

**CORRELATES OF AGE, SEX, AND THE  
CALIFORNIA PSYCHOLOGICAL INVENTORY**

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A Research Paper  
Presented to  
the Graduate Council of  
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In Partial Fulfillment  
of the Requirements for the Degree  
Masters of Arts  
in Psychology

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by  
Paula Carol Jones

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To the Graduate Council:

I am submitting herewith a Research Paper written by Paula Carol Jones entitled "Correlates of Age, Sex, and the California Psychological Inventory." I recommend that it be accepted in partial fulfillment of the requirement for the degree of Master of Arts, with a major in Psychology.

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Major Professor

Accepted for the  
Graduate Council:

William H. Ellis  
Dean of the Graduate School

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## CHAPTER I

### INTRODUCTION

The California Psychological Inventory (CPI) (Gough, 1957) has been widely used in counseling and research. Nevertheless, few studies have focused on the relationship between the various scales of the CPI and age. A correlation statistically significant at the .01 level was obtained by Schaie (1959) between scores on the Responsibility scale of the CPI and age. In the Schaie study, 500 individuals between the ages of 20 to 70 were divided into ten five-year age intervals. Their mean scores increased until the 51-55 year old age group and then slightly declined. Schaie noted that the mean difference in raw score points between the youngest group and the 51-55 year old group was only four points, and, therefore, of limited practical significance.

More recently, research studies concerning the effect of age on the many scales of the CPI have used more specialized groups. Grupp, Ramseyer and Richardson (1968) utilized 283 subjects with a history of drug use to investigate the effect of age on the Good Impression (Gi), Self-acceptance (Sa), Self-control (Sc) and Socialization (So) scales of the CPI. Statistically significant

increases were demonstrated by subjects on the Gi and Sc scales until 34-38 year old age group and then the scores decreased slightly. Scores on the So scale increased until the 39-43 age group before declining. In neither case did the scores drop below the scores of the youngest age group (19-23). Age did not affect the Sa scale, a result which could be related to the kind of person who becomes involved in drug use.

Nurses have been used as subjects frequently in studies designed to determine the relationship of age to scores on the scales of the CPI. Dyer, Monson and Van Drimmelen (1971) utilized 1018 nurses in an attempt to ascertain the effect of age, education and administrative position on the scores of the CPI scales. The profile increased directly with increased age and education. In the case of older nurses who had not pursued further education, eight scales on the inventory decreased significantly, giving them the lowest profile of any group. They also found that the CPI scales correlated more with age than with each other.

In a later study by Dyer, Monson, and Van Drimmelen (1975), a negative relationship resulted between age and seven of the scales when they sought to determine the relationship of quality patient care to performance and personality variables. Decreases were significant

at the .01 level for the Social Presence, Self-acceptance, and Flexibility scales, and at the .10 level for the Sociability, Achievement via Independence, Intellectual Efficiency and Psychological-mindedness scales in this sample of 387 staff nurses with a mean age of 42 years. The Responsibility, Self-control, and Good Impression scales increased with age. The authors concluded that older staff nurses were less sociable and outgoing, and tended to be more quiet, patient, unassuming and self-restrained. Those same nurses wanted to make a good impression on others, but they were not as flexible and independent as their younger associates.

Performance ratings by head nurses were the object of an investigation by Welches, Dixon and Stanford (1974). Each of the 18 scales of the CPI was used as an independent variable in the cluster analysis which attempted to classify 650 staff nurses into types. Six clusters of variables were found to influence the nurses' performance, one of which was age and experience. When these clusters were used to construct types of nurses, twelve types were located. Beyond these types, the relationship of the scales to age is unclear.

In an unpublished master's thesis, Asako (1979) attempted to determine the relationship between the CPI scales and age, sex, and conformity. Using a sample of

38 undergraduate students between the ages of 19 to 43, she found that the profiles increased with age. Correlations were significant beyond the .01 level between age and the Capacity for Status, Sense of Well-being, Responsibility, Self-control, Tolerance, Good Impression, Achievement via Conformance, Achievement via Independence, Intellectual Efficiency, Psychological-mindedness and Flexibility scales. Age and Dominance correlated significantly at the .05 level. These results suggest that as people reach their early forties they manifest more leadership ability, persistence, ambition, resourcefulness, dependability, conscientiousness and responsibility. They tend to minimize their worries and feel good about themselves. Older people are likely to be more tolerant and have better self-control as well as being better able to present a favorable picture of themselves. They are capable of independence or conformance, depending upon the situation. The older individuals in Asako's research were also more intellectually efficient, more responsive to and concerned about the inner needs of others, and more flexible.

The literature relative to age and the scales of the CPI is limited. The results of the research conducted are not as clear and definite as one would like. The most applicable study, the one by Asako, employed

such a limited sample in size and age range that further, more specific research was indicated. The intention of the present investigation was to extend the sample of the Asako study in terms of both size and age range and to determine the degree of relationship between age and the CPI scales.

## CHAPTER II

### METHOD

#### The Sample

The sample used in the present study consisted of graduate and undergraduate students enrolled in Austin Peay State University, Clarksville, Tennessee. The 179 subjects included 118 females and 61 males with an age range from 18 to 69. The mean age was 28.4 years.

#### Description of the Instruments

The California Psychological Inventory (CPI) is a 480 item self-report inventory designed for normal subjects between the ages of 13 and 70. It was developed to assess the positive aspects of the personality with wide applicability to human behavior. The CPI includes 18 scales which are intended to provide a comprehensive survey of an individual from a social interaction point of view. The names of the scales were chosen to describe the kind of behavior they were designed to reflect.

The scales are divided into four groups for interpretational convenience. The first group, designed to measure poise, interpersonal adequacy and self assurance, includes the Do (dominance), Cs (capacity for status), Sy (sociability), SP (social presence), Sa (self-acceptance),

and Wb (sense of well-being) scales. The Do scale attempts to measure an individual's leadership ability, persistence and social initiative. Attributes which typically underlie and lead to status are assessed by the Cs scale. The Sy scale was designed to identify outgoing, sociable persons. Poise, spontaneity and self-confidence in human interactions are reflected by the Sp scale. The Sa scale attempts to measure individuals' capacities for independent thinking and action, as well as their sense of personal worth. Similarly, the Wb scale attempts to identify people who minimize their worries and are not plagued by self-doubt and disillusionment.

The second group consists of the Re (responsibility), So (socialization), Sc (self-control), To (tolerance), Gi (good impression), and Cm (communality) scales, and focuses on personal maturity, responsibility and value structures. The Re scale attempts to assess dependability and conscientiousness. The So scale indicates an individual's social maturity and integrity. Impulsivity and self-centeredness will elevate the Sc scale which measures the degree and adequacy of self regulation. Persons who are permissive, accepting and socially non-judgmental are identified by the To scale. The Gi scale taps an individual's concern about how others

react to him. The Cm scale compares subjects to the most common inventory pattern of responses, and is used with the Gi and Wb scales as an indicator of falsified test results.

Achievement potential and intellectual efficiency are manifested by the Ac (achievement via conformance), Ai (achievement via independence) and Ie (intellectual efficiency) scales. The Ac and Ai scales attempt to identify individuals who possess personality characteristics which lead to achievement when conforming and autonomous behaviors are, respectively, indicated. The level of intellectual and personal efficiency a person has attained is measured by the Ie scale.

The last three scales were developed to assess factors in the intellectual and interest modes. The Py (psychological-mindedness) scale covers the degree of interest in and responsiveness to the needs and motives of others. The Fx (flexibility) scale measures the adaptability of a person's thinking and social behavior. The masculine-feminine interest continuum is reflected by the Fe (femininity) scale.

### Procedure

The CPI was administered to graduate and undergraduate students individually and in groups of up to

35 persons. The inventories were hand scored according to the instructions presented in the manual.

## CHAPTER III

## RESULTS

Age and sex were compared with scores from the various scales of the California Psychological Inventory by use of the Pearson product-moment correlational technique. Age and Communality correlated .185, which was significant at the .05 level. Age correlated significantly at the .01 level with Dominance, Capacity for Status, Sociability, Sense of Well-being, Responsibility, Self-control, Tolerance, Good Impression, Achievement via Conformance, Achievement via Independence, Intellectual Efficiency, and Psychological-mindedness. Sex correlated positively at the .01 level with Socialization and Femininity. The magnitudes of the coefficients are depicted in Table I.

TABLE 1  
Correlations Between CPI Scores, Age, and Sex

	Sex	Age
Dominance	-.091	.202*
Capacity for status	.022	.427
Sociability	-.058	.202*
Social presence	-.082	.104
Self-acceptance	-.007	.117
Sense of well-being	-.092	.386*
Responsibility	.147	.399*
Socialization	.282*	.028
Self-control	-.001	.370*
Tolerance	.027	.399*
Good impression	.084	.353*
Communality	.111	.185**
Achievement via conformance	-.018	.404*
Achievement via independence	.053	.405*
Intellectual efficiency	.021	.384*
Psychological mindedness	-.131	.379*
Flexibility	.079	.136
Femininity	.715	.110

\* Significant at the .01 level

\*\* Significant at the .05 level

## CHAPTER IV

## DISCUSSION

The significant correlation between age and Dominance suggests that one shows more leadership ability, persistence, and social initiative as one gets older. The significant relationship between age and Capacity for Status indicates that attributes which underlie and lead to status, such as ambition, resourcefulness, and effective communication, increase with age. The positive correlation between age and Sociability suggests that older people tend to be more likely to minimize their worries, and to be free from disillusionment and self-doubt.

As expected, age and Responsibility correlated significantly, suggesting that people become more conscientious, dependable, and responsible as they mature. Age and Self-control showed a significant relationship which indicates that the self-centered, impulsive manner associated with the younger generation is better regulated by older individuals. The degree of relationship between Tolerance and age strongly suggests that older people are more permissive, accepting and non-judgmental in their social attitudes. The ability to create a

favorable impression is measured by the Good Impression scale. The anticipated relationship between age and Good Impression materialized, supporting the notion that the older people get, the better others react to them. The Communality scale compares subjects to the modal inventory profile. Age and Communality covary in significant ways.

Achievement potential increases as people mature as indicated by the positive correlation between age and both achievement scales. The relationship between age and Achievement via Conformance indicates that older individuals appropriately display behaviors which facilitate achievement in any setting in which conformance is a positive behavior. Autonomy and independence are the facilitating factors identified by the Achievement via Independence scale. The positive results suggest that older people manifest either independent or conforming behaviors in an acceptable way, depending on the situation.

It was not surprising to find a significant relationship between age and Intellectual Efficiency. Since personal and intellectual efficiency are learned behaviors, they can be expected to increase with age.

Age and Psychological-mindedness are significantly

related indicating more expressed interest in and responsiveness to others is shown by older people.

Sex correlated positively with Socialization, which indicates that females possess more social maturity, rectitude, and integrity than males. The positive relationship between sex and Femininity materialized as expected, indicating that women possess more feminine interests than do males.

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