HONESTY AND ITS RELATIONSHIP TO VARIOUS CHURCH-RELATED ACTIVITIES

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I. INTRODUCTION

This study is concerned with the relationship between cheating and various kinds of church-related factors. Among these factors are: a humanitarian orientation, belief in Christian dogma, church attendance, Bible reading, and prayer.

Honesty and Church-Related Activities

In our society a general impression is held that one result of being involved with church-related activities is an increase in honesty (Clark, 1959, & Fairchild & Wynn, 1961). There do not appear to be any studies available which deal with the origin of that belief. It is, then, possible only to speculate about origins.

One possible source for the origin of this belief is the assumption that persons act in accord with the teachings of their religion (Clark, 1959, & O'Brien, 1957). Christians are directed to be honest in the Bible (Young, 1957) and in sermons. A second likely source is the projection, on the part of many church members, of the fear of damnation for dishonesty. A third possible source is the ethnocentric belief that those of the in-group will act in accord with the mores of the group while those in the out-group will not.

the experimental literature dealing with the belief that being an active church member leads to greater honesty is not to be found in great supply. The classical Hartshorns and May atudy (1930) was the

first experimental test of this belief. The results indicated that there is a statistically insignificant relationship between frequency of Sunday School attendance and various behavioral tests of honesty.

A more recent study by Clark and Warner (1955) correlates reputation for honesty with reputation for church attendance. The relationship was found to be significant, but this by no means justifies the assumption.

Regarding literature on delinquent behavior and church influence, the Elliot (1952) and Munsel (1930) studies indicate that delinquents are likely to exhibit greater incidence of attendance and belonging to church groups than does the general population. A study by Dominic (195h) suggests that delinquent girls, though claiming religious affiliation for the most part, have negative and hostile attitudes toward the church. Patrick (1950), in a study of immates at a federal reformatory, found that church membership had no significant relationship with success in vocational training programs or with success as a parolee. Therefore, it would appear, the effect of the church on honesty is unclear. The few available studies on honesty and religion and of anti-social behavior and religion seem to indicate that there may be little basis for the generally held concept that church-related activities lend to more honest and/or less anti-social behavior.

In regard to humanitarian attitudes, there do not seem to be any available investigations which relate honesty and humanitarian behavior. There are two studies (Kirkpatrick, 1949, & Broen, 1957) which indicate that humanitarian attitudes are not, as traditionally held, necessarily a result of religious affiliations.

In view of the available studies cited, there seems to be a lack of evidence to support the generally held idea that church-related activities have an effect on behavior. The present study represents an attempt to determine if some church-related behaviors are related to one kind of honest behavior: cheating on a college examination.

Hypotheses

Three general factors have been selected as a point of departure for experimentally investigating the relationship between honest behavior and religious activities.

The following bypotheses are set forth to determine the effect on honesty of several factors: intensity of Christian belief, intensity of attitudes toward Christians, extent of participation in humanitarian activities, frequency of church attendance, frequency of prayer, and frequency of Bible reading.

The following null hypotheses are to be tested: The difference in honesty as judged by cheating on an academic examination between each of the following pairs of groups is significant at the five per cent level:

- There will be a significant difference in honesty between a high intensity of religious belief and a low intensity of religious belief.
- 2. There will be a significant difference in honesty between those who expect religious persons to act often as humanitarians and those who do not expect them to act often as humanitarians.

There will be a significant difference in honesty within the high intensity religious belief group between:

- 3. Those who attend church once a month and those who attend less than once a month.
- b. Those who pray once a month or more and those who pray less than once a month.
- 5. Those who read the Bible once a week or more and those who do not read it once a week.

II. METHOLE AND PROGRDURE

As indicated in the previous chapter the main interest of the study is to compare the degree of honesty with the degree of religious belief. To examine this, subjects of high intensity and subjects of low intensity were compared on the basis of scores obtained from five religiously oriented factors. The subjects were divided on the basis of the following five variables: (1) attitude toward Christian dogma, (2) attitude toward humanitarian persons who are religious, (3) frequency of church attendance among high intensity believers, (h) frequency of prayer among high intensity believers, and (5) frequency of Bible reading among high intensity believers.

Each of these ten groups was then subjected to an academic psychology examination. Unknown to the subjects, the instructor graded the examination. The examinations were then returned with the statement that the examinations had not been graded by the instructor and that the students were to grade their own examination. This was the independent variable of the study.

Three or more errors between the student's grading and the instructor's grading was used as the criteria of measurement for dishonesty on the part of each subject. The number of honest and dishonest subjects was identified. This is the dependent variable of the research. In order to check for possible mechanical errors on the part of the instructor a later psychology examination was given. In this second

examination, subjects were told that their papers were already graded.

No corrections were visible on the examination papers.

A chi-square procedure was then used to determine the significance of differences in honesty and dishonesty between high and low intensity groups for each of the five variables.

In order to investigate these five variables, the following methods were used:

The first step in the investigation was to give a regularly scheduled psychology examination of sixty objective items to two Introductory Psychology classes. The instructor graded each examination paper and recorded the grades without marking the papers. The papers were returned to the students with the explanation that the instructor had not had time to grade the papers (see Appendix A for the complete instructions). It was explained that in order to avoid a delay in returning the test papers and to provide a "learning experience" regarding the test material, the students would be allowed to grade their own papers. (This procedure is similar to the one used by Hartshorne and May (1930) as one of their honesty measures. This method was reported to have a reliability of .825 and a validity of .730 as checked against other measures of honesty.)

The examination papers were carefully pre-graded and closely screened after the students had "corrected" them. Most changes in scores were obvious when checked against the instructor's records.

A second regularly scheduled psychology examination of sixty-one items was given to the two psychology classes after four weeks. These examinations were also graded without marking the papers as before. When the papers were returned for this examination, the students were

told that the test papers had been graded and the scores recorded. They were informed that they were to correct their own papers in order to give the instructor a check on the efficiency of a new test scoring procedure.

This latter procedure was devised to serve as a check on the number of mechanical errors made by the instructor on the first examination. An allowance of two points gives the benefit of doubt to subjects for errors made by the instructor in recording the scores. The Hartshorne and May (1930) study also arrived at the two point figure by another process.

The Brown and Lowe (1951) Inventory of Religious Belief was given to the two psychology classes approximately sixty days later with no changes in the original instructions (see Appendix B). This fifteen item, Likert-type scale, though short and convenient to administer, has a reported split-half corrected reliability of .87 (plus or minus .0b) using the Spearman-Brown formula. Validity of the instrument was, in part, determined when it discriminated between liberal seminary students and Bible college students. A mean of 48.60 was reported for the former group as compared with a mean of 73.77 for the Bible college group. The Inventory score range was from a low of fifteen to a high of seventyfive points. Five possible points can be given for each of the fifteen items when a subject is in most favorable agreement with Christian dogma. This Brown and Lowe religious inventory was given to the two Introductory Psychology classes in order to divide the subjects into two groups, an upper one-third (high intensity) and a lower one-third (low intensity) of "Believers" in Christian dogma.

Following the Inventory, the two classes were given a questionnaire (Appendix B) dealing with various aspects of their religious beliefs and practices. No names were requested until these forms were completed. At this time it was explained that names were desired only for purposes of identification of the data and that anyone who objected to this request could withhold their forms. No forms were withheld.

A religious behavior statement form (Appendix B) was given to the two psychology classes five weeks later. This form asked subjects to write, in order of importance, five statements as follows:

What five things do you think a religious (Christian) person will do during any given week of his life because of his religion?

List these five things in the order that they are most likely to be done, thus, the most likely will be number 1 and so on until the fifth most likely is listed.

Subjects were not allowed to ask questions in order to avoid influencing the other subjects. They were given approximately five minutes to complete the form.

A pilot study, using the same form, was run on other Introductory Psychology classes to determine assignment of the free statements to categories. In this present study two raters assigned the various statements about Christian behavior to one of four religious goals designated by Kling (1961) in a study of the minister's goals:

- 1. Devotion to God, doing God's will.
- 2. Developing a sense of personal communion with God.
- 3. Participating fully in the life and work of the Church.
- 4. Being genuinely concerned about other people.

In this classification by Kling, ministers and lay persons ranked statement about the minister resulting in the four top ranked categories above. The first three statements deal with "fundamental" issues and the last with humanitarian or man-deals-with-man activities.

A total of seventy-six free-statements were judged by the two raters for all of the four categories above. The humanitarian statement from this classification was the only one used in the present study. (For examples of the statements made for all four categories as rated by the two judges in this study, refer to Appendix C). Fourteen of twenty-five statements were completely agreed upon as belonging to Kling's fourth "humanitarian" category:

- 1. Be kind and get along with others.
- 2. Be helpful.
- 3. Visit the sick.
- 4. Be hospitable.
- 5. Be willing to help others.
- 6. Treat others in a Christian way.
- 7. Feel bad if you don't help others.
- 8. Help others to lead a Christian life.
- 9. Help others.
- 10. Visit with neighbors and friends.
- 11. Help the needy.
- 12. Have compassion on your fellow man.
- 13. Do not have prejudices.
- 14. Help someone who is unfortunate.

In the pilot study, points were assigned inversely to the humanitarian statements. Five points were given if the first statement made was humanitarian, four points were given for the second statement, three for the third statement, two for the fourth statement, one for the fifth statement, and zero points for not having a humanitarian statement on the form. If all statements were humanitarian in content a subject could receive a maximum of fifteen points. It was found that the average number of humanitarian points was 2.1.7 with a range from zero to seven points. An arbitrary cutting point based on data later obtained in the actual research was used to compare those who expressed the notion that a religious person engages in humanitarian activities with those who did not express this idea.

One hundred and thirty students (forty-five per cent freshmen, thirty-two per cent sophomores, nineteen per cent juniors, three per cent seniors, and one per cent graduate students) from two classes of Introductory Psychology at Oklahoma State University were used as subjects. Subjects were administered several self-report forms during regularly scheduled classes over a period of one sixteen week semester.

In short, one hundred and thirty college subjects were divided into five categories involving religious attitudes and church-related activity. Scores were obtained for these five categories of variables, forming a high intensity and a low intensity group for each variable. Using an academic examination as the independent variable, an evaluation of honesty was made. The dependent variable, honesty of the subjects, is the criteria used to compare each of the high and low intensity groups.

III. RESULES

The difference in honcety between the five high intensity and the five low intensity groups that were compared was tested by the chi-square test (Snedecor, 1956). Four-way contingency tables were constructed for each hypothesis to be tested (Appendix D) and chi-square values were corrected for continuity.

The first fector to be considered using the chi-square test is a comparison of the honesty scores of one-third of the subjects who received the highest scores on the Christian Belief scale (high intensity group) with the honesty scores of the one-third who received the lowest scores on this inventory (low intensity group). The two groups of thirty subjects each were created by decignating the upper and lower one-third as arbitrarily representative of opposite poles of belief in Christian dogma.

As it turns out the Oklahoma college subjects used did not form a heterogeneous sample in regard to religious belief scores. Scores on the religious continuum are negatively skewed, contrary to the findings of the Brown and Lowe (1961) study in which the belief scores formed a nearly normal distribution (see Table II, Appendix D). The resultant skewing of belief scores in this investigation does not allow a desired comparison of honesty between "Believers" (sixty-five to seventy-five points) and "Nonbelievers" (fifteen to twenty-nine points) to be made. Instead, the comparison in this study becomes one between what was

called "Believers" (sixty-four to seventy-five points) and "Moderate Believers" (seventeen to fifty-four points) by Brown and Lowe on their Christian dogma inventory. This makes up the present study's high intensity and low intensity groups. The range of scores for this inventory, as was previously mentioned, is fifteen to seventy-five points.

Thus, the "Belief" groups formed by using the Brown and Lowe Inventory of Religious Belief in the two separate studies are comparable, but there is only a ten point difference between the high one-third group of believers and the low, or moderate, one-third group of believers in the present investigation. In contrast, there is a thirty-six point "cushion" of "Moderate Believers" between the high and low believers in the Brown and Lowe study.

As can be seen in Table I, the chi-square value of 1.42 is not significent at the five per cent level and, therefore, the hypothesis that there is no difference in honesty between the upper one-third or high intensity and the lower one-third or low intensity group of believers in Christian dogma is not rejected. The chi-square test does not indicate that a person who receives a moderate score on the Brown and lowe inventory of belief is less honest on a college examination than a person who receives a high belief score.

In order to provide a check on mechanical errors made by the instructor in grading the examinations, a second examination, as has been mentioned, was given but the subjects were informed that their grades had previously been determined and recorded. The subjects were then instructed to correct their own papers as before. The two sets of results were then compared, those from the actual independent variable.

TABLE I

CHI-SQUARE VALUES FOR VARIOUS HONESTY COMPARISONS¹

Nul	1 Hypotheses	Number of Subjects	Chi-Square Value
1.	Upper One-Third Versus Lower One-Third of "Believers"	60	1.l ₂ 2
2.	Humanitarian Expectation Versus Non-Expectation	88	2.88
Wit	thin the Upper One-Third of "Believers":		
3.	Those Who Attend Church Once Monthly Versus Those Who Attend Less	29	1.75
4.	Those Who Read the Bible Once a Week or More Versus Those Who Read It Less	29	2.73
5.	Those Who Pray Once a Month or Nore Versus Those Who Pray Less	29	1.20

¹⁰ne degree of freedom is used with the chi-square test of independence.

(honesty evaluation) and those from the error-checking examination.

This error-checking procedure may not serve as a useful and accurate check as the instructor accidentally learned, at a later date, that some of the subjects changed their scores on this second examination with the idea that the papers had not actually been pre-graded.

The average difference between the instructor's examination scores and the subject derived scores were computed for both the honesty examination and the error-checking examination. The mean difference in the instructor's scores and the subject's scores for the honesty examination is 1.7h (see Table IV, Appendix D, for complete distributions). The mean difference between instructor and subject scores in the error-checking procedure is only .19. Standard deviation for the honesty examination is 3.35. For the error-checking examination the standard deviation is .h2.

Variance for the error-checking examination is 1.79 as opposed to 11.21 for the actual honesty examination. This distribution of errors suggests that changes above the error-checking variance (1.79) should adequately constitute a change in the true examination grade and can be considered an attempt to cheat on the examination. Any change of two or more points is to be considered as dishonest. As the error-checking examination also has some variance due to a small and indefinite amount of cheating, the use of a two point allowance seems more than reasonable.

The second variable considered is the relationship between scores derived from expressions that were judged to be humanitarian in content and honest behavior on a college examination. The determination of scoring for statements by subjects who consider the Christian as one who

performs humanitarian acts was arbitrary. The decision to compare the honesty of subjects who did not make humanitarian statements (zero points) against those who did (three to seven out of a possible fifteen points) was based on two factors. First, nearly one-third of the subjects who filled out the forms (Appendix B) in a pilot study did not make humanitarian statements. This creates a substantial low intensity group to use in a chi-square comparison.

In the actual study, the mean score for humanitarian statements was 1.57. The standard deviation was 1.87 (see Appendix D, Table II, for the complete distribution). It was arbitrarily determined from these data to place subjects who did not make humanitarian statements (zero points) in the low intensity group and those who made three or more points in the high intensity group. This represents an effort to avoid influencing the high intensity group with borderline attitudes.

By looking at Table I and at Table I, Appendix D, it can be seen that the comparison of the humanitarian-non-humanitarian attitude groups (zero points versus three to seven points) by the chi-square test of independence results in a value of 2.88 which is not significant at the five per cent level. This result supports the hypothesis that there is no difference in honesty between those who expect Christians to engage in humanitarian activities and those who do not have this expectation.

Though the original chi-square test value of 2.88 is not statistically significant at the five per cent level, it is significant at the ten per cent level, indicating the presence of a tendency on the part of one pair of variables to affect the other pair. Inspection of the data (Table I, Appendix D) reveals that those who express an expectation of

humanitarian behavior on the part of Christians tend to be slightly more honest on a college examination.

The third consideration of this investigation deals with three activities that high intensity believers (the upper one-third of scores on the Belief Inventory) in Christian dogma engage in and whether or not these activities are related to being more honest on a college examination.

The questionnaire which was given to the subjects obtained frequencies of participation in several church-related activities (Appendix B). Three of these activities; church attendance, prayer, and Bible reading, were subjected to the chi-square test of independence. Subjects were compared to determine if those who are high intensity believers in Christian teachings are more honest if they attend church once a month or more, or read the Bible once a week or more, or if they pray once a month or more. In each of these cases, subjects were compared with high intensity believers in Christian dogma who seldom or never attend church, read the Bible, or pray.

The hypothesis that persons who believe in the teachings of Christianity and who attend church once a month or more are no more honest than believers who attend church seldom or never is not rejected at the five per cent level (Table II). This result indicates that more frequent attendance of church is probably independent of honesty and probably has no effect on whether or not a person cheats on a college examination.

There is no difference in honesty within the high intensity belief group between those who pray frequently and those who pray saldom or never. This hypothesis, then, is also not rejected at the five per cent level. The chi-square value of 1.20 suggests that praying more

TABLE II.

CHI-SQUARE TEST FOR INDEPENDENCE OF SEX EFFECTS IN VARIOUS HONESTY COMPARISONS

####	(本) 中央の大きが行から、前に関わっているのでは、ためからからから、中央できた。これでは、からなど、からなど、からなど、からなど、からなど、からなど、からなど、からなど	in the E		.Fom21es	
applicate soften		Cai-Square	Muder	Ohi-Square	Number
1.	Upper One-Third Versus Lower One-Third of "Believers"	. 096	32	2.28	26
2.	Humanitarian Expectation Versus Non- Expectation ²				
Wit	hin the Upper One-Third of "Believers":				
3.	Those Who Attend Church Once Monthly Versus Those Who Do Not	.18	8	1.09	21
lı.	Those Who Read the Biblo Once a Week or More Versus Those Who Do Not	•09	8	0.0	21
5.	Those Who Pray Once a Month Versus Those Who Pray Less	. 32	6	.68	21

 $^{^2}$ A chi-square sex comparison was not made. See Table III for a t-test comparison of this variable.

frequently on the part of believers is not related to being more honest on an academic test.

Similarly, those persons who read the Bible once a week or more and who receive high scores on the religious inventory, are not significantly nore honest than those believers who read the Bible seldom or never.

Again, using the chi-square test of independence, no statistically significant effect at the five per cent level was observed.

Upon inspecting the data, it was observed that the high intensity "Belief" scores of the total population of females in the study tended to be higher than those for males. A t-test was used to compare the means of the "Belief" scores of men and women (see Table III). A t-test was also computed to determine if a sex difference exists in the hypothesis on humanitarian expectations.

TABLE III
t-TEST COMPARISONS OF POPULATION MEANS FOR HOMOGENEITY OF SEX

Comparison	t-Value
Mean Belief Scores (Males Versus Females)	3 . l/3****
Mean Humanitarian Expectation Points (Males Versus Females)	.71
***Significant at the .001 level.	D Adajas varzi i annolosayn, idajastero obologaja o ovazye s

In the case of the high intensity "Belief" scores, females were found to score significantly higher than males at the .OCl level. This is the only statistically significant finding of the investigation. In the case of the humanitarian scores, no significant sex differences were

observed. The t-test value of .71 is not significant at the five per cent level.

In each hypothesis discussed above, except one, the chi-square test for independence was applied to determine if there was a tendency for a difference in sex to affect the obtained ratios (see Table II). The chi-square test of independence was not applied to determine the possible presence of sex differences in humanitarian expectations, but a t-test was used instead, as has been noted.

No significant effects on honesty were observed in the chi-square values for male versus female effects in each of the above null hypotheses.

No significant chi-square values were found for any of the proposed null hypotheses at the five per cent level of significance (Table I). A lack of significance indicates that the null hypotheses are tenable and not to be rejected, supporting the fact that the two ratios for each pair of factors are probably samples from the same population - there is apparently no influence on the part of church-related activities on the dependent variable of honest (or dishonest) behavior.

IV. DISCUSSION

The analysis has failed to demonstrate significant differences in honesty within the high intensity belief group between persons who participate more frequently in certain religious activities, and who strongly believe or do not believe in Christian dogma.

The results of this investigation support the original Hartshorne and May (1930) conclusion that frequency of Sunday School attendance (church attendance in this study) does not increase the likelihood of more honest behavior. The age of this present sample is greater than that of the group investigated by Hartshorne and May over thirty years ago; however there seems to be no other comparison of honesty and religious activities in a comparable age group.

There are, also, apparently no other available investigations which attempt in any way to relate religious attitudes to honesty. This attempt indicates that a high intensity of religious belief is not related to more honest behavior. This conclusion is based upon one kind of honesty measure, cheating on a college examination, and one kind of measure of religious attitude obtained by a short belief inventory which examines expressed agreement or disagreement with dogmatic Christian statements.

In regard to the hypothesis that persons who anticipate that a religious person will exhibit humanitarian behavior, those subjects who do anticipate humanitarian behavior are found to be no more honest than

those subjects who do not anticipate such humanitarian activity. This result suggests that humanitarian attitudes of themselves do not contribute to being more honest. This extension of the result is true assuming that a projected humanitarian attitude on the part of subjects is an expression of their own attitudes toward humanitarian activity. If this assumption is not a valid one, then the comparison remains as one between the honesty of subjects and their anticipation of humanitarian behavior on the part of a religious person.

That humanitarian attitudes do not cause more honest behavior seems contrary to what might be expected. It is interesting that there is a tendency to be more honest on the part of those subjects who do anticipate humanitarian acts by Christians (at the ten per cent level).

Frequent church attendance on the part of the high intensity belief group is also apparently unrelated to more honest behavior.

A lack of honesty on the part of persons who attend church services regularly would not be a surprising result. Findings by Kling (1961), and Fukuyama (1960), as well as a predicted result by Glock (1959), show that church attendance is often no more than a ritual where religious values are not internalized. Persons are, then, not likely to be more honest as a result of church attendance alone.

Praying once or more per month does not, at the same time, significantly contribute to being more honest. The act of praying, as a church related behavior, cannot be claimed as contributing to greater honesty. There is a slight tendency, however, significant at the ten per cent level, for those who pray once a month or more to be more honest on the college examination than those who pray less than once a month.

It is interesting that females in the upper one-third or high intensity group of Believers all prayed more than once a month. This observation is based on only twenty-one subjects, but, along with the significantly higher (.001 level) belief scores obtained by the female sample, this fact may provide a clue to be followed up in investigating sex differences in religious personality. That women score higher on religious attitude inventories is not unusual (Clark, 1950, Kirkpatrick, 1949, and Vernon, 1955).

In spite of the fact that honesty is very frankly taught in the Bible (Young, 195h) no significant relationship was found to exist between honesty and the various church-related variables measured in this study.

If this finding is generally true, then one of the three initial speculations (see page 1), that the honesty of religious persons is a result of Christian teachings, is not upheld. This implies that the other two speculations (that honesty is possibly a result of projection out of fear of damnation or the result of ethnocentric in-group beliefs) are without value unless honesty is in some way related to religion.

Aside from the fact that none of the null hypotheses are rejected by the chi-square analysis, and that only one factor, the Belief of females regarding Christian dogma is significantly higher than the Belief of males, some other factors deserve consideration.

The Belief of the college sample at Oklahoma State University is skewed toward the high or Belief end of the Christian dogma continuum. This negative skewing of the distribution of belief scores is contrary to the finding of the Brown and Lowe (1951) result which, with a large number of subjects, 622, formed a nearly normal distribution. Sixty-eight

per cent of the Brown and Lowe group fell within plus and minus one standard deviation from the mean, allowing a convenient cushion between the compared "Believer" and "Nonbeliever" groups.

Because of the skewing in the present investigation, a "Non-believer" group comparable to the one in the Brown and Lowe experiment does not exist. As a result, it is necessary to compare an upper one-third of the population group (high intensity believers) against a lower one-third group (low intensity believers) which contains one "Non-believer" and the rest moderate believers.

Because of the skewing of the distribution toward high Belief scores, the conclusions of this present investigation are limited as there is no way to determine from present data whether there is an actual difference in honesty between "Believers" and "Nonbelievers" as would be possible in a more normally distributed population.

It is not possible, at the same time to compare the honesty of the Oklahoma sample with another more religiously heterogeneous population because there are no studies of honesty and religion available. Until additional data are available, there is no way to determine whether the more "religious" population is more honest than a less religious population.

The present Oklahoma college sample is probably more religious than the Colorado population of ten years ago. This agrees with the fact that Oklahoma is considered a part of the "Bible-Belt" as mentioned by Adorno (1950).

Humanitarian attitudes do not seem to contribute to more honest behavior, but the relationship between honesty and humanitarianism needs further study in order to arrive at a more concrete conclusion. Further, Kirkpatrick (1949) offers evidence that women are significantly more humanitarian than men, a result not supported by the present study. The Kirkpatrick result was obtained by using a humanitarian attitude inventory. It would be useful to more fully explore the relationship between this study's anticipation of humanitarian behavior and humanitarian attitudes as measured by such an attitude inventory and an honesty behavior measure.

In the investigation of this humanitarian variable two raters were used to determine which statements made by the subjects on the free-form blank (see Appendix B) were humanitarian in content. In order to increase the reliability of selecting these statements, several raters should be used. Reliability of selection of the statements would also then be subject to statistical correlation.

Regarding the classroom examination as a measure of honesty, such a procedure should be recognized as a situational test of cheating behavior and is only one kind of measure of honesty. It has been pointed out by Hartshorne and May (1930) that a person may display dishonest behavior in one situation, such as cheating on an examination, and consider it as acceptable behavior in that situation, while in other circumstances the same person will display honest behavior. This present investigation of honesty and religious behavior is limited to this one situation. However, it is demonstrated in this study that various church related factors do not cause persons to be more honest on a college examination.

This kind of classroom examination was also used by Hartshorne and May (1930). In this earlier study a reliability of .825 and validity of .730 were reported when the examination was compared with other measures

of honesty. The implication is that the test used in this study to determine honest behavior is a valid and reliable indicator of honesty though limited to the situation of cheating on a college examination.

In a study of this type, it is important to carefully control procedures used to measure honesty. This particular facet of the study is crucial to accurate placement of subjects in honest or dishonest categories. The smaller the distribution of errors, the less allowance necessary for individual cases of extreme error deviation.

There are, besides some of the previous considerations, other factors which might be altered to provide for a more precise future investigation. Following administration of the Brown and Lowe Inventory of Religious Belief, the questionnaire obtaining other religious information was given to the subjects. There was no variation in order of presentation and it is conceivable that the administration of the Inventory followed by the questionnaire (see Appendix B) influenced the answers on the questionnaire. It is highly possible that the reported frequencies of church attendance, Bible reading, and prayer are greater than they might otherwise be. Ego-involvement with the religious questions on the inventory may well have carried over to the questionnaire. There is, however, no way to determine the existence or the amount of such an influence without additional research.

It is suggested that future investigation provide for alternation in administration procedures, for a time lapse or for both alternation and a time lapse to control and/or determine possible effects of one form upon the other.

Another point that would benefit the study is a reconsideration of the frequency of prayer (Appendix B) that was selected. The frequency week or more instead of once a month or more. The present choice may be unrealistic as persons who do pray would do so at least as often as they would read the Bible. A high frequency of prayer would be due to the number of possible opportunities for prayer (grace, devotionals, church services, bedtime, etc.). There is no set rule for determining such frequencies.

There exists any number of possible methods to investigate religion and honesty, but in view of the present study, two factors are of special interest by way of clarifying the results.

First, the Brown and Lowe Inventory should be used with other populations to establish whether or not it is as valid a measure of Christian Belief as it seemed to be with the Colorado population some ten years ago. Establishing this validity would support two results of the study between religious behavior and honesty; one, that this Oklahoma population of college students tends to score higher in belief than the Colorado population, and two, that the present finding, supported by other studies, that women score significantly higher than men in regard to belief.

Secondly, and probably of most value, would be a duplicate study using the present methods for investigating the relationship between various church-related factors and honesty. Of specific interest would be a comparison of the honesty of a group of "Believers" and "Non-believers" as measured by the Brown and Lowe Inventory of Religious Belief and/or by a religious attitude measure of greater depth using a population that is religiously more heterogeneous (see Strunk, 1958, for an extensive survey of the literature). Such a study would show more

clearly whether "Believers" in Christian dogma and/or religious persons in general are more honest than "Wonbelievers" or nonreligious persons.

V. SUMMARY

This investigation has empirically examined the relationship between a dependent variable of honesty and five other variables consisting of certain church-related activities and religious attitudes. The independent variable, an inventory of belief in Christian dogma (Brown & Lowe, 1954) was given to over one hundred subjects to divide them into a high and a low intensity group. These groups were separated according to scored statements about the subjects' beliefs in Christian teachings. Secondly, a free-statement form was used to divide the population into high and low intensity groups on the basis of humanitarian anticipation. These forms asked for five statements from each subject involving attitudes toward Christian activities. Each of the statements about the Christian activities were placed into one of four categories (Kling, 1960) by two judges. One of the four categories involved the humanitarian statements. The statements were assigned a numerical value according to the order that each subject placed them on the free-statement form. Subjects were then placed into a high intensity or low intensity group according to the value of their humanitarian statements. Thirdly, a questionnaire was given to the subjects and three categories; frequency of church attendance, frequency of prayer, and frequency of Bible reading, were evaluated. A high intensity group and a low intensity group were formed for each of these three variables on the basis of frequency of participation.

The independent variable, consisting of an academic examination, provided the subjects with an opportunity to cheat, resulting in the dependent variable, the honesty or dishonesty of the subjects. The analysis of the research involves a comparison between the honesty of the five high intensity groups and the honesty of the five low intensity groups for the above variables.

The following results were obtained from comparisons of the high and low intensity groups for each of the five variables, using honesty as the criteria:

- 1. A higher intensity of belief in Christian dogma did not relate to greater honesty on the part of college students.
- 2. An expressed humanitarian attitude of high intensity did not relate to greater honesty.
- 3. Attending church once a month or more on the part of the high intensity belief group did not relate to greater honesty.
- 4. Praying once a month or more on the part of the high intensity belief group did not relate to greater honesty.
- 5. Reading the Bible once a week or more among the high intensity belief group did not relate to more honest behavior.
- 6. Women have a significantly higher intensity of belief in Christian teachings than men, a result common to religious investigations.
- 7. The college population at Oklahoma State University tends to demonstrate higher belief scores than a similarly investigated Colorado college population.

Though this test of honesty is apparently situational, this investigation indicates that the churches have not been, as hes been traditionally held, a source of more honest behavior.

The results of this investigation, especially those in regard to church attendance, support the Hartshorne and May conclusion that frequency of Sunday School attendance is not related to more honest behavior.

The tendency of the presently investigated sample to score heavily in high intensity of belief in Christian dogma has interfered with the research as honesty could not be compared between a group of high intensity "Believers" and a truly representative low intensity group of "Nonbelievers" in Christian dogma. A clearly defined group of low intensity "Nonbelievers" was not found in this investigated population.

REFERENCES

VI. REFERENCES

- Adorno, T. W., Frenkel-Brunswik, Else, Levinson, D. J., & Sanford, R. N. The authoritarian personality. New York: Harper Brothers, 1950.
- Allport, G. N. The individual and his religion. New York: MacMillan Co., 1950.
- Broen, W. E., Jr. A factor-analytic study of religious attitudes. J. abnorm. soc. Psychol., 1957, 54, 176-179.
- Brown, D. G., & Lowe, W. L. Religious beliefs and personality characteristics of college students. <u>J. soc. Psychol.</u>, 1951, 33, 103-129.
- Clark, H. C., & Warner, C. M. The relation of church attendance to honesty and kindness in a small community. Relig. Educ., September-October, 1955, 340-342.
- Clark, W. H. The psychology of religious values. Pers., 1950, 1, 15-62.
- Clark, W. H. The psychology of religion. New York: MacMillan Co., 1959.
- Dominic, S. M. Religion and juvenile delinquency. Amer. Cath. Sociel. Rev., 1954, 15, 256-264.
- Diamond, S. Information and error. New York: Basic Books, 1959.
- Elliot, M. A. Crime in modern society. New York: Harper Brothers,
- Fairchild, R. W., & Wynn, J. C. Families in the church: a Protestant survey. New York: Association Press, 1961.
- Fukuyama, Y. The major dimensions of church membership. Unpublished doctoral dissertation, Univ. of Chicago, 1760.
- Glock, C. Y. The religious revival in America? Religion and the face of America. / Jane C. Zahn, ed. / Berkeley, Calif.: University Extension, Univ. of Calif., 1958.
- Hartshorne, H., & May, M. A. Stables in deceit. (Vol. II). New York: NacMillan Co., 1930.

- Kirkpatrick, C. Religion and humanitarianism; a study of institutional implications. <u>Psychol. Honogr.</u>, 1949, 63 (Whole No. 304).
- Kling, F. R. Value structures and the minister's purpose. Pastor. Psychol., 1961, 12, 13-23.
- Mansel, G. R. A study of religious training as a psychological factor in delinquency. Unpublished doctoral dissertation, Ohio State Univ., 1930.
- O'Brien, J. A. Truths men live by. New York: MacMillan Co., 1947.
- Patrick, E. W. Significant factors associated with the success of vocational trainees and parolees at the Federal reformatory, El Reno, Oklahoma. Unpublished doctoral dissertation, Okla. State Univ., 1958.
- Snedecor, G. W. Statistical methods. (5th ed.). Ames, Iowa: Iowa State College Press, 1956.
- Strunk, O., Jr. The psychology of religion: an historical and contemporary survey. Psychol. Newsletter, 1958, 9, 181-199.
- Teleford, C. W. A study of religious attitudes. J. soc. Psychol., 1950, 31, 217-230.
- Vernon, G. M. An inquiry into the scaleability of church orthodoxy. Social. Soc. Res., 1955, 39, 324-327.
- Young, R. Analytical concordance to the Bible. (22nd ed.). Grand Rapids, Mich.: Wm. B. Ferdmen's Pub. Co., 1955.

APPENDICES

APPENDIX A

APPENDIX A

This is a statement given to the two classes of Introductory

Psychology students when their unmarked examination papers were returned to them after the instructor indicated that he did not have time to grade them:

These tests haven't been graded. In order to let you know how you did, you'll grade your own paper and we'll discuss them today.

The purpose of a test is to provide a learning experience as well as to give you an indication of how well you have done. This will give you an opportunity to learn and to help me get a grade for your work.

APPENDIN B

INVENTORY OF RELIGIOUS BELIEF

This is a study of religious belief. Below are fifteen items which are to be answered in the following manner:
Place a line under Strongly agree if you agree strongly with the statement.
Place a line under Agree if you agree with the statement.
Place a line under Not Sure if you are in doubt as to whether you agree or disagree with the

statement.

Place a line under Disagree if you disagree with the statement.

Place a line under Strongly Disagree if you disagree strongly with the statement.

Remember to read each statement carefully, and mark only one answer for each item.

Poople differ widely in their beliefs: please indicate your own in the manner described.

3	It makes no difference	whathan o	na la a Christian	or not as long as one	lone cood and 11 Com
1.	others.				•
	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
2.	I believe the Bible is Strongly Agree	the inspi Agroe	red Word of God. Not Sure	Disagree	Strongly Disagree
3.	God oreated man separa Strongly Agree	te end dis Agree	tinct from animal Not Sure	s. D i sagree	Strongly Disagree
4.		ecessary i Agree	n our enlightened Not Sure	age. Disagree	Strongly Disagree
5.	There is no life after Strongly Agree		Not Sure	Disagree	Strongly Disagree
6.	I believe Jesus was bo Strongly Agree	rn of a Vi: Agrec	rgin. Not Sure	Disagree	Strongly Disagree
7.	God exists as: Pather Strongly Agree	, Son and 1 Agree	Holy Spirit. Not Sure	Disagree	Strongly Disagree
8.	The Bible is full of e Strongly Agree	r ro rs, mis Agree		ontradi c tions. Bisagree	Strongly Disagree
9.	The Gospel of Christ i Strongly Agree	s the only Agree	way for mankind . Net Sure	to be saved. Disagree	Strongly Disagree
10.		n many men Agree		as great as Jesus. Bisagree	Strongly Disagree
11.	I believe there is a h Strongly Agree			Disagree	Strongly Disagree
12.	Eternal life is the gi	ft of God	only to those who	believe in Jesus Chris	t as Savior and
	Lord. Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
13.	I think a person can b Strongly Agree	e happy and Agrae	d enjoy life with Not Sure	out believing in God. Disagree	Strongly Disagree
14.			ba c k and retarded Not Sure	human progress. Bisagree	Strongly Disagree
15.	I believe in the perso Strongly Agree	nal, visib Agree	le return of Chris Not Sure	st to the earth. Disagree	Strongly Disagree
-			والمراج فالمنصف وجازتها والتقاميات والمساول بالموادية		

This is a survey of students on this campus to determine what religious practices and preferences exist.

Please answer the following as honestly as you can. Do not leave out any item.

Age	Sex.	Gless	anders and the second s
Hometown	an a	State	Honetom Size
Church Prefer	19200 ***********************************	Military new majora water majora na silikuwa na silikuwa na silikuwa na silikuwa na silikuwa na silikuwa na si) NATION CONTINUES COLLEGE
			- CONTROCACIONAL SIGNOS (NO. NA) CONTROL MODIS (NO. NA ACCURACIONA NA ACCURACIONA SIGNOS (NO. NA ACCURACIONA SIGNOS (NO. NA ACCURACIONA
Are you a men	ber?	gillings-yeak anin'i Sarragapu. 4,40 tao	
What other ch	urch groups do	you attend?	FRALL 40000690 TEP (UMONETIC 1521 ACCUMENTATION (UMONETIC UMONETIC COMPANIES COMPANIES ACCUMENTATION (UMONETIC)
Do you go to once or more	church (underli		r) or more per month?
seldom?		Neve	r?
Do you pray At least once	a day?	one (or more times a month?
seldom?		Nevei	r?
Do you read tevery day?	he Bible	one (or more times a week?
seldom?		nevei	r?
ship, communi		ig, play an ins	church (i.e., help with wor- strument, lead prayer, preach,
	occasionally?		ly? Never?
			onal work, visiting the sick og church activities etc.)
Often?	occasionally?	lare]	ly? Never?
Do you object	to the telling	of off-color	stories.
completely?		If they are in	n bad taste?
only if the c	pposite sex is	around?	Do not object.
Do you feel t	hat drinking al	coholic bever	eges is:
completely wr	ong?	Mot	t elways wrong?
acceptable wi	th moderation?	Acc	ceptable?

Do you drink alcoholic beverages?

Often?

occasionally?

Rarely?

Never?

Do you feel that smoking is:

acceptable?

acceptable with moderation? not entirely wrong?

completely wrong?

Do you smoke?

often?

occasionally?

Rarely?

Never?

Do you feel that swearing (profanity) is:

acceptable behavior?

acceptable with unmixed company?

Not completely wrong?

Completely wrong?

What five things do you think a religious (Christian) person will do during any given week of his life because of his religion?

List these five things in the order that they are most likely to be done, thus, the most likely will be number 1 and so on until the fifth most likely is listed.

1.

2.

3.

<u>L</u>.

5.

APPENDIX C

APPENDIX C

The following are examples of some of the statements made by subjects on a free response form (see pages 8-10). These statements reflect the manner in which subjects conceive religious persons to behave because of their religion. Each statement is placed with the proper goal category (Kling, 1961) as it was agreed upon by both of two judges:

1. Devotion to God, doing God's will.

Be honest.
Make decisions in a Christian way.
Apply Bible lessons to life.
Have faith in God.

2. Developing a sense of personal communion with God.

Pray daily.
Study the Bible.
Thank God for blessings.
Say grace at meals.

3. Participating fully in the life and work of the Church.

Worship.
Tithe.
Attend church services.
Participate in church activities.

h. Being genuinely concerned about other people. (See page 9 for the full list of statements.)

Help others. Visit the sick. Treat others in a Christian way. Do not have prejudices. APPENDIX D

APPENDIX TABLE I

FOURFOLD CONTINGENCY TABLES: CHI-SQUARE TEST OF INDEPENDENCE
UPPER ONE-THIRD VERSUS LOWER ONE-THIRD OF BELIEF

Experimental variable	Number Honest	Number Dishonest	Totals	Chi-Square Values
Males and Females:				
Upper one-third of Belief	24	6	30	
Lower one-third of Belief	21	6 9	30	
Totals	45	15	60	1.42
Males:				
Upper one-third of Belief	5	5 8	10	
Lower one-third of Belief	14	8	22	
Totals	19	13	32	.096
Females:				
Upper one-third of Belief	19	1	20	
Lower one-third of Belief	7	1	8	
Totals	26	2	28	2.28
Males and Females:				
Humanitarian Expectation	27	7	34	
No Humanitarian Expectation	35	19	34 54	
Totals	62	26	88	2.88*

*Significant at the ten per cent level.

APPENDIX TABLE II t-TEST OF SEX DIFFERENCES FOR BELIEF AND HUMANITARIANISM

Variable	Number of Subjects	Mean Score	Median Score	Standard Deviation	Variance	Standard Error of the Mean	t-Value
Belief	10h	59.93	60.0	7.78	60.45	.58	
Male		57.20	56.50	5.66	32.0	.64	
Female	50 54	62.0	63.0	8.42	70.85	1.31	3.43***
Brown and Lowe							
Study	622	47.16		12.33		.49	
Humanitarianism	119	1.57		1.87	3.48	.03	
Male	59 60	1.46		1.99	3.98	.07	
Female	60	1.70		1.74	3.03	.05	1.64

***Significant at the .001 level of confidence.

APPENDIX TABLE III

FOURFOLD CONTINGENCY TABLES: CHI-SQUARE TEST OF INDEPENDENCE
WITHIN THE UPPER ONE-THIRD OF BELIEF

Experimental Variable	Number Honest	Number Dishonest	Totals	Chi-Square Value
Attends Church Once or More Per Month	21	ď	26	
Attends Church Less Than Once a Month	2	1	3	
Totals	23	6	29	1.75
Prays Once or More Per Month Prays Less Than Once a Month	21 2	6	27	
Totals	23	6	29	2.73*
Reads the Bible Once or More Per Week Reads the Bible Less Than Once a Week	12 11	4 2	16 13	
Totals	23	6	19	1.20

^{*}Significant at the ten per cent level.

APPENDIX TABLE IV
SAMPLE DISTRIBUTIONS FOR THE HONESTY EXAMINATION AND ITS ERROR-CHECKING PROCEDURE

AND THE PROPERTY OF THE PARTY O	Number of			Standard Error		
Variable	Subjects	Mean	Median	Deviation	Varience	of the Mean
Honesty	119	1.74	.09	3.35	11.21	.31
	•••••			* * ***		• • • • • • • • • • • • • • • • • • • •
Error Check	122	.19	.72	.42	1.79	·Ola

APPENDIX TABLE V

FOURFOLD CONTINGENCY TABLES: CHI-SQUARE TEST OF INDEPENDENCE SEX DIFFERENCES WITHIN THE UPPER ONE-THIRD OF BELIEF

attings virigina apperior pasagraniana menera piratti i periornahan cenjes i perjempia necimatri dan patri professiona i patri	MALES				c. (Párimaniania)			
Experimental Variable	Number Honest	Numbe r Dishonest	Totals	Chi- Square	Number Honest	Number Dishonest	Totals	Chi- Square
Attends Church Once		,						
or More Per Month Attends Church Less	L	2	6		17	3	20	
Than Once a Month	1.	1	2		1	0	1	
Totals	5	3	Ê	.18	18	3	22	1.09
Preys Once or More	'n	2	6		18	o	18	
Per Week Prays Less Than Once	3	3				·		
a Week	2	0	2		3	0	3	
Totals	5	3	8	.09	21	0	<u> 21</u>	0.0
Reads the Bible Once								
or More a Week Reads the Bible Less	2	1	3		10	3	13	
Than Once a Week	3	2	5		8	0	8	
Totals	5	3	8	. 32	18	3	21	.68

VITA

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