td>
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<tr>
<td>Baptist</td>
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<td>Methodist</td>
<td>8.21</td>
<td>8.51</td>
</tr>
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<td>Unitarian</td>
<td>8.53</td>
<td>9.09</td>
</tr>
<tr>
<td>Lutheran</td>
<td>8.44</td>
<td>9.48</td>
</tr>
<tr>
<td>Presbyterian</td>
<td>9.30</td>
<td>9.67</td>
</tr>
</tbody>
</table>
Figure 1. I-E scores and churches rank order.
Discussion

Although it was hypothesized that there would be variation among religious groups with regard to the way in which members of those groups would distribute themselves on the I-E Scale, it was not anticipated that the variation would be in the direction that it was. In fact, it was hypothesized that on the basis of the relationship between a sense of powerlessness and membership in doctrinally closed churches there would be a higher (more external) score on the I-E Scale among those churches which could be identified as doctrinally closed. That this was not the case may mean several things.

Since there seems to be a relationship between internal control and intrinsic and committed religion (Strickland & Shaffer, 1971), it may be speculated that there are differences in terms of religious commitment between members of the Church of Christ and the Seventh Day Adventist Church on the one end and the Methodist, Unitarian, Lutheran, and Presbyterian on the other. The internally-controlled, intrinsically-religious person sees himself as ultimately responsible for most of his own success and failure. He resists subtle attempts by others to change him. At the same time, however, he is alert to his environment and will act to change it, likely giving expression of his faith in the process. When studied carefully, the Church of Christ and Seventh Day Adventist Church do seem to manifest many of the characteristics of internal locus of control. In both churches there seems to be a marked level of active participation in all aspects of the church's work. The members themselves
share leadership in worship, study, and in tending to the food and clothing needs of others in the community. Those churches also seem to be more evangelical as they relate to the community outside their churches. That is, characteristic of internal control, they seek to change the environment by making "converts" to their churches. Even though they will attempt to change the environment, they are not open to easy changes themselves. It appears that a member of the Church of Christ or the Seventh Day Adventist Church will, because of doctrinal commitment, typically remain a member of his respective church for life. There is no facile movement from church to church by members of either of those groups.

Another of the characteristics of internal control is that those persons are not easily persuaded by others, even when the others are clearly in the majority. The Church of Christ can be characterized by its insistence that it is distinctively different from all other groups which claim to be "churches." A substantial portion of their rhetoric is their effort to provide a theological apologetics for their "correctness" and difference. The Seventh Day Adventist does not seem to maintain the exclusivist posture of the Church of Christ but it does maintain a difference even from the Church of Christ: it holds its corporate worship on Saturday, the traditional Sabbath.

The externally-controlled person is less alert to environmental cues, more conforming and less active in bringing changes in the environment. Again, considering the relationship between external control and extrinsic religion, it may be hypothesized that he also has little more than a superficial relationship to his religion in
some instances, from which he hopes to gain status and security. When one considers the Methodist, Unitarian, Lutheran, and Presbyterian Churches, he may find a lot of wandering around from church to church. It is just as easy for many a person to be a member of one of those congregations as another. A person's commitment either to the denomination or the congregation does not seem to be so strong as that of a member of the Church of Christ or Seventh Day Adventist Church to his. Also, rather than actively taking food or clothing to needy people (which may be characteristic of internal control), a member of a more externally-controlled congregation is likely to give some money for someone else to do the "leg work." During worship in these churches, one is not likely to find a high percentage of active congregational participation either. It is often only the minister who speaks and the choir who sings, and the person in the pew may do little more than sit and watch and (perhaps) listen.

The Baptist Church fell about mid-way on the I-E Scale between the Methodist, Unitarian, Lutheran, and Presbyterian Churches (at the more external end) and the Church of Christ and Seventh Day Adventist Church (at the more internal end). This may be explained by the wide variety of persons who seem to compose the Baptist Church. Some are doctrinally closed and separatists; others are doctrinally open and feel free to participate in worship and in study experiences other than those provided by their own church.

What this research may mean is that churches might do well to become more sensitive to the internal-external nature of their own congregation when planning events that will require some active commitment
from the membership, such as canvassing for funds or for new members. Internally-controlled congregations may be interested and able to perform these tasks effectively, while externally-controlled congregations may find it more expedient to hire these tasks done, as some churches do. Churches may also consider the kind of Christian education materials which adult Sunday School classes will use most effectively. Internally-controlled, more highly committed persons could be expected to read their lessons, and the internally-controlled teacher could be expected to take some initiative to use a flexible lesson material composed, for example, of resource guides rather than to follow pedantically a "packaged" lesson, ready to deliver. The externally-controlled person could be expected to take less initiative to prepare his lesson either as a student or as a teacher. He would likely choose a more passive role in class. Both economically and educationally that kind of information may be helpful to have prior to the procurement of Christian education materials.

Inasmuch as internally-controlled persons tend to be more socially active, further research would be in order to determine the degree to which the corporate behavior of a congregation correlates with their corporate score on the I-E Scale. A model to follow for such research would possibly be that of Gore and Rotter (1963) or Strickland (1965) in their work on social commitment.

Internally-controlled persons see themselves as primarily responsible for their own destiny. It could be hypothesized that they would define their God differently than the externally-controlled, powerless individuals, especially in terms of the issue of the omnipotence of God. Such a study
could be done by relating scores on the I-E Scale with specific theological beliefs in individuals.

Many more people seem to inherit than to select a religious framework, so, in the future, research into religion with the I-E Scale may need to make a distinction between those who have remained with the faith of their fathers and those who have chosen a new way to go. It may be that only with those who make a conscious option of religious preference can a true distinction between internal and external locus of control be found along denominational lines. However, it may also be discovered that the most internally-controlled persons make few denominational changes and what changes there are are made by less-committed, "church hopping," externally-controlled persons.

Whatever research is done in the future should seek a larger number of Ss and churches than was available for this study. Continued research is also appropriate on the I-E Scale itself in order to give greater clarity and dimension to the variable it seeks to measure. It does appear, however, that internal-external locus of control is a valid construct and that there are differences between churches according to it. Further research, then, should seek to provide a clearer definition to those differences.
References


James, W. H. Internal versus external control of reinforcement as a basic variable in learning theory. *Dissertation Abstracts*, 1957, 17 (10), 2314.


Rotter, J. B. Some implications of a social learning theory for the prediction of goal directed behavior from testing procedures. *Psychological Review, 1960*, 67, 301-316.


Appendix A

Rotter's Internal-External Locus of Control Scale

1. a. Children get into trouble because their parents punish them too much.
   b. The trouble with most children nowadays is that their parents are too easy with them.

2. a. Many of the unhappy things in people's lives are partly due to bad luck.
   b. People's misfortunes result from the mistakes they make.

3. a. One of the major reasons why we have wars is because people don't take enough interest in politics.
   b. There will always be wars, no matter how hard people try to prevent them.

4. a. In the long run people get the respect they deserve in this world.
   b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.

5. a. The idea that teachers are unfair to students is nonsense.
b. Most students don't realize the extent to which their grades are influenced by accidental happenings.

6. a. Without the right breaks one cannot be an effective leader.
   b. Capable people who fail to become leaders have not taken advantage of their opportunities.

7. a. No matter how hard you try some people just don't like you.
   b. People who can't get others to like them don't understand how to get along with others.

8.* a. Heredity plays the major role in determining one's personality.
   b. It is one's experiences in life which determine what they're like.

9. a. I have often found that what is going to happen will happen.
   b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

10. a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
    b. Many times exam questions tend to be so unrelated to course work that studying is really useless.

11. a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.
    b. Getting a good job depends mainly on being in the right place at the right time.
12. a. The average citizen can have an influence in government decisions.
   b. This world is run by the few people in power, and there is not much the little guy can do about it.

13. a. When I make plans, I am almost certain that I can make them work.
   b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.

14.* a. There are certain people who are just no good.
   b. There is some good in everybody.

15. a. In my case getting what I want has little or nothing to do with luck.
   b. Many times we might just as well decide what to do by flipping a coin.

16. a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
   b. Getting people to do the right things depends upon ability, luck has little or nothing to do with it.

17. a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
   b. By taking an active part in political and social affairs the people can control world events.
18. a. Most people don't realize the extent to which their lives are controlled by accidental happenings.
   b. There really is no such thing as "luck."

19.* a. One should always be willing to admit mistakes.
   b. It is usually best to cover up one's mistakes.

20. a. It is hard to know whether or not a person really likes you.
   b. How many friends you have depends upon how nice a person you are.

21. a. In the long run the bad things that happen to us are balanced by the good ones.
   b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

22. a. With enough effort we can wipe out political corruption.
   b. It is difficult for people to have much control over the things politicians do in office.

23. a. Sometimes I can't understand how teachers arrive at the grades they give.
   b. There is a direct connection between how hard I study and the grades I get.

24.* a. A good leader expects people to decide for themselves what they should do.
   b. A good leader makes it clear to everybody what their jobs are.
25. a. Many times I feel that I have little influence over the things that happen to me.

   b. It is impossible for me to believe that chance or luck plays an important role in my life.

26. a. People are lonely because they don't try to be friendly.

       b. There's not much use in trying too hard to please people, if they like you, they like you.

27.* a. There is too much emphasis on athletics in high school.

       b. Team sports are an excellent way to build character.

28. a. What happens to me is my own doing.

       b. Sometimes I feel that I don't have enough control over the direction my life is taking.

29. a. Most of the time I can't understand why politicians behave the way they do.

       b. In the long run the people are responsible for bad government on a national as well as on a local level.

Note.--Score is number of underlined items. Asterisk indicates filler items.
Appendix B

<table>
<thead>
<tr>
<th>Church</th>
<th>Sorting Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assembly of God</td>
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<td>Episcopal</td>
</tr>
<tr>
<td>Catholic</td>
<td>Jehovah's Witnesses</td>
</tr>
<tr>
<td>Christian Science</td>
<td>Jewish</td>
</tr>
<tr>
<td>Church of Christ</td>
<td>Lutheran</td>
</tr>
<tr>
<td>Church of God</td>
<td>Methodist</td>
</tr>
</tbody>
</table>

PLEASE (1.) SORT THE ABOVE RELIGIOUS GROUPS ACCORDING TO THE WAY YOU FEEL THE MEMBERSHIP OF EACH GROUP WOULD SUBSCRIBE TO THE STATEMENTS WHICH FOLLOW, INCLUDING AT LEAST THREE GROUPS UNDER EACH HEADING AND (2.) INDICATE A LOCAL CONGREGATION WHICH YOU FEEL IS MOST REPRESENTATIVE OF THAT GROUP.

"The teachings of the church are clear and are not open to question."

"Some teachings of the church are not open to question, but others are."

"Most of the teachings of the church are always open to question."


46
## Appendix C

### Results of Church Sorting Questionnaire

<table>
<thead>
<tr>
<th>Church</th>
<th>The teachings are not open to question.</th>
<th>Some teachings are not open to question.</th>
<th>Most teachings are always open to question.</th>
<th>Others are.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assembly of God</td>
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<tr>
<td>Baptist</td>
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<td></td>
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<td>Christian Science</td>
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<td>Jehovah's Witnesses</td>
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<td>Unitarian</td>
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Appendix D

Church Ranking Questionnaire

This questionnaire is an effort to rank seven churches on a scale from the most doctrinally closed to the most doctrinally open.

A doctrinally closed church may be defined as one in which the teachings of the church are clearly stated and are not open for the membership to question.

A doctrinally open church may be defined as one in which most of the teachings of the church are always open for the membership to question.

In the space provided beside each church, please rank all the churches according to where you feel each church belongs, giving the most doctrinally closed church a rank of 1, the next most doctrinally closed church a rank of 2, etc. The most doctrinally open church will have a rank of 7, the next most doctrinally open church will have a rank of 6, the next, 5, etc.

The churches are listed alphabetically. Please rank each church independently from the others, allowing no ties. Rank all seven churches in Column A. In Column B, circle your own church.
<table>
<thead>
<tr>
<th>A. Rank all seven churches</th>
<th>B. Circle your own church</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baptist</td>
<td>A. M. E</td>
</tr>
<tr>
<td>Church of Christ</td>
<td>Assembly of God</td>
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<td>Lutheran</td>
<td>Baptist</td>
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<td>Methodist</td>
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</tr>
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<td>Unitarian</td>
<td>Disciples of Christ</td>
</tr>
<tr>
<td></td>
<td>Unitarian</td>
</tr>
</tbody>
</table>
Appendix E

Instructions for Internal-External Control Scale

A Word to the Teacher

Thank you for your help in this study. Your completion of one of the questionnaires would also be appreciated.

Distribute the questionnaires after you read the instructions and they seem to be clearly understood. Where there is confusion as to the instructions, you may reread part or all of the instructions. Pencils are provided for those who do not have them.

Instructions for the Class

This is a questionnaire to find out the way in which certain important events in our society affect different people. It will take only about ten minutes to complete. Each item consists of a pair of alternatives lettered a or b. Please select the one statement of each pair (and only one) which you more strongly believe to be the case as far as you're concerned. Be sure to select the one you actually believe to be more true rather than the one you think you should choose or the one you would like to be true. This is a measure of personal belief: obviously there are no right or wrong answers. Only you will know how you answer the questions.

Please answer these items carefully but do not spend too much time on any one item. Be sure to find an answer for every choice; then circle the letter a or b for each item.
In some instances you may discover that you believe both statements or neither one. In such cases, be sure to select the one you more strongly believe to be the case as far as you're concerned. Also try to respond to each item independently when making your choice; do not be influenced by your previous choices. Please answer all the questions.
Appendix F

Personal Data Sheet

PLEASE COMPLETE THE FOLLOWING ITEMS:

1. ___ age

2. ___ male; ___ female

3. ___ single; ___ married
   ___ widowed; ___ divorced

4. How often do you attend church?
   ___ once a week
   ___ twice a month
   ___ once a month
   ___ once every 2 or 3 months
   ___ once every 3 to 6 months
   ___ once every 6 to 12 months
   ___ less than once a year
   ___ more than once a year

5. Are you a member of this congregation?
   ___ yes; ___ no

6. Education completed:
   ___ elementary
   ___ high school
   ___ vocational school

7. Family income
   ___ under $3000/year
   ___ $3000 to $6000/year
   ___ $6000 to $10,000/year
   ___ $10,000 to $20,000/year
   ___ over $20,000/year

8. What is your primary occupation?
   ___ housewife  ___ business
   ___ laborer  ___ clerical
   ___ farmer  ___ student
   ___ professional  ___ retired

52