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AN ASSESSMENT OF ATTITUDINAL RIGIDITY IN RELATION  
// TO AGE AND ABSTRACT INTELLIGENCE

A Thesis

by

SHARON STORY AUSTIN  
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Submitted to the Graduate School  
Appalachian State University  
in partial fulfillment of the requirements for the degree of  
MASTER OF ARTS

August 1982

Major Department: Psychology

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ABSTRACT

AN ASSESSMENT OF ATTITUDINAL RIGIDITY IN RELATION TO  
AGE AND ABSTRACT INTELLIGENCE. (August 1982)

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Although older adults are often characterized as rigid in both beliefs and behavior, research is often confounded by cohort differences and is usually not directed specifically to attitudes. Age, abstract intelligence and demographic variables were examined in relation to attitudinal rigidity, as assessed by Harvey's Conceptual Systems Test. Male and female members ( $n = 53$ ; ages 18-88) of various community organizations served as subjects. Age was found positively related to rigidity, while no significant relationship was observed between abstract intelligence and rigidity. Age did not account for a significant proportion of the variance in rigidity after the effects of selected variables were removed. Instead, frequency of the respondent's church attendance and rearing children were found to be positively related to attitudinal rigidity.

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## INTRODUCTION

Societal attitudes toward aging may be critical for older adults' adjustment and survival. In contemporary society perceived differences between generations have become pronounced and older adults are often viewed as inflexible and rigid in both attitudes and behavior. In fact, the result of negative attitudes may be observed in the frequent neglect and rejection of the elderly and in the seeming inability or unwillingness of younger adults to plan for old age (Bennett & Eckman, 1973).

Numerous sociological studies examining social, political, and economic issues are often taken as empirical support for the contention that older people become more rigid as they grow older (Cutler, Lentz, Muha, & Riter, 1980). This position is derived from the fact that older people are more cautious than middle age persons who, in turn, are more cautious than younger persons. Other studies, however, are appearing in the sociological literature to challenge these suppositions. For example, a 24-year follow-up study on individuals attitudes toward traditional morality (Willits, Bealer, & Crider, 1977) demonstrated that considerable differences exist among people in the degree and direction of their attitude change. The findings suggested that although change does occur over time, these changes are likely to be in a liberal direction if there is a

growing liberalization of attitudes in the society at large. The authors concluded that attitudinal rigidity is not necessarily the norm.

For the most part, psychologically-based studies concerning age-related changes and rigidity, cautiousness, and growing resistance to change (Cutler & Kaufman, 1975) have been consistent with the view that aging is associated with growing rigidity. "You can't teach an old dog new tricks" seems, even to psychologists, to be more than a time-worn cliché.

Most psychological research on rigidity in the elderly has focused on the reported behavior itself. However, there are problems with this research. The concept of rigidity has not been clearly defined. For example, definitions range from inability to shift expectancy or set and control inhibition (Heglin, 1956), to difficulty in re-organizing habits (Entwisle, 1959), to inappropriate perseveration (Shultz, 1977). Although much of the behavioral research indicates that older adults are more rigid than are younger adults, the results are often ambiguous and yield no conclusive evidence that rigidity is intrinsic to maturation age changes (Chown, 1961; Schaie, Labouvie & Buech, 1973; Schaie & Labouvie-Vief, 1974). The behavioral studies do not address attitudinal rigidity, or the tenacity with which people cling to their beliefs, which has received scant attention in the literature of the elderly. Further, of the existing research on attitudinal rigidity, most has been directed toward a personality correlate of resistance to change--dogmatism (Ackerman, 1978; Reigel & Reigel,



1960). For instance, in a study on the relationship between dogmatism and cognition, Ackerman (1978) found age to be negatively related to the level of dogmatism in an individual. Reigel and Reigel (1960) administered their own rigidity and dogmatism tests (questionnaire form) to groups of both young and elderly adults and found few differences in dogmatism scores with increasing age; however, their results showed a consistent rise in rigidity with age. These findings were complicated by the fact that very low correlations (.22 - .46) were found between the two tests, both of which were designed to measure resistance to change.

In summary, there do not appear in the literature sufficient amounts of data to assert that rigidity is related to the aging process. Even studies whose data appear to support such claims often overlooked the significance of cohort (i.e., persons born during the same general time period) differences. For example, Ackerman (1978) found level of education to be the most significant factor in the prediction of dogmatism, yet age is inversely related to the level of education in our society. The life course of any particular cohort will reflect its own unique background, kinds of people involved, and the special sociocultural and environmental events to which a person is exposed. Thus, differences in education, sex of the individual, and exposure to varied and heterogeneous circumstances (e.g., marital and family status, residential history, degree of involvement in organized religious activity, etc.) are generally expected to be conducive to cohort differences (Willits et al., 1977). Since differences reported among age



groups may be confounded by cohort differences rather than maturation, cross-sectional studies rarely permit any conclusions to be drawn about the age-rigidity relationship.

Some of the problems in research on age and rigidity may be overcome by considering a more appropriate measure of attitudinal rigidity. One variable which may be an important determinant in assessment of resistance to change, namely, concreteness-abstractness, is suggested by personality research in cognitive style. O. J. Harvey and his colleagues (Harvey, Hunt, & Schroder, 1961; Harvey & Ware, 1967) have identified concreteness-abstractness as a higher order personality variable affecting the structure and process of belief systems and related behavioral characteristics.

Concreteness-abstractness is one of the two main variables (the other being relations to other people) in Harvey's Conceptual Systems Theory (1971) which is directed toward an understanding of how people receive and process information and how they use it. Of special interest is the kind of information that constitutes a potential threat to the person's existing system of beliefs. The basic assumption of the theory is that when facing a situation of personal relevance, an individual will somehow structure it in ways compatible with his or her motives and subjective ends (Harvey, 1967). This underlying assumption appears to stress a key factor that is often ignored in studies between age groups--individual differences (Botwinick, 1978).

A conceptual system is a set of beliefs and concepts, and operates primarily as an information processing system. Each

system has a characteristic level of concreteness-abstractness (the lower level being concreteness, and the higher level abstractness) in cognitive functioning so that there is a range of differentiation and integration within and among its concepts. However, concreteness-abstractness is only one of the dimensions on which the systems differ from each other; each system leads to a characteristic way of relating to other people. Thus, people's conceptual systems differ in terms of their cognitive functioning and in terms of their social behavior, so that it is the overall patterning of these dimensions which characterize the individual personality.

Harvey uses a structural, developmental interpretation in his approach to conceptual systems. All persons must arrive at one of the four basic systems (ranging from System 1, the most concrete, to System 4, the most abstract), but there is no regular progression from one to the other at given periods of life as would be true of stages. Also, Harvey asserts that "...once in being, an individual's way of ordering, or concepts, seem to possess as a salient characteristic resistance to change (my italics) and the tendency to be perpetuated across time and different situations," (1967, p. 223) so that adults can be found representing any of the four systems no matter how old they are. This aspect appears most relevant to a study of rigidity in belief systems.

Several important behavioral dimensions which have consistently been found related to concreteness are authoritarianism, dogmatism, locus of control, conformity, and creativity (Harvey,

1967). For example, a concretely-functioning individual, according to Harvey, may be characterized by a number of different conditions, including: (a) a greater tendency toward polarized evaluations, namely, good-bad, right-wrong, etc. (White & Harvey, 1965); (b) a greater dependence on authority related cues as guidelines to belief and action (Harvey, 1964); (c) a greater intolerance of ambiguity, expressed in higher scores on such measures as the F Scale (Adorno, Frenkel-Brunswick, Levinson, & Sandford, 1950) and the D Scale (Rokeach, 1960) and in the tendency to form judgments of a novel situation more quickly (Harvey, 1963); (d) a greater need or tendency toward cognitive consistency and greater arousal and change from the experience of cognitive dissonance (Harvey, 1963); (e) a poorer capacity to act "as if" in assuming the role of another (Harvey, 1961); and, (f) the holding of opinions with greater strength and expression of greater certainty that the opinions will not change over time (Harvey, 1967).

The Conceptual Systems Test (Harvey, 1967) was devised to be consonant with the conceptual systems theory and provides identification of belief and behavior patterns (Harvey, 1967; Murphy & Brown, 1970; Williams & Kelleher, 1973). Six factors, Divine Fate Control (DFC), Need for Structure Order (NSO), Need to Help People (NHP), Need for People (NFP), Interpersonal Aggression (IA), and General Pessimism (GP), are identified through scores on the test; persons are assigned a system description (1, 2, 3, or 4) based on their scores on the six factors. The Divine Fate Control (DFC) factor specifies the degree of a person's conviction that a divine

being has, and ought to have, control of one's life. Scoring this factor alone can successfully identify concretely functioning individuals.

The Conceptual Systems Test has been found related to measures of authoritarianism and dogmatism, as well as behavioral measures of field dependence (Harvey, 1967). Although reliability data have not been reported on the test, other studies have reported consistency for many of the conditions postulated as evidence of concrete or abstract functioning (Goldberg, 1974; Phillips, Watkins, & Noll, 1974).

Using scores on the Conceptual Systems Test as a measure of attitudinal rigidity, a pilot study (Austin, 1980) compared rigidity to both age and years of formal education. The data failed to support the hypothesis that older subjects are more rigid in their beliefs than are younger subjects, though the small sample size and limited range of scores may have been responsible for results.

Research on cognitive complexity, e.g., abstract-rigid conceptualizers, suggests that an abstract conceptual level cannot be considered synonymous with intelligence or reasoning (Miller & Harvey, 1973; Sechrest & Jackson, 1961; Smith & Leach, 1972). However, differing abilities for various intellectual functions have been shown to confound earlier studies on age-difference comparisons of rigidity (Chown, 1961; Schaie, 1958). Older persons, in general, perform less well on tests of intellectual ability than do younger persons; yet, older persons are an even more

heterogeneous population than are other age groups (Botwinick, 1978). For this reason, the relationship of intellectual abstraction to level of conceptual functioning should be examined and considered as a likely source of variance.

Therefore the purpose of this study was to examine the relationship between attitudinal rigidity as measured by level of conceptual functioning, and age. Given the perspective that various factors may affect the age-rigidity relationship, eight variables were also examined as correlates of rigidity. In this study the single hypothesis was that age accounts for a substantial amount of the variance in rigidity. To test this hypothesis, four sets of stepwise multiple regression equations were performed to provide a gauge for evaluating additional variance accounted for by each variable. To this end, rigidity was examined in relation to the following variables: a) abstract intelligence, educational level, sex, and age; b) abstract intelligence, educational level, frequency of church attendance, and age; c) abstract intelligence, marital status, parental status, and age; and d) frequency of church attendance, length of time Caldwell County resident, length of time North Carolina State resident, and age.



## METHOD

### Subjects

Fifty-three members (females = 30, males = 23) of community organizations in Caldwell County, a community in the rural south, served as subjects. Volunteers were actively participating in the Hudson Jay Cee's (n = 19; ages 18-35), Business and Professional Women's Club (n = 13; ages 25-58), American Business Women's Association (n = 9, ages 19-39), and the Retired Senior Citizens Volunteer Programs - Bridge and Pool Club (n = 12, ages 62-88) during the time this study was undertaken.

### Materials

The tests used in this study consisted of the Conceptual Systems Test (Harvey, 1971), the Similarities subscale of the Wechsler Adult Intelligence Scale - Revised (Wechsler, 1980), and a brief questionnaire developed by the author (Appendix A). The Conceptual Systems Test consists of 48 items of agreement to which the respondent indicates the strength of agreement or disagreement on a five point scale. Since the focus in this study was on Concreteness-abstractness without regard for content differences among the four systems, only a score on Divine Fate Control (DFC) was computed. If a person has a score of 2.51 or greater on Divine Fate Control then that person may be classified as a concretely functioning individual and falls into System 1. A score lower than 2.51 on the

DFC factor reflects a greater degree of conceptual abstractness, the system depending on the pattern of the individual's remaining factor scores.

The Similarities subscale, scored according to designated criteria in the WAIS-R Manual, is composed of 13 individually administered items which assess several aspects of abstract intellectual ability. Across age groups, the Similarities subscale correlates from .73 - .79 with the Full Scale IQ; reliability coefficients (.78 - .89) are also consistently high (Wechsler, 1980). The third measure was developed to gather certain demographic data about the participants in this study.

#### Procedure

During organized meetings of various community organizations, subjects were asked to serve as volunteers for a study about attitudes. They were informed that their involvement in the study would consist of: 1) completion of a test booklet containing biographical data and an attitudes questionnaire (Appendix B) and, 2) participation in a brief, individually administered measure of thinking about various objects and ideas. Information requested in the test booklet was briefly described to potential subjects, as well as instructions for completing the attitudes questionnaire. Subjects were also informed of their approximate time involvement: for the test packet, no more than 35 minutes; for the individually administered measure, no more than 10 minutes. To insure strict confidentiality, subjects were asked to refrain from putting their names on the test packets. Subjects were then informed that results



of the study would be made available after its completion. Volunteers were asked to meet with the author at the close of the meeting to pick up the test packet and to make arrangements to complete the individual measure.

## RESULTS

A cluster score was computed for each subject according to the Conceptual Systems Test Manual (1971). All DFC scores, the outcome measure, were compared to predictor variables. Of the total subject population, six subjects (11%) were classified as abstract (DFC score less than 2.51), while the remaining 47 subjects (89%) were designated concrete or attitudinally rigid.

Means and standard deviations for the continuous variables, DFC scores, abstract intelligence (AI), and age are presented in Table I. Age is shown in a grouped frequency distribution (Table II). Other variables were measured by Multiple category scales. A breakdown of the frequency of response within categorical variables is noted in Table III.

Pearson correlation coefficients were obtained to determine relationships among variables. Among the predictor variables, seven significant intercorrelations were observed (Table IV). Increased age levels were associated with lower levels of education, and with rearing children. Rearing children was also related to being married. Strong positive associations were found between education and abstract intelligence; frequent church attendance and rearing children; and years of residence in Caldwell County and in North Carolina. Being female was related to more frequent church attendance.

TABLE I  
DESCRIPTIVE STATISTICS FOR CONTINUOUS VARIABLES

| Variable | n  | Mean | SD    |
|----------|----|------|-------|
| DFC      | 53 | 3.7  | .92   |
| AI       | 53 | 19.2 | 5.01  |
| Age      | 53 | 41.9 | 18.55 |

TABLE II  
FREQUENCY DISTRIBUTION FOR AGE

| Age Level | n  | Total |
|-----------|----|-------|
| 18 - 25   | 8  |       |
| 26 - 35   | 18 |       |
| 36 - 45   | 10 |       |
| 46 - 55   | 3  |       |
| 56 - 65   | 3  |       |
| 66 - 75   | 9  |       |
| 76 - 88   | 2  | 53    |

TABLE III  
 CATEGORICAL VARIABLES, DESCRIPTIVE LEVELS,  
 AND FREQUENCY OF SUBJECTS' RESPONSE

| Variable                     | n  | Total |
|------------------------------|----|-------|
| Education                    |    |       |
| Did not complete high school | 7  |       |
| High school                  | 14 |       |
| Beyond high school           | 19 |       |
| Four-year degree             | 12 |       |
| Graduate/Professional degree | 1  | 53    |
| Marital Status               |    |       |
| Single                       | 11 |       |
| Separated/Divorced           | 5  |       |
| Widowed                      | 5  |       |
| Married                      | 32 | 53    |
| Parental Status              |    |       |
| Reared one or more children  | 28 |       |
| No children                  | 24 |       |
| No response                  | 1  | 53    |
| Caldwell County Resident     |    |       |
| Life-time resident           | 21 |       |
| More than 20-40 years        | 10 |       |
| More than 10-20 years        | 10 |       |
| 0-10 years                   | 10 |       |
| No response                  | 2  | 53    |
| N. C. Resident               |    |       |
| Life-time resident           | 34 |       |
| More than 20-40 years        | 6  |       |
| More than 10-20 years        | 6  |       |
| 0-10 years                   | 7  | 53    |

TABLE III - Continued

| Variable                     | n  | Total |
|------------------------------|----|-------|
| Church Frequency             |    |       |
| Once per week or more often  | 22 |       |
| Once per month or more often | 9  |       |
| Less than once per month     | 4  |       |
| Less than 3 times per year   | 14 |       |
| Never                        | 4  | 53    |
| Sex                          |    |       |
| Female                       | 30 |       |
| Male                         | 23 | 53    |

TABLE IV  
INTERCORRELATIONS OF THE PREDICTOR VARIABLES

| Variable          | AI    | Education | Sex   | Age   | Church | Marital | Parental | Caldwell Resident |
|-------------------|-------|-----------|-------|-------|--------|---------|----------|-------------------|
| Education         | .40** |           |       |       |        |         |          |                   |
| Sex               | -.20  | -.15      |       |       |        |         |          |                   |
| Age               | -.18  | -.32*     | -.29  |       |        |         |          |                   |
| Church            | -.01  | .01       | .38** | -.23  |        |         |          |                   |
| Marital           | -.02  | -.18      | -.09  | .29   | -.21   |         |          |                   |
| Parental          | -.15  | .00       | .30   | -.34* | .52**  | -.42**  |          |                   |
| Caldwell Resident | .11   | .12       | -.14  | .17   | .15    | .04     | .04      |                   |
| N. C. Resident    | .20   | -.03      | -.17  | .22   | .11    | -.04    | .03      | .78**             |

\*p < .05

\*\*p < .01

Four significant relationships were observed between the outcome measure of rigidity, DFC scores, and predictor variables (Table V). Age was positively related to DFC scores. Frequent church attendance and rearing children were strongly associated with higher rigidity scores, while higher education levels were related to lower rigidity scores.

#### Analyses of Regression Sets

Four stepwise multiple regression procedures were utilized in the analysis of data, and pairwise deletion measures were employed when missing data occurred. Single and multiple correlations with accompanying F values for each regression combination are presented in Table V. Note that a significant regression coefficient was not observed in Set A until introduction of the sex variable. Significant regression coefficients were obtained in Set B upon entry into the equation of the church attendance variable; and, in Set C, upon entry of the parental status variable.

Total common variance in rigidity scores in each regression equation was calculated, as well as incremental changes accounted for by each variable in the equation (Table V). The observed increase in common variance was deducted, stepwise, from the preceding combination of variables in the set, allowing assessment of the "net variance" accounted for by each predictor variable. Across the four sets, age was noted to account for 23%, 46%, 31%, and 44%, respectively, of the common variance in rigidity scores. After the effects of other variables were partialled out, however, age did not account for a substantial effect in variance in any regression



TABLE V  
SINGLE AND MULTIPLE CORRELATIONS, AND  
INCREMENTAL CHANGES IN VARIANCE

| Variables          | r      | R   | F       | df | R <sup>2</sup> | Increment |
|--------------------|--------|-----|---------|----|----------------|-----------|
| Set A              |        |     |         |    |                |           |
| AI                 | -.16   | .16 | 1.28    | 51 | .024           | .024      |
| Education          | -.31*  | .31 | 2.74    | 50 | .098           | .074      |
| Sex                | -.25   | .44 | 3.98*   | 49 | .195           | .097      |
| Age                | .37**  | .48 | 3.57*   | 48 | .229           | .033      |
| Set B              |        |     |         |    |                |           |
| AI                 | -.16   | .16 | 1.28    | 51 | .024           | .024      |
| Education          | -.31*  | .31 | 2.74    | 50 | .098           | .074      |
| Church Attendance  | -.59** | .67 | 13.15** | 49 | .445           | .347      |
| Age                | .37**  | .68 | 10.54** | 48 | .467           | .021      |
| Set C              |        |     |         |    |                |           |
| AI                 | -.16   | .16 | 1.25    | 50 | .024           | .024      |
| Marital Status     | .21    | .26 | 1.72    | 49 | .065           | .041      |
| Parental Status    | .48**  | .54 | 6.43**  | 48 | .286           | .221      |
| Age                | .37**  | .56 | 5.40**  | 47 | .314           | .028      |
| Set D              |        |     |         |    |                |           |
| Church             | -.59** | .59 | 25.66*  | 49 | .343           | .343      |
| Residence-Caldwell | .21    | .60 | 13.44** | 48 | .358           | .015      |
| Residence-N.C.     | .08    | .61 | 9.34*   | 47 | .373           | .014      |
| Age                | .37**  | .66 | 8.98*   | 46 | .438           | .064      |

\*p < .05

\*\*p < .01

combination. On the other hand, church attendance, with a net effect of 34% (Sets B and D), and parental status, with a net effect of 21% (Set C), accounted for large increments in the variance of rigidity scores.

## DISCUSSION

The results of this study offer support for the view that age, in and of itself, does not substantially contribute to the prediction of attitudinal rigidity.

Of the nine predictor variables expected to account for variance in rigidity, only two characteristics--frequency of the respondent's church attendance and rearing children--were especially noteworthy in terms of the degree of relationship with rigidity.

Consistent with research cited earlier was the failure to find support for a relationship between abstract intelligence and rigidity. However, as shown in previous studies, age was found to be inversely related to level of education. As education and abstract intelligence were positively associated, these findings suggest that "practice" effects from education may be a factor in psychological differentiation in both abstract intelligence and in abstract conceptual levels.

The magnitude of variance accounted for by the frequency of church attendance variable indicates that this factor may be an important determinant in the prediction of attitudinal rigidity. An earlier study (Murphy & Brown, 1968) on conceptual systems and teachers' resourcefulness, dictatorialness and punitiveness found church-related activities to be the major contributing variable in

differences among belief systems, while other socioeconomic factors were not significant.

To the extent that 89% of this sample population was classified attitudinally rigid, and to the extent that the fundamentalist ideology is a pervasive force among organized religious activity in North Carolina, the significant relationship between church attendance and a rigid belief system merits further attention. It has been suggested that people enter particular situations because these situations allow them to express particular self-attributes (Mischel, 1977). Applicable to this point seems the dependence upon authority-related cues as guidelines for belief and action noted in the rigid individual. Recent research (Stebbins, Lee, Hallberg, & Schmidt, 1980) also finds rigid persons attribute more responsibility for their actions to impersonal, external sources. As the fundamentalist ideology "rejects biblical criticism as gross unbelief" (Noss, 1974, p. 501) some comparison between fundamentalism and rigid conceptual systems may be in order. However, this study did not seek to differentiate religious affiliation (i.e., fundamentalist versus liberal ideologies) and such an interpretation is clearly an ex post facto one. Future research is needed to determine whether church attendance and such related factors would prove to be good predictive dimensions of rigidity.

The finding that rearing children accounted for considerable variance is more difficult to explain in terms of this study. It may be, however, more clearly understood in terms of the close relationship observed between parental status and church attendance.

According to Frieze and Sales (1978), the decision to have and rear children is the strongest commitment made to a chosen role in adult life. Yet, parents receive little specific information about how to rear children or to develop their ethical ideals. Adherents of social interaction theories have long advocated the belief that individuals, when uncertain of appropriate action, are more likely to conform to what others are doing as a means of gaining information about what is expected. This idea is also congruent with the conceptual systems theory of individuals structuring personally relevant situations in ways compatible with their subjective ends. However, this generalization is at best speculative. Further research is needed to explore the mutual influence of these two variables on rigidity.

The results of this study should not be overgeneralized. Nearly 50% of the subjects in the sample population were age 35 or younger although examination of scatter plots suggests that these scores were not a problem. The sample was limited also by a small number of abstract subjects (11%) and was drawn from a specific community in the rural south. A substantial portion of the variance in rigidity was not accounted for, and strong intercorrelations among the predictor variables indicated that most of the reported variability was due to a number of characteristics working together. The analysis does suggest several important components of attitudinal rigidity. Age, however, is important only to the degree that it correlates with the church attendance and parental status variables.

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APPENDIX A  
Questionnaire



## VII. Marital Status

1. \_\_\_\_\_ Single
2. \_\_\_\_\_ Separated-Divorced
3. \_\_\_\_\_ Widowed
4. \_\_\_\_\_ Married

## VIII. Parental Status

1. \_\_\_\_\_ Reared one or more children (or rearing)
2. \_\_\_\_\_ No children

## IX. Residential Status of Caldwell County

1. Life-time resident \_\_\_\_\_
2. More than 20-40 years \_\_\_\_\_
3. More than 10-20 years \_\_\_\_\_
4. 0 - 10 years \_\_\_\_\_

## X. Residential Status of North Carolina

1. Life-time resident \_\_\_\_\_
2. More than 20-40 years \_\_\_\_\_
3. More than 10-20 years \_\_\_\_\_
4. 0 - 10 years \_\_\_\_\_

## XI. Frequency of Church Attendance

1. \_\_\_\_\_ Usually attend once per week or more often
2. \_\_\_\_\_ Usually attend once per month or more often
3. \_\_\_\_\_ Less than once per month
4. \_\_\_\_\_ Less than three times per year
5. \_\_\_\_\_ Never

APPENDIX B

Conceptual Systems Test - Instructions

Conceptual Systems Test





## CONCEPTUAL SYSTEMS TEST

- |     |                                                                                                                 |   |   |   |   |   |
|-----|-----------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| 1.  | I think I have more friends than most people I know.                                                            | 1 | 2 | 3 | 4 | 5 |
| 2.  | Contributing to human welfare is the most satisfying human endeavor.                                            | 1 | 2 | 3 | 4 | 5 |
| 3.  | I like to meet new people.                                                                                      | 1 | 2 | 3 | 4 | 5 |
| 4.  | No man can be fully successful in life without belief or faith in divine guidance.                              | 1 | 2 | 3 | 4 | 5 |
| 5.  | I feel like telling other people off when I disagree with them.                                                 | 1 | 2 | 3 | 4 | 5 |
| 6.  | I like to help my friends when they are in trouble.                                                             | 1 | 2 | 3 | 4 | 5 |
| 7.  | I like to give lots of parties.                                                                                 | 1 | 2 | 3 | 4 | 5 |
| 8.  | I like to criticize people who are in a position of authority.                                                  | 1 | 2 | 3 | 4 | 5 |
| 9.  | I am a very sociable person who gets along easily with nearly everyone.                                         | 1 | 2 | 3 | 4 | 5 |
| 10. | In the final analysis events in the world will ultimately be in line with the master plan of God.               | 1 | 2 | 3 | 4 | 5 |
| 11. | I like to start conversation.                                                                                   | 1 | 2 | 3 | 4 | 5 |
| 12. | Most people can still be depended upon to come through in a pinch.                                              | 1 | 2 | 3 | 4 | 5 |
| 13. | I like to join clubs or social groups.                                                                          | 1 | 2 | 3 | 4 | 5 |
| 14. | Any written work that I do I like to have precise, neat and well organized.                                     | 1 | 2 | 3 | 4 | 5 |
| 15. | It is safest to assume that all people have a vicious streak and it will come out when they are given a chance. | 1 | 2 | 3 | 4 | 5 |

- |     |                                                                                                  |   |   |   |   |   |
|-----|--------------------------------------------------------------------------------------------------|---|---|---|---|---|
| 16. | The dictates of one's religion should be followed with trusting faith.                           | 1 | 2 | 3 | 4 | 5 |
| 17. | I like to have my meals organized and a definite time set aside for eating.                      | 1 | 2 | 3 | 4 | 5 |
| 18. | I like to do things with my friends rather than by myself.                                       | 1 | 2 | 3 | 4 | 5 |
| 19. | I like to have a place for everything and everything in its place.                               | 1 | 2 | 3 | 4 | 5 |
| 20. | I enjoy very much being part of a group.                                                         | 1 | 2 | 3 | 4 | 5 |
| 21. | I like to help other people who are less fortunate than I am.                                    | 1 | 2 | 3 | 4 | 5 |
| 22. | Marriage is a divine institution for the glorification of God.                                   | 1 | 2 | 3 | 4 | 5 |
| 23. | I like to have my life so arranged that it runs smoothly and without much change in my plans.    | 1 | 2 | 3 | 4 | 5 |
| 24. | I like my friends to confide in me and to tell me their troubles.                                | 1 | 2 | 3 | 4 | 5 |
| 25. | I like to have my work organized and planned before beginning it.                                | 1 | 2 | 3 | 4 | 5 |
| 26. | I enjoy making sacrifices for the sake of the happiness of others.                               | 1 | 2 | 3 | 4 | 5 |
| 27. | I feel like making fun of people who do things that I regard as stupid.                          | 1 | 2 | 3 | 4 | 5 |
| 28. | Sin is but a cultural concept built by man.                                                      | 1 | 2 | 3 | 4 | 5 |
| 29. | I like to keep my things neat and orderly, on my desk or workspace.                              | 1 | 2 | 3 | 4 | 5 |
| 30. | I prefer to do things alone rather than with my friends.                                         | 1 | 2 | 3 | 4 | 5 |
| 31. | I believe that to attain my goals it is only necessary for me to live as God would have me live. | 1 | 2 | 3 | 4 | 5 |

- |     |                                                                                                       |   |   |   |   |   |
|-----|-------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| 32. | I like to treat other people with kindness and sympathy.                                              | 1 | 2 | 3 | 4 | 5 |
| 33. | I find that a well-ordered mode of life with regular hours is suitable to my personality.             | 1 | 2 | 3 | 4 | 5 |
| 34. | These days a person doesn't really know whom he can count on.                                         | 1 | 2 | 3 | 4 | 5 |
| 35. | Guilt results from violation of God's law.                                                            | 1 | 2 | 3 | 4 | 5 |
| 36. | Politicians have to bribe people.                                                                     | 1 | 2 | 3 | 4 | 5 |
| 37. | I like to keep my letters, bills and other papers neatly arranged and filed according to some system. | 1 | 2 | 3 | 4 | 5 |
| 38. | I feel like getting revenge when someone has insulted me.                                             | 1 | 2 | 3 | 4 | 5 |
| 39. | I feel at home with almost everyone and like to participate in what they are doing.                   | 1 | 2 | 3 | 4 | 5 |
| 40. | I like to form new friendships.                                                                       | 1 | 2 | 3 | 4 | 5 |
| 41. | I like to sympathize with my friends when they are hurt or sick.                                      | 1 | 2 | 3 | 4 | 5 |
| 42. | I don't like for things to be uncertain and unpredictable.                                            | 1 | 2 | 3 | 4 | 5 |
| 43. | You sometimes can't help wondering whether anything is worthwhile anymore.                            | 1 | 2 | 3 | 4 | 5 |
| 44. | I like to plan and organize the details of any work I undertake.                                      | 1 | 2 | 3 | 4 | 5 |
| 45. | The way to peace is through religion.                                                                 | 1 | 2 | 3 | 4 | 5 |
| 46. | Anyone who completely trusts anyone else is asking for trouble.                                       | 1 | 2 | 3 | 4 | 5 |
| 47. | I always like for other people to tell me their problems.                                             | 1 | 2 | 3 | 4 | 5 |
| 48. | I like to make as many friends as I can.                                                              | 1 | 2 | 3 | 4 | 5 |

## VITA

Sharon Story Austin was born in Lenoir, North Carolina on June 11, 1947. She was graduated from Hudson High School in June 1965. After a career in the business community she began study at Caldwell Community College where she was graduated in May 1979 with an Associate of Arts degree. In June 1979 she entered Appalachian State University in Boone, North Carolina and received the Bachelor of Arts degree in Psychology in August 1980. In the fall of 1980 she began study toward a master's degree in Clinical Psychology at Appalachian State University. This degree will be completed in August 1982. Currently, she is completing a six month internship in the Division of Children and Youth Services of Foothills Mental Health, Lenoir, North Carolina. After graduation she hopes to obtain employment in the area of community mental health.

Ms. Austin is the daughter of Mr. and Mrs. Harold Story of Lenoir, North Carolina. She is married to Jerry L. Austin. They have one son, Chad.

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