Personality, Socioeconomic status and Father's education as contributing factors to selection in the NWFP Public Service Commission.

Everything that irritates us about others can lead us to an understanding of ourselves.

Carl. G. Jung

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By

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DEDICATED TO:

My dear Husband, TAHIR SAEED, who has been very patient and a beacon of guidance for me throughout.

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ACKNOWLEDGEMENT:

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ABSTRACT

ABSTRACT:

The present research was designed to investigate the factors contributing to the selection of the NWFP Public Service Commission candidates belonging to different socioeconomic status and the father's educational level.

The main aim of the study was to facilitate the Commission, in its selection process by highlighting the characteristics of those subjects who fulfill and do not fulfill the selection criteria, belonging to different socioeconomic status and father educational level. The socioeconomic status of the subjects was defined in terms of the annual total family income and the father's occupation. The socioeconomic status of the subjects was divided into three classes Upper-Middle-Lower. Similarly father's education was divided into four categories: B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated.

The sample consisted of 695 subjects applying for various jobs at the NWFP Public Service Commission. Their age ranged from 18-35 years and their educational qualification was from F.A./F.Sc. to M.A./M.Sc. and professional degrees.

California Psychological Inventory (CPI) was used for this purpose.

The objective of the research was achieved through five stages, which included the identification of CPI scales congruent to the selection criteria of dominance/leadership/ dynamism, intelligence, confidence, responsibility, sociability, social tolerance and clarity of self doubts and anxieties.

The second stage was the classification of subjects fulfilling/not fulfilling the selection criteria according to their socioeconomic status and father's education.

The third stage was the identification of the number of selected subjects fulfilling and not fulfilling the selection criteria to various departments and then classifying them according to their socioeconomic status and father's education.

Fourth stage was the identification of the selection trend of the NWFP Public Service Commission.

Fifth stage consisted of a comparison between the selected and a matched sample of unselected subjects by taking the age and the educational qualification of the two groups constant on the identified CPI scale, according to socioeconomic status and the father's education.

The data was subjected to:

(i) 2x3 Chi-square analysis between the low-high scoring subjects on each of the 12 CPI scales and the socioeconomic status.

(ii) 2x4 Chi-square analysis between the low-high scoring subjects on each of 12 CPI scales and the father's education.

The results were highly significant $P < .01$, $p < .05$ in most of the cases, except for the Responsibility, Self control scale and partially for the Achievement via independence and the Flexibility scale, where the results were non-significant.

This meant that the low-high scoring subjects on each of the 12 scales of CPI, significantly differed from each other in most of the cases.

(iii) Frequency and percentage were also calculated for the selected subjects falling in each of the three socioeconomic classes and the four categories of the father's education. A 2x3 Chi-square between the two low-high scorers and the three socioeconomic classes for each of the CPI scales was computed. Further a 2x4 Chi-square between the two low-high scorers and the four categories of the father's education was also computed.

The results were non-significant and partially significant in majority of the cases.

This means that the low-high scoring selected subjects do not or just marginally differ from each other on most of the CPI scales.

(iv) Further; (i) a 2x3 Chi-square between the two unselected and the selected subjects and the three classes of the socioeconomic classes was computed; and (ii) a 2x4 Chi-square between the two selected and the unselected subjects and the four categories of the father's education was computed.

The result revealed a significant $p < .01$, findings for 2x3 Chi-square between selected/unselected and the socioeconomic status, meaning that the two groups differ significantly on their socioeconomic status.

Where as a non-insignificant result p = n.s. was obtained for the 2x4 Chi-square between the unselected/selected subjects and the four categories of the father's education. Stating that the two groups do not differ as far as their father's education is concerned.

(v) ANOVA, test of significance were also applied to the unselected/selected groups on each of the 12 scales of CPI.

The result remained non-significant for the scales Dominance, Responsibility, Self control, Tolerance, Intellectual efficiency and Flexibility.

Whereas the results remained marginally significant for the scales: Social presence, Well being, Achievement via independence: $p < .07$; $p < .06$ and $p < .04$. While for the scales Capacity for status, Sociability and the Self acceptance the results were highly significant: $p < .01$; $p < .05$.

The findings therefore suggest that the Dominance, Responsibility, Flexibility, Tolerance, and the Intellectual efficiency scales fail to differentiate between the unselected/selected groups. Where as the Social presence, Well being and the Achievement via independence scales only marginally differentiate between the two groups.

While Capacity for status, Sociability and the Self acceptance scales of the CPI significantly differentiate between the unselected and the selected groups.

The findings of the analyses suggest a trend of selection by the NWFP Public Service Commission, towards the middle socioeconomic status and the subjects with father's having educational status of middle-intermediate. Further the selection is from the low scoring subjects on the majority of the CPI scales, except for the Self acceptance and the Responsibility scale of CPI.

INTRODUCTION

INTRODUCTION AND HISTORICAL BACKGROUND

Every person is in certain respects;

(a) ***like all other people.***
(b) ***like some other people.***
(c) ***like no other person.***

(Kluckhohn and Murray, 1953)

Introduction

Every person and event is unique. However, there is enough similarity among many people and the events of their lives to consider what they have in common. It is these patterns of human behavior that the psychologist attempts to understand. Though psychologists disagree on their specific definitions of personality, but virtually agree that personality must be approached with the aim of providing an explanation of human thought and action at the psychological level underlying every psychological process (whether "learning" or "being hungry", or "being afraid") one or more biological process can be found. Thus, learning can be an electrical or more biochemical change in the brain, hunger can be in terms of reduced blood sugar level, and fear can be considered a state of our glands and visceral organs . All biological processes therefore can be considered in purely physical terms. But in practice, to drift away from the basic knowledge of a biologist or a physicist, whose knowledge is too remote from human feelings, thoughts and behavior, that psychologist commit to explain personality in psychological terms.

The personality is a concept of the organism, created by us as a means of assisting our understanding of psychological phenomena. Without the concept of personality, we cannot study psychological topics, for physical systems by definition have no psychology. When studying personality, we do not change the organism, of course, but we change our conception of it and think about it differently.

Psychology wrestles with definitions, because it is concerned with everyday life. Psychology's main concern is with central questions and issues about being a person. What am I ? Why do I do what I do ? What will I be like in the future? and several other questions. As scientists psychologists greatly value a precise definition of personality and its subject matter.

Personality Definitions:

"Personality is a stable set of characteristics and tendencies that determine those commonalties and differences in the psychological behavior (thoughts, feelings and actions) of people that have continuity in time and that may or may not be easily understood in terms of the social and biological pressures of the immediate situation alone." (Maddi 1960).

"The governing organ of the body, an institution, which from birth to death is ceaselessly engaged in transformative functional operations" (Murray, 1951 p.436).

"The dynamic organization within the individual of those psychological systems that determines his characteristic behavior and thought." (Allport. 1961 p.28)

" Personality is that which permits a prediction or what a person will do in a given situation .... personality is concerned with all the behavior of the individual, both overt or under the skin. (Cattel, 1950, p.2).

" Habits and habit systems of social importance that are stable and resistant to change", (Gutherie 1944).

Personality is hypothetical than a real thing. It is an abstraction not observed directly, instead it is inferred from behavior. Thus people may be viewed in terms of what they say and do (Liebert Spiegler 1978, p. 11).

Personality may be defined in terms of attributes or qualities, that is highly typical of an individual and is an important part of the overall impression created in others. (Hall, Lindzey, 1991, p. 7-8).

These definitions sound scientific, and they seem precise, but they fall short of capturing what we mean by personality when we talk about it in ordinary life. Perhaps a dictionary definition comes closer:

3a: the complex of characteristics that distinguishes an individual or a nation or group b(1) the totality of an individuals behavioral and emotional tendencies; (2) the organization of the individuals distinguishing character traits, attitudes, or habits. (Webster's New Collegiate Dictionary, 1977, p. 855).

Hathaway, talks of personality in terms of a real person. " The real person we speak of is usually a vaguely described confidential self that we are in our selves or others." He emphasizes on the behavior elicited during a particular moment, being a function of situation and environmental factors- His view of personality is a total self which has several facets and they are displayed under various setups. (W. Grant Dahlstorm 1979).

While Harrison Gough (1972) considers personality as make up of interpersonal behavior and defines it in the context of what people will do in a given situation and what is their expectation s of others. (Megargee 1972).

At present there is no generally agreed on, single definition of personality some study the biochemical and physiological aspects of how individual function and use methods appropriate to these areas of investigation. While others look at individuals and observe their overt behavior. These and other possible definitions of personality range from processes internal to the organism to overt behavior in an interpersonal perspective.

It is clear that various definitions of personality are possible and have been used. Each leads to a concentration on different kinds of behavior and to the use of different methods of study. While defining personality it is important to keep two issues in mind. First, a definition reflects the kinds of methods that will be used to study this behavior. Second, there is no right or wrong definition of personality. Thus for the present, Lawrence A . Pervin (1989, p.4) suggests of a working definition of personality;

Personality represents those characteristics of the person or of people generally that account for consistent patterns of behavior. This working definition is based on certain assumptions about the nature of personality.

1. The human organism has characteristics distinct from those of other species that are particularly important for the study of personality.
2. Human behavior is complex.
3. Behavior is not always what it appears to be.

We are not always aware of or in control of the factors determining our behavior.

These qualities of human functioning greatly complicate our efforts to measure, interpret and predict behavior. They suggest that after we capture only glimpse of a person. Although they make the study of personality frustrating, frequent surprises and occasional insights into patterns of behavior also make it exciting. Personality is something that is property of the individual; psychological in nature; general in its manifestation; characteristics of the individual; enduring over time; integrated with itself and with other aspects of the individual; and related to how the individual functions in the world, or fails to function.

Personality usually refers to something that a person has, does, or is; it is attached to specific person. When personality is attributed to other entities, like groups, animals, or machines then it is implied that these entities are like people, not that people are like them. Personality is rarely used to describe the material attributes, possessions, and status of a person. Personality usually refers to the person, to his or her behavior- thoughts, actions, and feelings. In this sense, personality describes the whole person, not just the fine print. Personality is when an individual is distinguished from others, meaning the ways in which people differ from each other. In sum, we can define personality by using a family of pertinent attributes and none of these attributes is necessary or sufficient to call something personality. (Peterson, 1988, pp. 15-16).

A common factor that prevails through most of the definitions of personality is the need to comprehend the meaning of the individual differences, their determinants, and the factors that make for personal distinctiveness. Most definitions implicitly involve the assumption that personality refers to some kind of hypothetical internal structure or organization. However, a trend has set in, that leads away from more or less formal definitions of personality as an organization or characteristics and systems. The impetus for this trend seems to be an awareness that explicit, concise definitions of complex hypothetical structures may not be the best way to stimulate empirical knowledge about the connections among individual differences, personal disposition and covert behavior. Thus McClellands (1951) has defined personality as " the most adequate conceptualization of a person behavior in all its details that a scientist can give at a moment in time."

It was with the aim in mind to explore and investigate personality scientifically through self report inventories that the present investigation was taken up. It was an attempt to discover, understand and explain regularities and peculiarities in human behavior with reference to CPI, in Pakistan specifically the N.W.F.P province male population. It was the central aim of the author to measure the characteristics of personality from a selection perspective and with cultural beliefs and values in mind.

In the pages to follow, personality will be reviewed with specific reference to various agents contributing to the growth and development of personality and the theoretical approaches to the study of personality. And the two broad categories; the objective and the projective techniques for the assessment of personality.

(ii) PERSONALITY : a review and theoretical explanation.

Probably no field of psychology has been more perplexing to its students with respect to theory than that of personality. (Sears . 1950).

Factors influencing the personality and their contribution in the personality development :

Environment:

Our personality develops in the course of our life from germs that are hard or impossible to discern and it is only our deeds that reveal who we are. We are like the sun, which nourishes the life of the earth and brings forth every kind of strange, wonderful and evil things; we are like the mothers who bear in their wombs untold happiness and suffering. At first we do not know what deeds or misdeeds, what destiny, what good and evil we have in use, and only the autumn can show what the spring has engendered, only in the evening will it be seen what the morning began.

Personality, as the complete realization of our whole being, is an unattainable ideal. But unattainability is no argument against the ideal, for ideals are only signposts, never the goal just as the child must develop in order to be educated, so the personality must begin to sprout before it can be trained. and this is where the danger begins. For we are handling something unpredictable, we do not know and in what direction the budding personality will develop.

There is nothing new about the fact that individuals live in and interact with their environment. No theory, whether of learning or growth has ever dismissed the environment as unimportant or to be ignored in accounting for development .

By environment, we mean the conditions, forces and external stimuli which impinge upon the individual. These may be physical, social, as well as intellectual forces and conditions. We conceive of a range of environments from the most immediate social interactions to the more remote cultural and institutional forces. We regard the environment as providing a network of forces and factors which surround, engulf and play on the individual. Although some individuals may resist this network, it will only be the extreme and rare individuals who can completely avoid or escape from these forces. The

environment is a shaping and reinforcing force which acts on the individual. At the level of total environment, each individual may be said to have lived in a unique environment and no two individuals have had the same combination of environmental factors.

Cultural - Influence:

An interpretation of growth and development must account for changes in structure from infancy to maturity, and for the corresponding developments in process. Significant among the environmental determinants of personality are experiences individuals have as a result of membership in a particular culture. Each culture has its own set of beliefs, rituals and sanctioned patterns of learned behaviors. The institutionalized patterns of behavior means that most members of a culture will have certain personality characteristics in common. Even in a complex society like ours, there may not be rigidity of certain institutionalized patterns like eating, drinking still the importance of culture forces in shaping personality functioning is considerable.

These forces influence our needs and means of satisfying them, our relationships to authority, our self concepts, our experiences of major forms of anxiety and conflict, and our ways of dealing with them. They effect what we think is funny and sad, how we cope with life and death, what we view as healthy and sick. In the words of an eminent anthropologist "Culture regulates our lives at every turn. From the moment we are born until we die; there is, whether we are conscious of it or not constant pressure upon us to follow certain types of behavior that other men have created for us" (Kluckhohn, 1949, p. 327)

Social Class influence:

Although certain patterns of behavior develop as a result of membership in a culture, others develop as a result of membership in some social class of the population. Few aspects of an individual's personality can be understood without reference to the group to which that person belongs. One's social class group - whether lower class or upper class, working class or professional - is of particular importance. Social class factors help determine the status of individuals, the roles they perform, the duties they are bound by, and the privileges they enjoy. These factors influence how they see themselves and how they perceive members of other social classes, how they earn and spend money. Like cultural factors, social class factors influence the ways individuals define situations and how

they respond to them. There is evidence that social class factors are related in population to the prevalence of mental illness and to the types of mental disorders found. In a study of social class and mental illness, Hollingshead and Redlich (1958) found that although each type of mental disorder occurs in all social classes, proportions in the various classes differ. For example, upper class patients tended to be neurotic and lower - class patients to be psychotic. Within the neurotic and psychotic categories, members of different classes tended to behave differently.

Family Influence:

Beyond the similarities deliminated by environmental factors such a membership in the same culture or social class, environmental factors lead to considerable variation in the personality functioning of members of a single culture or class. Of particular significance among them is the influence of the family. And it is generally believed that the early socialization is the basic and more fundamental than anything else learned at a later stage. Parents may be warm and loving or hostile and rejecting, over protective and possessive or aware of their children's heed for freedom and autonomy. Each pattern of parental behavior affects the personality development of the child. For some time personality researchers mainly were interested in environmental differences between families. However, more recently interest is focused on the difference within a family. Thus, while clearly family environments differ from one another, children within the same family experience different environments depending for example, on their birth order or on parental relationships at the time they were maturing.

Some theories of personality attach particular importance to early social interaction between infant and mother. The interpersonal relations theory of Sullivan (1953), for example, suggests that a significant component of, personality is the self - system (a persons perception of the self), which develops out of relationships with significant figures in the environment. During infancy the developing self-system is influenced by the amount of anxiety the mother communicates, often in a subtle way, to the child.

Parents influence their children's behavior in at least three important ways:

(1) Through their own behavior they present situations that elicit certain behavior in children (e.g. frustration leads to aggression).

(2) They serve as role models for identification.

(3) They selectively reward behaviors.

Cultural beliefs, values, norms and patterns are inculcated by the parents or a parent into a child, in a given society. This would include techniques of handling his physical and social obligations, motor and social skills of all kind, and cognitive and emotional orientation to persons and things along the lines that the cultural requires.

Cultures vary, from country to country all over the world. Certain values and norms may be considered as abnormal while they may be perfectly normal in others. Thus concept of normality and abnormality depends upon a typical culture of a typical society.

The conception of what is normal varies not only with the culture but also within the same culture, the term neurotic cannot be used without its cultural implications. One can diagnose a broken leg without knowing the cultural background of the patient but one would run a great risk in calling a person "psychotic" - in a "Red Indian" society, because of his visions. In Indian culture, visions and hallucinations are a blessings from the spirits, and they are deliberately induced as conferring a certain prestige on the person who has them.

Socialization, as integral to self-concept:

Social learning, commonly known as "Socialization" takes place in a way, in which the individual through social learning becomes a part or member of a group and learns to take on certain roles and their related statuses. The socialization agents for a person are the neighborhood, relations and the members of the primary groups as well as later membership in secondary groups.

The self-system in the later years is influenced by reflected appraisals - how the individual perceives others as perceiving and responding to him or her. Of particular significance is whether the person sees the self as good or bad as a result of perceptions of the evaluative judgments made by others.

The relationship between human interaction and behavior is the focus of the symbolic interactionist perspective. Interaction is fundamental to normal human development. George Herbert Mead, the founder of this perspective, described three stages in childhood socialization - the stage of developing self-consciousness, the play stage! and

the game stage. Through the development of language and role playing children come to view their own selves from the perspective of others. They learn to anticipate, evaluate and consciously experience their own behavior while developing an understanding of the expectations, desires and feelings of others. Children become persons capable of relating to, responding to and interpreting and evaluating themselves through their relations with, responses to, and interpretations and evaluations of other. In this process they also learn what is expected of them in a general way by others in the culture and what they can generally expect of them, thus developing what Mead calls a generalized other.

Interaction with other people is crucial for normal human development. Socialization being a key agent in determining a persons sexual identity. Available evidence strongly suggests that patterns of thinking and behaving that commonly differentiates men from women in a particular culture is also learned.

Socialization is crucial to social control. Through socialization we internalize certain values and rules that we break only on pain of self punishment. Moreover, knowing the rules, and being motivated to avoid breaking them by the possible disapproval or punishment of others, is the consequence of socialization.

Genetic Factors:

Along with environmental factors, genetic factors play a major role in determining personality, particularly in relation to what is unique in the individual. Although many psychologists historically have argued the relative importance of environmental and genetic factors in shaping personality as a whole, recent theorists have recognized that the importance of these factors may vary from one personality characteristics to another. Genetic factors are generally more important in such characteristics as intelligence and temperament and less important in regard to values, ideals, and beliefs. Theorists have also begun to explore possible interactions between genetic and environmental factors. Thus, for example, the concept of reaction range (Gottsman, 1963) suggests that although heredity fixes a number of possible behavioral outcomes, environment ultimately determines behavior. Heredity, may set a range within which the further development of the characteristic is determined by the environment. The relationship of heredity and environment seem a complicated one, as genetically influenced characteristics may lead a person to act upon, and in return be influenced by, the environment in a particular way. For example, the hyperactive child evokes different responses from parents than does the

tranquil child. Yet in an another study reported by Lawrence A. Pervin (1989) Triplets had been separated in infancy and discovered one another as young man. They found that they not only looked alike but smiled and talked in the same way.

The relationship between environment and heredity, is a reciprocal process or an ongoing interaction rather than a simple cause - effect, relationship.

In summary, personality is determined by many interacting factors, including genetic, cultural, social class and familial forces. Heredity sets limits on the range of development of characteristics, within this range characteristics are determined by environmental forces. Heredity provides talents which a culture may or may not, reward, refine or cultivate. It is possible to see the interaction of these many genetic and environmental forces in any significant aspect of personality.

(iii) PERSONALITY THEORIES, as an Answer to the Questions of What, How, and Why

A definition of personality, that a psychologist considers, depends upon the psychologists theoretical orientation. Psychologists with a deterministic, genetic orientation often choose a definition that emphasizes the operation of psychological processes within a person for example Hans Eysenck defines personality as "the more or less stable and enduring organization of a persons character, temperament, intellect and physique, which determines his unique adjustment to his environment".....

On the other hand, psychologists who view human beings as adaptive creatures whose behavior is determined largely by experience tend to stress past learning and current situational factors in their definitions. Thus Walter Mischel (1978) defines personality as "the distinctive patterns of behavior (including thoughts and emotions) that characterize each individual's adaptation to the situation of his or her life. "Raymond Cattel, stresses the predictive utility of measurements and defines personality as "that which permits a prediction of what a person will do in a given situation".

Whereas the concept of personality given by Sigmund Freud is synonymous with psyche (mind) and is a theory of personality in general, he posited that personality is a make up of the id, the ego and the super ego three aspects of psyche, and that it is their interaction which determines behavior, and his definition of personality is his theory of personality.

The study of personality goes back to the days of the Greek philosophers. But if the field of study is limited to conceptualizations based on controlled observational studies, then its history might be said to date from the work of European psychiatrists of relatively recent years. As the field of psychology expanded and matured both deviant and normal persons fell within the domain of the study of personality.

Increasing attention to theory and conceptualization, on the one hand, and to objective research, on the other, has marked the development of the study of personality.

Hall and Lindzey (1970), in reviewing theories of personality, have concluded:

That personality consists concretely or set of values of descriptive terms which are used to describe the individual being studied according to the variables or dimensions which occupy a central position within the particular theory utilized.

There can be little doubt that, in some ways at best, each of us has a unique and distinctive personality. Each person is a product of all the forces that produce an individual and, like the uniqueness of the finger print, represents a combination that will not occur again. However, although personality psychologists generally agree that each of us is in some way unique, there is great controversy over the implications of this fact for the study of personality.

Psychoanalytic Strategy:

Psychoanalysis is, first of all, a strategy which emphasizes the importance of intrapsychic event (i.e. events within the mind) as central to personality. Secondly, it is a method of scientific investigation, a way of studying intrapsychic phenomena. This includes psycho-analyzing a person's random thoughts, dreams, mistakes, and other behaviors so as to determine their intrapsychic significance, or their meaning for the person. This process is the same as that used to bring about personality change, and psychoanalysis as therapy is the third meaning of the term.

First psycho-analytic theory is a deterministic point of view. Freud held that all behavior is determined, or caused by some force within us and that all behavior therefore has meaning. One of Freud's earliest and most widely cited clinical observations was the finding that even the simplest occurrences of human behavior can be traced to complicated psychological factors of which the individual may be totally unaware. Perhaps the best known of these occurrences are the so-called Freudian slips made in speech, writing, and reading. The errors presumably reveal something about the persons "inner" thoughts, or "real" intent. Examples in which the unconscious ideas are obvious include substituting "play-body" for "playboy" and "Fraud" for "Freud."

A second major characteristic of psychoanalytic theory is that it is a dynamic point of view. "Dynamic" in the present context refers to the exchange and transformation of energy within the personality. Like most other personality theorists, Freud thought that it was essential for a comprehensive understanding of personality to have a statement of the source of motivation for human actions. Freud postulated that this source of motivation

was a unitary energy source, called psychic energy, which can be found within the individual.

Third, psychoanalysis is organizational. Freud organized personality into three basic functions — the id, the ego, and the superego — and believed that it is the dynamic interaction or conflict among them which determines behavior. Also, these personality functions operate at three levels of awareness — unconscious, preconscious, and conscious.

Fourth, psychoanalytic theory is developmental. Freud held that human development follows a more or less set course from birth, and he divided development into a series of stages which all persons must pass through. Freud's theory is also developmental in the sense that it stresses the importance, indeed the dominance, of early childhood development as a determinant of adult personalities.

The psychoanalytic term 'drive' refers to an inborn, intrapsychic force which, when operative, produces a state of excitation or tension. When these drives are not satisfied, the organism experiences tension, as when we hold our breath or have not eaten in some time and feel hunger pangs. Usually, objects or circumstances to satisfy these drives are available in direct form; their satisfaction is typically simple and straightforward, allowing relatively little tension to build up. However, under unusual circumstances a drive such as hunger can become strong and exert a powerful influence on behavior.

The second group of drives are those related to sexual urges; the psychic energy of sexual drives is called libido. In this context, "sexual" refers to all pleasurable actions and thoughts, including, but not confined to, eroticism. Libido is also the energy for all mental activity (e.g., thinking, perceiving, imagining, remembering, problem solving) and is somewhat analogous to, though not the same as, physical energy.

Freud initially believed that most of human motivation is sexual in nature. Societies place obstacles in the way of living completely or even predominantly in terms of satisfying one's pleasure-seeking drives. In capsule form, Freud's theory of personality deals with the manner in which we handle our sexual needs in relation to society, which usually prevents direct expression of these needs. Each individual's personality is a function of his or her particular compromise between sexual drives and society's restraints on them.

Neo-Freudian Approaches to Psychoanalysis:

The origin of all contemporary psychoanalytic approaches to personality lies in Freudian psychoanalysis. . The opposition to Freud's theory centered on his ideas of infantile sexuality and his belief that the basic source of human motivation was the sexual drive. It was on this latter issue that some of his most devoted disciples began to drift away from Freudian psychoanalysis and to develop somewhat modified theories, though still within the psychoanalytic tradition.

Neo-Freudian psychoanalysis can be characterized as emphasizing two dominant themes: (a) the social determinants of personality and (b) conscious, reality-oriented intrapsychic processes. Although some neoanalysts tend to predominantly focus on the former, social-interpersonal approach to psychoanalysis and other predominantly focus on the latter, ego psychology (or ego analysis) approach, Neo-Freudian psychoanalysis usually incorporates both themes into the study of personality.

For Freud, human motivation is biological and largely inherited. During the first five years of life, the inherited personality structure is essentially developed, which means that adult functioning is largely a product of the past. Although not denying the importance of either biological endowment or early childhood development, Neo-Freudians have introduced and emphasized the social-interpersonal factors which determine personality. They have considered critical personality development that occurs after the first five years of life and, to some extent, the role of goals and strivings (towards the future).

For Freud, the personality is almost completely dominated by unconscious processes which are instinctual and animal-like in nature–primarily sex and aggression (id processes which seek immediate release of tension and hence pleasure gratification). Neo-Freudians have focused on the conscious realm of personality and personality functions related to reality and higher mental processes, such as thinking and problem solving (ego processes).

A final distinction involves the role of conflict in personality. In Freudian theory it is conflict among intrapsychic aspects of the personality (id, ego, superego) which determines behavior. There is a constant struggle for predominance among instinctual drives (id), reality demands (ego), and the moral restraints of society (super-ego). This

struggle frequently causes psychological and behavioral disturbances (neuroses), and much of Freudian theory relates to such psycho pathology – its origins, manifestations, and treatment. Neo-Freudians (especially ego analysts) have examined the other side of the coin –the conflict-free part of personality which enables people to remain relatively healthy by coping successfully with the inner and outer forces that shape their personalities.

As both theory and practice, psychoanalysis has undergone many changes by such analysts as Alfred Adler, Carl Jung, Erich Fromm and Karen Horney.

Adler's dissension with Freud regarding the importance of the sexual drive was even more marked than Jung's. Essentially Adler believed that the fundamental human motive was the striving for superiority as a compensation for feelings of inferiority. In Adler's (1964) words, "to be a human being means to feel oneself inferior" (p. 96)In development, striving for superiority compensates for the feelings of inferiority. In the resulting compensatory life-style which the individual adopts, feelings of inferiority, which are most prominent in childhood, may be forgotten. Adler (1964) was aware that "not every one ..... can remember that he has ever felt inferior. Possibly, too, many may feel repelled by this expression and would rather choose another word" (p. 96).

Abnormal behavior (neurosis) can occur if feelings of inferiority and/or strivings for superiority become exaggerated. Adler used the term inferiority complex to refer to such an exaggerated, neurotic reaction. Thus, the common usage of "inferiority complex," which equates the term with normal feelings of inferiority, is contrary to the narrower meaning which Adler intended.

Like Freud, Jung (1969b) divided the personality into three aspects, two of which are similar to Freudian concepts. There is the conscious ego, which includes the perceptions, thoughts, feelings and memories of which we are aware. The personal unconscious is similar to Freud's preconscious in that it contains mental images of which we are not immediately aware, but which can readily come into our consciousness (i.e., be part of the conscious ego). Some of the content of the personal unconscious is out of awareness because we are attending to other matters or because of disuse. In other cases, images in the personal unconscious have been actively repressed because they are threatening or unacceptable to the conscious ego.

In contrast to Freud, Jung believed that the personal unconscious has both retrospective and prospective functions. Not only is the personal unconscious a repository for past experiences, but it also serves to anticipate the future. In addition, the personal unconscious has a compensatory function in that it is capable of adjusting imbalance in the personality if a person's conscious attitudes lean too heavily in one direction. This is accomplished by allowing the personality to experience the appropriate opposite tendency in dreams or fantasy (Jung, 1969a).

Jung's third aspect of the personality–the collective or transpersonal unconscious–has no parallel in Freud's theory and is probably Jung's most original and controversial contribution to the study of personality.

Jung strongly believed that we are not only a product of our individual histories but that we are also predisposed to act in various ways by experiences which have been common to all humans throughout the evolution of the species. In the collective unconscious–the dominant aspect of the personality for Jung–there are primordial images, called archetypes, which serve as models for our actions and reactions. "Archetypes are inherited modes of psychic functioning which can be recognized in the recurring motifs to be found in man's myths and dreams, in every time and every place" (Kopp, 1977, p. 186). (Much of Jung's evidence for the collective unconscious and its archetypes came from his extensive study of myths and symbols). Thus, the collective unconscious is the same in all people. This does not mean, of course, that all people behave identically. The way an individual reacts in a particular situation is determined both by the relevant archetype and by the individual's experiences with the situation.

Fromm says man is a product of society. When he cannot cope with society he suffers, becomes unreasonable. Fromm emphasized that social conditions reach beyond family influences, a good society being one in which human needs are met and despair is avoided. Social systems thus help form personality. Horney brought in an emphasis on complaint, aggressive and detached types of people; she makes anxiety the basic concept rather than sexual and aggressive impulses described by Freud. Man has "neurotic needs" for affection and approval, for self sufficiency and independence. They are neurotic in the sense that they come to dominate the person.

The Dispositional Strategy:

The major idea behind the strategy is that there are enduring, stable personality differences which reside within the person. One person differs from another in the way each is disposed to behave, according to this strategy. Put another way, people differ in what they are basically like.

Early Dispositional Concept:

Early dispositional views assumed that human beings could be divided into a relatively small number of types, according to their personalities, and that by knowing an individual's type, one could predict with reasonable accuracy the way in which that person would behave in a variety of circumstances. The ancient Hebrews used this perspective to conduct what may have been the first formal effort at personality assessment. They tried to describe two types of people, those who could be ferocious fighters and those who lacked this quality.

A second ancient view, the theory of the four temperaments, is closely akin to several contemporary theories and to a goodly number of everyday conceptions of personality. The position has as its basis the Greek hypothesis that the physical universe can be described in terms of four basic elements: air, earth, fire, and water. Hypocrites, often called the "father of medicine", extended this argument to people themselves by suggesting that the body is composed of four corresponding "humors": blood, black bile, yellow bile, and phlegm. Galen later postulated that an excess of any of these humors led to a characteristic temperament, or "personality type": sanguine (hopeful), melancholic (sad), choleric (hot-tempered), or phlegmatic (apathetic). Although this ancient psycho-physiological theory of personality is no longer taken seriously, the four temperaments have survived to this day as part of our language.

The Early Work of Kretschmer and Sheldon:

The names of two individuals, Ernst Kretschmer (1888-1964), a German psychiatrist, and William Sheldon (1899-1977), an American psychologist, dominate the early history of constitutional psychology.

Kretschmer's Approach:

. The two major categories of psychosis (severe psychological disturbance in which the individual is no longer able to function in society) recognized in Kretschmer's day were schizophrenia and manic-depressive psychosis. The former diagnosis was ascribed to individuals who showed a variety of thought disorders, while the latter category included persons characterized by extreme elation (mania) or extreme depression or sometimes a cyclic movement from one to the other.

> In order to determine types of physique, Kretschmer and his associates began by developing a very detailed "constitutional inventory" consisting of more than 70 items. Examinations of this type were carried out on approximately 400 psychiatric patients. The data seemed to reveal three basic physiques asthenic, athletic, and pyknic and a small number of anomalous patterns, grouped together as dysplastic.

The asthenic type appeared to be: a lean narrowly-built man In contrast, the following is a "rough impression" of the athletic type.

> A middle-sized to tall man, with particularly wide projecting shoulders, and a solid long head.(pp. 24-25).

The pyknic male bears little resemblance to either of these two. He is a man of: Middle height, rounded figure and a soft broad face. Less uniformity is to be found among the dysplastics, who are primarily distinguished by the unusualness of their appearance.

Persons of the asthenic, athletic, and dysplastic body type were more likely to be schizophrenic than manic-depressive. For persons of pyknic build, on the other hand, manic-depressive psychosis was the more probable diagnosis.

Kretschmer believed that this striking evidence for a relationship between physique and personality would be paralleled by reliable relationships with "normal" persons, but it remained for William Sheldon to develop the idea fully.

Sheldon's Approach:

In developing a comprehensive psychology of constitutional differences, Sheldon (1942) regarded his task as: (1) the development of an adequate classification of physique- the structural, or static, aspect of human; (2) the development of an adequate classification of temperament - the functional, or dynamic, aspect of humans; and (3) the empirical search for an enduring, reliable relationship between the static and the dynamic views of humans.

The Primary Components of Physique:

Three primary components of body structure were identified by Sheldon they were named endomorphy, mesomorphy, and ectomorphy. The names and the statement of their continuity were new, but they were remarkably like the body types found by Kretschmer.

Endomorphs are usually fat and are said to "float high in the water", and their musculature is under developed. Mesomorphs tend to be "hard, firm, upright, and relatively strong and tough". The skin of mesomorphs is thick, their blood vessels are large, and their appearance is overwhelmingly one of sturdiness. Finally, ectomorphs are characterized by "fragility, linearity, flatness of the chest, and delicacy throughout the body."

In Sheldon's scheme, persons are not merely classified as one type or another, Rather, on the basis of many measurements, a person is somatotyped by assigning three numbers, each ranging from 1 to 7, which represent the strength of each of the components of body structure. In somatotyping, the first numeral refers to endomorphy, the second to mesomorphy, and the last to ectomorphy. Thus, a muscular, powerful person might approach the somatotype 1-7-1, whereas an average individual with respect to physique might be somatotyped 4-4-4.

Sometimes, "type" and "trait" are used as summary labels for observed differences in behavior.

Guilford (1959) defined a trait as "any distinguishable, relatively enduring way in which one individual varies from others" (p. 6).

Allport's heuristic realism:

Gordon Allport (1897-1967), acknowledged by his colleagues to be one of the founders of modern trait theory, described this latter approach as heuristic realism. The word heuristic derives from Greek and Latin roots meaning "to find out or discover", and Allport meant to convey by his term that "the person who confronts us possesses inside his skin generalized action tendencies (or traits) and that it is our job scientifically to discover what they are" (Allport, 1966, p. 3). Allport did not believe, of course, that traits existed as physical entities, like glands or organs; what he did believe was that psychological traits are real attributes of persons in the sense that they serve to explain behavior rather than merely to describe it.

It should not be surprising that Allport, perhaps more than any other modern personality theorist, attempted to treat personality in its entirety. He emphasized not only the importance of the whole, living person but also the importance of integrating every bit of available biological and psychological research into his perspective. Thus he spoke of the importance of learning, the meaning of private experience and selfhood, and the truths to be found in psychoanalysis. And he fashioned from all of this a more or less cohesive picture of personality.

Allport argued that traits may be viewed either as characteristics which allow us to compare one person with another (as we might compare body weights) or as unique characteristics of the individual which need not invite, or even permit, comparison with others.

Allport goes on to describe five sub levels of integration that culminate in a fully integrated, total personality. Conditioned reflexes are the lowest level integration, linking neural cells to produce simple but adaptive responses. Habits, especially habits that have been reinforced often, are integrated systems of conditioned reflexes. Next in the hierarchy are personal traits, our "more dynamic and flexible dispositions, resulting, at least in part, from the integration of specific habits. Belonging to this level are dispositions called sentiments, values, needs, interests" (Allport, 1961, p. 100).

William James, sometimes called the father of modern psychology, believed that each of us has a number of different "social selves", and Allport agrees. "Selves", in the personality hierarchy, are "systems of traits that are coherent among themselves, but likely to vary in different situation." Finally, at the pinnacle of the structure, we find the total

personality, "the progressive but never complete integration of all systems that deal with an individual's characteristic adjustment to his various environments" (Allport, 1961, p. 100).

Factor Analysis and Multivariate Research:

Raymond B. Cattell a prominent dispositional psychologist, has quipped that "the trouble with measuring traits is that there are too many of them!" (1965, p. 55). Cattell (1965),suggested a procedure, central to most trait research today, a statistical technique merging all similar properties of a trait into one and called it factor analysis.

Cattell's Trait Approach:

Cattell (1965) proposes that there should be three broad sources of data about personality, which he labels L-data, Q-data and T-data. L-data refer to information which can be gathered from the life record of the individual and are usually taken from ratings by observers as to the frequency and intensity of occurrence of specific kinds of behavior.

Q-data consist of information gathered from questionnaires and interviews. The common feature of Q-data is that the individual answers direct questions about him or herself, based on personal observations and introspection (e.g., "Do you have trouble making and keeping friends?").

Data gathered from so-called objective tests are referred to as T-data. Teachers and educators might well be tempted to call questionnaire and essay data (i.e. Q-data) "objective" whenever these are scored in some standardized way so as to lead two or more examiners to exactly the same conclusions. However, Cattell argues that these procedures are often not objective in another sense, since the individual may "take on airs" or otherwise attempt to fabricate or distort responses. Cattell (1965) defines an objective test as one in which "the subject is placed in a miniature situation and simply act....[and] does not know on what aspect of his behavior he is really being evaluated" (p. 104).

Types as Dimensions of Personality: Eysenck's View:

Perhaps the most fundamental difference between the dispositional approaches espoused by Cattell and H.J. Eysenck (1916-) lies in the level at which each has chosen to look for the basic dimensions of personality. Cattell's research has revealed a relatively

lengthy list of source traits. In contrast, Eysenck's investigations have focused on discovering a small number of basic personality types.

In Eysenck's view, types are not categories that a few people fit; rather, types are dimensions on which persons differ. They tend to be normally distributed, as do traits with most people around the average mark.

Like many other theorists, Eysenck envisions a structural model of personality. Types are at the pinnacle of the personality structure, and therefore they exert the most commanding influence. Types are composed of traits; traits are composed of habitual responses; and, at the most particular level, specific responses are the elements out of which our habits are made.

Using factor-analytic procedures, Eysenck and his colleagues have performed dozens of studies over a period of more than 30 years. (As far back as World War II, for example, Eysenck applied factor-analytic procedures to a multitude of ratings, and classifications of approximately 10,000 soldiers.) In this time he has marshaled an impressive body of evidence suggesting that there are two major dimensions on which personality can be cast: introversion-extroversion and stability-instability.

A third aspect of personality which weaves its way in and out of Eysenck's writings is psychoticism. His most recent view is that the underlying dimension is best labeled P and that it includes both a disposition toward being psychotic and a degree of psychopathy (characterized by an absence of real loyalties to any person, group, or code). Unlike extroversion-introversion and stability-instability, P is not a dimension with polar opposites; rather, P is an ingredient which is present to varying degrees in individual personalities.

Eysenck (1975) reports that P is higher in men than in women, is heritable, is higher in prisoners than in non prisoners (and highest in those imprisoned for sexual or aggressive offenses), and is lower in psychiatric patients who have improved than in those who have not.

The Behavioral strategy:

In contrast to the psychoanalytic, and the dispositional strategy, is the behavioral strategy, for the Behaviorists study of personality is directly and ultimately concerned with

behavior for its own sake. Behavioral personality assessment techniques employ the basic strategy of sampling relevant behavior in an effort to predict similar behavior. The basic unit of personality in the behavioral strategy is behavior.

Although behavioral psychologists frequently eschew the term personality, in fact for them personality is the summation and organization of a person's behavior. Personality and behavior are closer to being synonymous terms in the behavioral strategy than in any of the other two strategies.

Historically, the behavioral strategy grew out of the school of psychology called behaviorism, which rejected the study of any phenomena that were not directly observable (Skinner, 1938; Watson, 1919). A recent trend within the behavioral strategy has been to investigate and change covert events such as cognitions and mental images. In this work, there is an emphasis on the role which overt behavior plays in determining covert events (e.g., our over actions toward a person cause us to develop certain attitudes about that person) or on the need to use covert mediators to induce certain changes in overt behavior.

Behavioral theories of personality usually make relatively few basic assumptions and therefore can be said to be parsimonious. Within a given learning approach, a single set of principles is used to explain a variety of different behaviors. The behavioral explanation of "unexpressed", or "inhibited", behavior is a case in point. "Unexpressed behavior" refers to acts which a person is capable of performing but which are not being performed at present.

The behavioral strategy looks to the environment, rather than within the person, for the factors which determine behavior (both overt and covert). This does not mean that genetic factors, physiology, biological needs, thought processes, and similar intraorganismic variables do not play a role in shaping behavior. It does mean that behavior approaches hold that personality can be most meaningfully explained (i.e., predicted and controlled) by examining the external influences on people.

The behavioral strategy is a deterministic position, just as the psychoanalytic and dispositional strategies are. However, in contrast to psychoanalytic and dispositional determinism, according to the behavior strategy the factors which determine behavior lie primarily in the individual's external environment. And also to the situational specificity of behavior.

Besides the focus on behavior, another unifying factor of the behavioral strategy is the emphasis on learning. A basic assumption is made that behavior develops and is modified primarily, though not exclusively, in accordance with principles of learning rather than through heredity and biological determination. Behavioral approaches differ, however, with respect to the form of learning which is emphasized.

The classical conditioning, or respondent, approach focuses on learning new responses through the association of a set of circumstances which previously did not elicit a particular reaction with another set of circumstances which had already led to that reaction. According to the operant conditioning, or instrumental learning, approach, behavior is learned as a result of the consequences which people receive when they act. In the observational learning, or imitation, approach, learning occurs by observing the behavior of others and its consequences for them.

Social Learning Theories:

The first detailed account of personality from a learning perspective appeared in 1941, with the publication of Neal Miller and John Dollard's Social Learning and Imitation. The wedding of the learning process with the social conditions of learning, that hallmarks a family of theoretical viewpoints which all call themselves "social learning theories." Miller and Dollard's social learning theory proved inadequate because it had wrongly assumed that only one learning process was involved in the acquisition of complex behavior. But it paved the way for other attempts to integrate psychological knowledge about social and learning processes and thus weave a complete theory of personality.

A second milestone in the history of social learning theories was the publication in 1954 of Julian Rotter's Social Learning and Clinical Psychology. Rotter emphasized the importance of the persons' subjective expectancies in determining behavior. Rotter's writings inspired research both on the learning of expectancies and on the degree to which expectancies for receiving reinforcement determine the real power of various rewards and punishments over behavior (Rotter, Chance, and Phares, 1972). But Rotter, like Miller and Dollard, only had a theory of an aspect of personality. Neither the Miller and Dollard nor the Rotter social learning approach seriously challenged established dispositional, psychoanalytic, or phenomenological theories of personality. There were too many phenomena about which these approaches had nothing to say.

So it was not until 1963, with the publication of Albert Bandura (1925-) and Richard H. Walters' (1918-1968) Social Learning and Personality Development, that a social learning theory of personality was articulated. In essence, Bandura and Walters demonstrated that the classical conditioning, operant conditioning, and observational learning approaches could be construed as a loose but compatible set of principles that, taken together, could explain a great deal about human conduct.

(iv) PERSONALITY ASSESSMENT:

> ***The character which shapes our conduct is a definite and durable "something", and therefore.... it is reasonable to attempt to measure it"*** *(Galton, 1884).*

The trend towards what is called personality assessment reflects a growing awareness of the need to quantify individual differences. The concern with assessment may be described as an approach to behavior that assumes that much of the variability in overt behavior results from differences in the extent to which individuals possess particular personal characteristics. Researchers in personality assessment seek to define these traits unambiguously, to measure them objectively, and to use them to predict behavior.

In the later stages of World War-I, it was recognized that psychological assessments might be useful in predicting cases of shell shock or "war neurosis". Woodworth developed the Personal data Sheet, a self report questionnaire, in an effort to screen out individuals highly susceptible to shell shock.

The decade following World War-I witnessed a development of several projective measures of personality (Dubios, 1970). Projective methods are ones that give the subject an abstract of unstructured stimulus, such as an inkblot or an incomplete sentence, and require the subject to interpret the stimulus and respond. The assumption of the projective method is that the individual's "private world" is revealed by the way that he or she organizes and interprets unstructured or ambiguous situations (Frank, 1939).

Perhaps the best example of a broad, integrated attempt to describe and assess personality is the work of Murray. First at Harvard's psychological clinic, and later working with the Army's Office of Strategic Services in assessing candidates during World War-II.

Personality inventories differ substantially in what they attempt to measure. Some attempt to measure a single, narrowly focused dimension, others attempt to measure several dimensions which together span a broad domain of behavior, still others attempt to measure a small set of very general or global dimensions. One of the first principles in evaluating a personality inventory is that the results must convey information about the individual which can be interpreted reliably by various users.

The most notable improvement in personality measurement during the next two decades was the appearance of multiscaled tests. Typically personality tests introduced in this measured such things as anxiety, assertiveness, home adjustments, general health, impulsiveness and interest in masculine or feminine activities. Some attempt at assessing defensiveness or conscious concealment on the test was also included, although these early scales often were quite primitive and obtrusive.

Intelligence tests, personality tests, behavioral assessments and clinical interviews all yield potentially important information about the person being tested, but none of these techniques provide an overall assessment of the examinee's level of functioning. In other words no individual test provides a complete picture of the individual, but only a specific piece of information about that person. One of the major test of psychologists involved in assessment is to evaluate information provided by many tests, interviews, and observation and to combine this information to make complex and important judgments about individuals.

Although expert judgment plays a part in each form of psychological measurement, the practice of clinical assessment broadly defined as the integration of multiple pieces of information into an overall evaluation of the present state of the individual being assessed is some what unique.

Korchin and Schuldberg (1981) define psycho diagnosis as a process which:

(a) Uses a number of procedures.
(b) Intended to tap various areas of psychological functions.
(c) Both at the conscious and unconscious level.
(d) Using projective techniques as well as more objective and standardized tests.
(e) In both cases, interpretation may rest on symbolic signs as well as scorable responses.
(f) With the goal of describing individuals in personological rather than normative terms.

Korchin and Schulderberg's definition of "psycho diagnosis" might be applied more aptly to the neutral term, "clinical assessment". The central difference between clinical assessment and other testing applications is that the clinician, rather than the tests, is at the

center of the assessment process. Indeed, as Wiggins (1973) notes, the clinician has two distinct functions both of which are essential to the assessment process. First, the clinician must gather data. Although standardized tests are used in clinical assessment, projective tests, interviews and behavioral observations represent the clinician's most important measurement tools. Second, the clinician must integrate data from various tests, interviews and observations in order to form an overall assessment of the individual.

At one time, psychological testing represented one of the most important activities of clinical psychologists (Korchin and Schuldberg, 1981, McReynolds, 1968, Rabin, 1981). In recent years the practice of clinical psychologists has shifted steadily from an emphasis on assessment and diagnosis to an emphasis on psychotherapy and behavior modification (Rabin, 1981). Nevertheless psychological testing still represents an important activity for practicing clinicians. Wade and Baker's (1977) survey suggested that over 85 percent of practicing clinical psychologists use tests, and that over one third of their therapy time is devoted to test administration and evaluation. Furthermore, patterns of test use have been quite stable over the past 15 years (Lubin, Larben and Matarazzo, 1984).

Finally testing appears to be a common activity regardless of the psychologists therapeutic orientation (e.g., behavioral, Freudian).

The most widely used clinical tests can be divided into three types:

(i) Individual tests of general mental ability;
(ii) Personality tests; and
(iii) Neurological tests.

The Wechsler Intelligence Scale (WISC-R and WAIS-R) and the Stanford Binet represent the most popular tests of general mental ability (Korchin and Schuldberg, 1981). These tests serve a dual function in forming assessments of individuals. First, an evaluation of general mental ability often is crucial for understanding an individual's behavior, since many behavioral problems are linked to intellectual deficits. Second, individual intelligence tests present an opportunity to observe the examinees behavior in response to several intellectually demanding tasks, and thus provide data regarding the subjects persistence, maturity, problems solving styles, and other characteristics.

The Rorschach, the Thematic Apperception Test (TAT) and the Minnesota Multiphasic Personality Inventory (MMPI) represent the most popular personality tests. Of the three, the MMPI is the most closely associated with the diagnosis of psycho pathology, while the TAT is most closely associated with the assessment of motives and drives. The Rorschach may be used for a variety of purposes ranging from the assessment of specific personality traits to the diagnosis of perceptual disorders.

Personality assessment, concerns itself with the understanding of the methods used in assessing characteristics and the uses to which these methods have been put. The use made of any particular method will, of course, be influenced by its validity. There are four types of validity: predictive, concurrent, content and construct.

Although the term "personality" is sometimes employed in a broader sense, yet in a conventional psychometric terminology "personality tests" are instrument for the measurement of emotional, motivational, interpersonal and attitudinal characteristics as distinguished from abilities.

Personality tests though are used as group screening instruments, the majority find their principal application in clinical and counseling context. Two major tools of personality assessment are the projective and the objective tests. The projective tests include unstructured tasks that permits wide latitude in its solution. The assumption under lying such methods is that the individual will project his characteristics modes or response into such a task. Like performance and situational tests, projective tests are more or less disguised in their purpose, thereby reducing the chances of subjects intentional desire of good impression. Sentence completion tests, are one of the examples of such tests. Other tasks commonly employed in projective techniques include drawing, arranging toys to create a scene, interpreting pictures or ink blots.

Objective personality tests, comprise performance tests utilizing perceptual, cognitive or evaluative tasks, several kind of situational test, and techniques designed to assess self-concepts and personal constructs.

The examinee is given a task that bears little resemblance to the criteria behavior under investigation. For this reason, these techniques are sometimes called "indirect tests".

Varying widely in content, these tests have several common distinguishing features. First the examiner is task oriented, rather than being report oriented as in personality questionnaires. He is given an objective task to perform, rather than being asked to describe his habitual behavior. Secondly, the purpose of these tests is disguised, the individual not realizing, which aspects of his performance are to be scored. Third, the task set for the examinee are structured. Fourth, many of the tests are perceived as aptitude measures in which the examinee endeavours to give "correct" answers. Thus, the individuals approach to the test is quite unlike that is encouraged by projective tests, in which "anything goes".

Among such objective tests of personality, some of the tests are outstanding measures which are examples of criterion keying, which refers to the development of a scoring key in terms of some external criterion. This procedure involves the selection of items to be retained and the assignment of scoring weights to each response. When criterion-keying procedures have been followed the responses elicited by these stimuli are scored in terms of their empirically established behavior correlates.

Within the realm of the criterion keying, California Psychological Inventory (CPI) is one of the best known and most widely used tests .

California Psychological Inventory:

California Psychological Inventory (CPI), an empirically keyed self report personality inventory. Developed at the University of California by Harrison Gough (1957, 1968) represents work carried out over a period of years. In several respects it is similar to MMPI, however it was not devised with an aim of contributing to the differential diagnosis of mental patients. The main goal behind its development was the description of normal personality. Its scales are principally addressed to personality characteristics important for social living and interaction. The inventory contains 480 true-false items and 18 scales. There appear to be four types of scales on the CPI measuring (1) poise, ascendancy, and self assurance, (2) socialization, maturity and social responsibility, (3) achievement potential and intellectual efficiency, and (4) personal orientation and attitudes towards life.

Three of its 18 scales are "validity" scales designed to assess test taking attitudes. These scales are designated as sense of well being (Wb), based on responses by normals asked to "fake bad"; Good impression based on responses of normals asked to "fake-

good", and communality (Cm) based on a frequency count of highly popular responses. The remaining 15 scales provide scores in such personality dimensions as Dominance, Sociability, Self-acceptance, Responsibility, Socialization, Self-control, Achievement-via-conformance, Achievement-via-independence and Femininity.

Keying of the various CPI scales was based on responses of a sample of over 6000-7000 males. In sampling, Gough paid attention to subjects ages, social positions, status and geographical locations. Thus a standard score scale with a mean 50 and a standard Deviation (SD) of 10 was obtained.

Internal consistency and retest reliability coefficients of the individual scales compare favourably with these found for other personality inventories (Megargee, 1972). Intercorrelations among scales are relatively high. All but four scales, for example, correlate at least .50 with one or more scales, indicating considerable redundancy among the 18 scales.

Cross cultural studies with individual scales such as Socialization and Femininity, have yielded promising validity data against local criteria within different cultures. Research has provided a number of regression equations for the optimal weighting of scales to predict such criteria as delinquency, parole outcome, high school and college grades, and the probability of high school dropouts.

Harrison & Gough emphasized upon the need of developing such test which are close measure of day to day events similar to all the cultures all over the world. He claims CPI to be a such test which is universally recognized due to its sensitivity in clicking the qualities which are cross culturally relevant. He regards the variables of CPI as 'Folk Concepts' i.e. terms available to all the normal human beings anywhere. Since these folk concepts emerge from the interpersonal relationships and social setup that enables them to have a direct relevance with such social situations and interpreting a particular individual with reference to the social value.

On the whole, however, the CPI is one of the best personality inventories currently available. Its technical development is of a high order and it has been subject to extensive research and continuous improvement.

One can be impressed by the wide variety of problems to which the CPI has been applied. The studies done have found significant associations between the CPI and various measures of achievement in school and college as well as in military and police training programs, medicine, dentistry, nursing and teaching, moreover CPI can identify those who are likely to cheat, exams or take part in extracurricular activities. The inventory has been found to relate to leadership, managerial ability, employability, and adjustment.

Thus CPI is clearly a "wide band" instrument — one that is sensitive to a broad array of behavior patterns. Noteworthy is the fact that the CPI has been found capable of making long-range predictions, sometimes over a period of three or four years (Megargee, 1972).

Another noteworthy aspect of the literature is the success the CPI has enjoyed in other cultures. Psychologists have been skeptical about whether domestic assessment devices in general, and structured inventories in particular, can be exported successfully. The fact that it was so contrary to expectation makes the cross-cultural data even more impressive (Gough recalls one colleague who dismissed the early results on the validity of the socialization scale in Europe as meaningless since "all Western Cultures are alike" when the data from Costa Rica arrived, Gough rushed to show his colleague who, looked at them in consternation and cried, "Damn that United Fruit Company! they've Americanized the Costa Ricans!), whether it is due to the use of folk concepts, the item pool, the scale construction strategy, all of the above, or more of the above, it is clear that Gough has created a remarkably vigorous assessment device (Megargee, 1972).

If nothing else, the literature demonstrates the wide acceptance the CPI has found among applied psychologists in both their scientific and their professional roles. In reviews such as "Mental Measurement Yearbooks" reflect that acceptance. In 1965, Kelly termed the CPI "one of the best, if not, the best available instrument of its kind", and Goldberg's review states "At least for the next five years, the knowledgeable applied practitioner should be able to provide more valid non-test predictions from the CPI than from most other comparable instruments on the market today" (Goldberg, in press, Megargee, 1972).

Carson and Parker (1966) classified 356 entering college freshmen as leaders (top 25 per cent), average leaders (middle 50 per cent), and nonleaders (bottom 25 per cent) on the basis of their election to office in high school extracurricular activities. The results were similar to those obtained by Gough; the mean T-Scores for the three groups were 55, 51

and 46 respectively, and an overall analysis of variance was statistically significant. Johnson and Frandsen (1962) reported more impressive findings. Their sample of fifty student leaders, all of whom had been elected to the presidency of a college organization having at least twenty members, had a mean Dominance T-score of about 62 while fifty nonleaders had a mean T-score of only 44.

Validity Of CPI Scales:

Rawls and Rawls (1968) reported that Dominance (Do) significantly differentiated the thirty most successful from the thirty least successful of the 150 executives employed by a medium-sized utilities firm. However, they failed to report the magnitude of the differences between groups. The Do scores of seventy-five managerial personnel who were ranked by their supervisors as being in the top third in managerial effectiveness were compared with the Do scores of those falling in the lowest third by Mahoney, Jerdee, and Nash (1961). (Data from the middle group were discarded.) Statistically significant differences were found; the median Do score of the more effective managers was 60 while the less effective group scored 54. These two studies showed that the Do scale is able to make discriminations within fairly homogeneous occupational groups.

The Do scale was also used in two other investigations (Altrocchi, 1959; Smelser, 1961) to select subjects high and low in dominance who then interacted in a mutual problem-solving situation. Although the validity of the Do scale was not the subject of investigation, it was noted in both studies that the high Do subjects behaved dominantly and the low Do subjects submissively.

Gough has correlated the Capacity for Status (CS) scale with scores on his Gough Home Index, a measure of socioeconomic status based on certain kinds of objects such as books, phonographs, and similar things present in the individual's home. In four samples ranging in size from 152 to 238, Gough reported correlations ranging from .38 to .48 (1952,p.23 and p.37).

Bogard (1960) compared the Cs scores of executive trainees from a labor union and a shipping line. Despite the fact that the social class identification of the management group was significantly higher than that of the union group, there were no significant

differences on Cs. This could be because both groups were ambitious and upwardly mobile.

Bouchard (1969) studied the relationship of the CPI to effectiveness in various types of group problem-solving situations. Sociability (Sy) was the only CPI scale that correlated consistently with this criterion in a variety of situations.

Evidence for the validity of Social-presence (Sp) is relatively sparse. In the CPI Manual, Gough (1969b) reports that fifty-two boys and fifty-one girls in five high schools nominated by their principals as being highest in social presence obtained Sp scores significantly higher than those of the fifty-two boys and fifty-one girls who were lowest. The subjects high in the dimension did not have elevated scores (T-scores = 53 and 52) but the subjects lacking the trait did score low (T = 42 and 43). In a sample of seventy medical students Gough also reports data from IPAR indicating a significant correlation (r = .43) between Sp and staff ratings of social presence.

Lazarus, Speisman, Mordkoff, and Davison (1962) investigated the relationship between CPI scores and autonomic nervous system reactivity to stress. Individuals with high Self-acceptance (Sa) scores manifested significantly less autonomic disturbance, supporting Gough's hypothesis that such people are less likely to become upset or perturbed.

Frankel (1969) classified undergraduate women and female alumnae as goal oriented or non-goal oriented. Analyzing their CPI scores, she found the goal oriented women to be significantly higher on Sa, as one would expect.

Gough (1969b) has compared the mean Well-being (Wb) scores of the 915 psychiatric patients and 354 dissemblers tested in connection with the cross-validation of Ds with those Wb scores of 2,800 college students tested in the standardization of the CPI. As was the case with Ds, the fake bad records are quite different from the valid protocols, but unlike Ds, Gough found a significant difference between the scores of the psychiatric cases and the normal students. Reflecting the changed purposes of the scale, he states, "The lower score among patients is..... in support of the scale's validity" (1969b, p. 21).

In a comparison of extreme groups with an undistributed middle, Gough (1969b) found fifty-two high school boys and fifty-one girls nominated by their principals as the

most responsible had significantly higher Responsibility (Re) scores than a similar number nominated as least responsible. The differences were fairly substantial, reaching 16-18 T-score points, with the least responsible groups having quite low T-scores (32-37) and the most responsible having average T-scores (50-53). The pattern of these studies suggests that the Re scale discriminates better at the lower end in a manner reminiscent of Fisher's (1959) "twisted pear" pattern.

It is evident, that groups characterized by anti-social behavior obtain low scores on the Re scale. There are also indications that occupational groups for whom responsible behavior is required may have above average scores, and that Re correlates with performance on tasks emphasizing attention to duty.

Megargee and Mendelsohn (1962) compared the Self-Control (Sc) scores of extremely assaultive, moderately assaultive, and nonviolent criminals with one another as well as with the scores of a sample of non criminals. The only difference that reached statistical significance was the tendency of moderately assaultive criminals to be more controlled than the non criminals. Although they used only the twenty-one Sc items common to the MMPI, subsequent research has indicated this abbreviated scale correlates .79 with the full CPI version (Megargee, 1966b).

Several investigators have correlated Tolerance (To) with the California F scale. Gough (1969b) reported a correlation of -.46 in a sample of one hundred military officers and one of -.49 in a sample of 419 college students. Jensen (1957), using the MMPI version, obtained a correlation of -.27 in a sample of 826 college students; the present writer in an unpublished study found correlation's of -.22 in a sample of 293 college men and -.40 in a sample of 210 college women.

Both studies relating Achievement-via-independence (Ai) to high school GPA conducted on Anglo-American samples which did not partial out intelligence reported significant associations (Bending and Klugh, 1956; Gough, 1964a). In addition, Gough has reported positive results in an Italian sample (1964c). The correlation's in these studies are generally in the .20s.

Trites, *et al.* (1967) found a small but significant correlation between Ai and grades in an air traffic control training program ($r = .18$). In military training programs, Datel, Hall, and Rufe (1965) found soldiers who completed an Army language training program

had higher Ai scores than those who dropped out, and Rosenberg, McHenry, Rosenberg, and Nichols (1962) found significant correlation's with course grades in clinical psychology and social work (r = .46), and neuropsychiatric procedures (r = .47). Kohlfield and Weitzel (1969) also reported a significant correlation (r = -.32) with their treadmill measures.

Purkey (1966) found students whose SAT scores were in the gifted range scored higher on Intellectual-efficiency (Ie) than did average students. The mean difference was about 20 T-score points. Southern and Plant (1968) reported an Ie T-score of fifty-six for members of MENSA, a score significantly higher than the national norms. (Some problems in discriminant validity were evident in that study, since the MENSA members scored even higher on Ai [T = 65 for men and 61 for women] than they did on Ie). Plant and Minium (1967) tested students about to enter junior college and again after two years there. The Ie scores of the gifted students significantly exceeded those of the students with less ability, the difference being about 12 T-score points. They also found that the difference increased after two years of college, which could mean that college increases the intellectual efficiency of bright students more than it does that of duller ones.

Studies of the Flexibility (Fx) scale have been less direct. Hills (1960) took students in the top and bottom quarters on Fx and administered two performance tasks thought to be related to rigidity: mirror-tracing and the Stoop color-naming test. The more flexible students did not perform better than the rigid ones on these two tasks.

It appears that the Fx scales does correlate negatively with measures of rigidity, but that it fails to relate positively to criteria of flexibility. Gough (1968a) states that Fx is curvilinear with moderate elevations reflecting adaptability, but very high scores (T > 75) indicating instability.

The usefulness of the CPI for various assessment and selection problems is not solely a function of the test. Many other external factors can influence its usefulness. Meehl and Rosen (1955) demonstrate the importance of the base rates for the occurrence of a characteristic within a particular population. Unless a measure is perfectly valid, or has a false positive rate of zero, it can be demonstrated that its use will increase errors if the rate of occurrence of that trait within the population is very low. For example, a large university was shocked when it was found that a student had brutally slain two co-educationists. The writer was appointed to a committee charged with determining what steps, if any, could be taken to prevent another such tragedy. Among the data reviewed

was the murder's CPI profile. When it was pointed out that he had a low Socialization (So) scale score (approximately T = 40), it was suggested by some that the So scale could be used as a device for screening new students, with individuals having scores of 40 or below excluded. Given the fact that 16 per cent of the normal student population would have such scores and that the apparent base rate for murderers was only .005 per cent (one murderer among twenty thousand students), use of that formula would have meant denying admission to 3,200 non homicidal students in order to avoid admitting one potential murderer.

Relationship of CPI scales to demographic — other variables and other tests:

The factor 1 (Wb, Re, Sc, Ai, and Ac) scales have negligible correlation's with Socioeconomic Status and IQ among male Subjects; however, some of the scales show low but significant correlation's with socioeconomic status for women. That may reflect shifts in values as a function of status for women. Women usually score two or three raw score points higher than men on the factor 1 scales.

The Factor 2 (Do, Cs, Sy, Sp, and Sa) variables correlate higher with measures of socioeconomic status than the other CPI scales, several of the former having correlation's in the .30s and .40s with such measures of status as the Gough Home Index. There are also significant correlation's (in the high .20s and .30s) with measures of verbal intelligence. There are no noteworthy sex differences in the raw score means for the factor 2 scales. This pattern is consistent with the notion that the individual who is high on such scales is upwardly mobile, ascendant, and verbally fluent.

Factor 3 is defined by high loadings from Ai and Fx and, to a somewhat lesser extent, To, Ie, and Py. The correlations with socioeconomic status are on the order of zero for Ai and Fx, but To and Ie resemble the factor 1 pattern with negligible correlation's for men but significant correlation's for women. Of all the CPI scales, the factor 3 scales have the highest correlation's with IQ, r ranging from .28 to .58 (Ie, of course, was designed to assess intelligence).

Factor 4 is defined by Cm and, to lesser extent, So. There is no significant correlation with socioeconomic status; the correlation with IQ is significantly negative for Cm and zero order for So. Women tend to score higher than men.

Fe has negligible correlation's with socioeconomic status and IQ. Women of course score much higher than men.

Carney and McKeachie (1963) found that, as they had predicted, Jews had higher Achievement Orientation (Ao) scores than Protestants and Catholics. They also found students from higher socioeconomic strata had significantly higher scores than those with lower socioeconomic status.

Sufficient and a well documented literature is available about the ability of CPI to forecast academic and vocational achievement and also an improvement of its use in clinical assessment and prediction if used in conjunction with other clinical instruments. In the CPI manual, Gough (1969b, p. 5) stated "the inventory is intended primarily for use with 'normal' (non-psychiatrically disturbed) subjects. Its scales are addressed principally to personality characteristics important for social living and social interaction. It has also been found to have a special utility with few problem groups (for example, persons of delinquent, a social tendencies) and has been often used as a diagnostic instrument and in other settings such as planning or evaluating treatment programs.

CPI, has been shown to be most useful in discriminating individuals who are primarily in conflict with society rather than with themselves. Low So scores characterize delinquents criminals, unwed mothers, marijuana and cigarette smokers, bright underachievers, alcoholic cheater and psychologists. A fruitful area for configural research would be studies such as Hogan's (1970) designed to determine what other variables influences the behavioral manifestation of low socialization. Such studies might also provide indications about whether the CPI could be used for the topological classification of anti-social individuals.

Two studies have contrasted patients believed to be suffering from psycho physiological disorders with symptom-free groups. In his follow-up of subjects in Oakland Adolescent Growth Study, Stewart (1962) located ten men and ten women with such psychosomatic ailments as stomach ulcers, and arthritis. When the CPI scores of the psychosomatic men were compared with those obtained by the symptom-free group, the psychological group was found to have significantly lower scores on Wb, Sc, and Ie, there was also a trend ($p < .10$) for them to be higher on Cm.

A program of research by Donn Byrne and his colleagues has focused on the dimension of repression-sensitization. According to Byrne, repressors are those who avoid anxiety arousing stimuli, while sensitizers approach and attempt to control them. His revised Repression-Sensitization (Rs) scale, composed of MMPI items, in a well-validated measure of that construct (Byrne, 1964). Byrne, Golighthy, and Sheffield (1965) correlated the RS and CPI scores of ninety-one students, they report the scales most consistently relating to the repression-sensitization dimension are Sy, Wb, Sc, To, G, Ac and Ie. Those correlation's are all negative, ranging from -.30 to -.49, indicating that high scorers on those scales are more likely to use repressive defenses.

(Gough, 1969b, p. 5) states that people with "delinquent, a social tendencies" are one of the few problems' groups with which the CPI has been found to have "special utility".

In non-domestic studies, Mizushima and Devos (1967), using a Japanese translation of the CPI, compared thirty-six inmates of the Kurihama Reformatory for severe delinquents with sixty four similarly aged students at a commercial high school near Tokyo. The delinquents were significantly lower on the Do, Wb, Re, So, Sc, To, Ac, Ai, Ie, Py and Fc scales. Finding differences primarily in the Factor 1 and 3 scales lends cross-cultural support to the pattern noted in Gough's data. The absolute elevations for the delinquents were fine to the T-score points below the mean scores reported by Gough (1969b) for a social American samples. That probably indicates a cultural difference since the Japanese non-delinquents were also lower than the American counterparts on those scales.

The CPI is used not only to predict the potential for improvement in treatment, but also to measure, change after therapy or counseling has been completed. In such studies, the validity of the CPI is taken as established and the test is used as a yardstick by which the effectiveness of the treatment program is evaluated.

Nichols and Beck (1960) used the CPI as one of several measures of client change after counseling at a university counseling service. Other measures included ratings made by therapists and by patients. For each measure the difference between the pre-and post-treatment scores was determined, those different scores were then factor analyzed. Of the six factors that emerged, two were clearly CPI factors. One was identifiable as factor 1, with high loadings from Wb, Re, Sc, To, Gi and Ac; the second was Factor 2, with high

loadings from Do, Sc, Sy, Sp and Sa. The amount of change on factor 2 scales was significantly greater than that observed in an uncounseled non-client group tested at the same intervals. It would appear from these data that the Factor 2, and to a lesser extent the Factor 1, scales are the ones most responsive to the changes resulting from insight oriented personal counseling. It is noteworthy that those CPI factors were independent of the clients and therapists' ratings; however, this could be due to the variance of the common method.

Shaver and Scheibe (1967) used the CPI to evaluate changes as a result of participating in a summer camp, program, in chronic psychiatric adult patients, most of whom were schizophrenic. The CPI was administered before and after the program, and significant mean increases were found in Cs, Sy, Sp, Sa, Cm and Ac. No control group was used.

The CPI Manual reports the correlation between the eighteen scales and the MMPI, the EPPS, the GZTS, the 16PF and the Strong Vocational Interest Blank.

There are substantial positive correlation's (.30 to 65) between the factor 1 scales and the MMPI scales, as well as significant positive correlation's as high as .50 with the Welsh R (Repression) scale. The principal negative correlation's are with the F scale, the F-K index, and with Block's Under control scale. That MMPI pattern supports the interpretation of factor 1 as reflecting good adjustment through social conformity and making a good impression. That interpretation finds additional support in the correlations with GZTS and 16PF . Factor 1 scales consistently correlate with the GZTS Emotional Stability, Objectivity, and Personal Relations measures and with 16PF Factor G, Super-Ego Strength. The correlations with the EPPS and SVIB are negligible, however. The person scoring high on those scales thus appears to be a stable, well-socialized, controlled individual with a conventional value system who is sensitive to social demands and tries to behave so as not to offend others.

The pattern of correlation's with the MMPI suggests that the person who scores high on the factor 2 scales is a well-adjusted happy, outgoing person who is rarely withdrawn or depressed. Almost all the scales have positive correlation's with the MMPI, K, Es, and Ma scales, coupled with negative correlation's with such measures of anxiety and depression as D, Pt, and MAS; there are also negative correlation's (ranging from -.44 to -.78) with the Si scale. People high on the factor 2 scales obtain low scores on the Welsh factor A and R measures and the Welsh Internalization Ratio, suggesting freedom from

neurotic conflicts and anxieties. Similarly, on the GZTS, significant correlations with the Ascendancy and Sociability scales are the rules, with correlations ranging from .21 to .56. The principal correlations with the 16 PF are with the scales for Factors A, E, F, and H. The Handbook for the 16 PF (Cattell and Eber, 1957) suggests that such a test pattern is found in an outgoing, spontaneous, socially participative individual who is good-natured but also assertive and ascendant in his interpersonal relations; he is cheerful, talkative, and often elected the leader of a group. That pattern is consistent with the CPI scale labels. The factor 2 scales also correlate significantly with the EPPS Dominance scale, but the correlations with the EPPS *n* achievement and *n* Affiliation scales do not approach significance. In the SVIB, the principal correlations are with the scales for personnel director, public administrator, Army officer and city school superintendent. There are moderate correlations with Interest Maturity, but those for Occupational Level are not as high. The common denominator for those occupations (and for others that a few factor 2 scales relate to), is an interest in a position with some authority in which one works with others. That interest in working directly with others apparently takes precedence over status or power since the correlations are negligible with such high-prestige positions as banker, or the presidency of a manufacturing concern. Likewise there is a negative correlation with the arts in which one is isolated and independent of others. By the same token, however, there is relatively little interest in low-status jobs such as high school teaching, despite the fact that they involve working with others.

Thus the pattern of correlations between the factor 2 scales and other test measures indicates that such scales reflect characteristics shared by well-adjusted, outgoing, ascendant, socially active, verbally fluent people who move up to positions of leadership.

Compared with other CPI scales, the factor 3 scales have few significant correlations with other personality tests, suggesting that they occupy a somewhat different "factorial space". Most personality scales are designed to assess some aspect of adjustment or interpersonal relations. In the factor analytic personality tests, the principal correlations are with the GZTS Friendlines scale and the 16 PF Factor Q-1 measure.

The MMPI is the only test in the present battery to which the factor 4 scales relate. As might be expected there are significant negative correlation's with the F scale, although the Rs (-.31 and -.35) are less than one would expect. So also has negative correlations with Pd and Ma, the MMPI scales.

As expected, the major correlation with the MMPI is with the Mf scale (+.44); Fe also correlates positively with D and r, suggesting that Fe also reflects a pattern of internalizing worrying about problems. Fe scale correlates principally with the Restraint and Friendliness scales of GZTS. Fe correlates positively with factor 1 (Toughness verses Sensitivity) and negatively with the factor Q -1 (Conservative verses Experimenting) of 16 PF. With EPPS significant correlation is with Need Deference.

On the SVIB there were positive correlations with occupations stressing artistic interests or work with abstractions: artist, musician, author.

Initial Psychometric Evaluation Of Urdu Version Of California Psychological Inventory (CPI).

Iftikhar Ahmad (1986) tempted to assess the scope of the application of the CPI in Pakistani society, as CPI has already been translated into many languages including French, German, Greek, Italian, Japanese, Spanish, and Mandarin.

The specific purpose of this study was to estimate the psychometric properties of the Urdu CPI and to assess whether it qualifies as a test of some potential use in the population of our interest. The salience of this test would depend upon its goodness viz-a-viz the response data characteristic of the subjects of this study. Standard psychometric procedures have been employed in evaluating the Urdu CPI in order to determine its usefulness as an objectively scorable personality test, to be used in Pakistan.

An adhoc (non random) group of 76 college student (14th year in education) were initially employed for this study. Of these, 70 (37 boys, 33 girls) completed the work. Primarily, the subjects had been selected as bilinguals in English and Urdu. The procedure of determining the status of the subjects as bilinguals could not be very rigorous, as proficiency tests were not available in the two languages to select any traditionally defined bilingual group, however, the subjects employed, had qualified Higher Secondary School Examination in which both English and Urdu languages are compulsory subjects. They had opted for English as their medium of instruction at the college level and had Urdu as their first language. This was held suffice for the bilingual requirements of the task.

Subjects were administered the test at their respective colleges during the class hours. It was difficult to have test-retest arrangement for the administration of both the

versions on the same subjects because of students' time constraint. Thus alternate CPI versions were administered to subjects. They were first briefed about the research study with regards to its objectives. The protocols were subsequently scored after the standard key for both the versions and appropriate procedures were adopted to carry out the analysis of the data on the parameters important in evaluating the test.

Validity of the Pakistani data:

In a test alien to Pakistani society, one major concern in the use of the tests would be to see whether or not the test contents are properly understood and responded to; subjects know how to take the test and write answers in the required style; have proper test-taking attitude, etc. Data were explored to assess some of these matters. Rate of omission of response was tabulated, which was found to be just negligible indicating that the testees did respond to the test contents and they tended to answer the questionnaire categorically and the items seemed to be working well in this group of subjects (Iftikhar, 1986).

Scalar Equivalence between the English and the Urdu Versions:

To assess metric equivalence at the level of scales, mean scores were calculated which were found to be quite comparable between the two versions, except on six scales, namely, Wb, Re, Sc, To, Gi and Ie, where differences between these indices were found to be statistically significant ($P < .05$). This corroborates the item-analysis done on the two versions in that the items of these six scales showed clear differences in response rates. It is interesting to note that this set of scales formed factor 1 in most of the factor analytic studies (Mitchell and Pierce-Jones, 1960; Bouchard, 1969; Nichols and Schnell, 1963). This factor has been referred to as a measure of 'general adjustment', as a measure of 'intrapersonal beliefs', and as a 'means of cultural values'. Hence, it is not surprising that these are the scales showing major differences between the two versions.

Problems of this kind (linguistic and value differences) are in fact inherent in the bilingual research method (Bond and Yang, 1980).

As against the English version, the scores on the Urdu version were moderately enhanced on almost all the scales. The average scores on the scales of the Urdu CPI adequately corresponded to the mid-value of the number of items set for the scales, which

means that Urdu version would have pretty fair discriminative ability in this population (Iftikhar, 1986).

Sex -Differences and Test Scores:

Scores of male and female subjects were also well comparable on the Urdu version. The difference between the means scores of the sexes was statistically significant on none of the scales, except, as expected, on 'Femininity' scale ($P < .01$). This attests to the validity of the said scale which seeks to differentiate between males and females, and to define a personological syndrome that can be properly conceptualized as 'feminine' at one pole and 'masculine' at the other. The validity of the 'Fe' scale has, therefore, been confirmed here also, as in several other cross cultural investigations (see Gough et al. 1968; Levin & Darani, 1971; Nishilyama, 1975; Pitariu, 1981); (Iftikhar, 1986).

Reliability Evidence:

As reliability is one of the most important properties of an objective personality test, KR-20 estimates were calculated to assess the internal consistency and homogeneity of the CPI scales. The obtained indices of reliability estimates ranged from .44 to .93 with a median value of 68, which is satisfactory for CPI as a largely externally criterioned test.

These estimates are also fairly comparable with the American data. Interestingly, KR-20 index of homogeneity of most of the externally criterioned scales was as good and oddly enough, even better than that of the scales which were developed by internal consistency technique. As an explanation for this observation, Farly and Cohen (1980), can well be mentioned who in a similar investigation of CPI found common items between the scales to have specially contributed to the internal consistency of all the scales of this multidimensional test (Iftikhar, 1986).

Cross-cultural Validity:

CPI has been stipulated to be positively related set of qualities important for adjustment and social living. This claim is first to be verified by Pakistani data also in order to assess the applicability of this rationale of the test here. This will reflect on the cross-cultural implication of the construct of these traits. Pakistani data were, therefore, intercorrelated on all the scales, on both the versions separately. The fact that most of the

indices so obtained in the correlational matrix were significantly positive upheld the rationale that the test assesses a set of related vectors.

Next Pakistani data were compared with the American data on English version taken from the California Psychological Inventory Handbook (Megargee, 1977) to see how close or otherwise they are vis-a-vis the two national samples. The inter-scale correlation between the two national data as well as between the two versions on the Pakistan data was computed as .099 as against the same estimates of .299 between the two versions. The smaller difference between the data of the cross-national groups supports the cross-cultural validity of the "Folk Concept" construct logic of the test and endorses the claim that CPI is applicable across borders. Relatively larger index of difference between the two versions, however, reflects on the current degree of equivalence between them (Iftikhar, 1986).

Cultural Differences and Response Rates:

Pakistani data of the Urdu version were compared to that of the modal American profile given in the CPI manual (Gough, 1957) for cross-national normative comparison where-upon the former was found to be much lower than the latter in terms of the base rate on most of the scales including two of the three validity scales. This is indicative of cultural differences which affected the frequency of response-rate in the two samples, that is, the Pakistani subjects did not respond to the items in the keyed direction as frequently as the Americans did.

The similarity of Urdu and English Pakistani profiles between themselves and their identical deviance from the American normative data suggests that differences between the two cultural groups were stronger than linguistic differences between the two versions. This showed that difference between the responses of Pakistani and American subjects exist by different nature of social living which affect their personal outlook, interest and values resulting consequently in differential appreciation of the test contents.(Iftikhar,1986)

Though this was a preliminary study having certain limitations pertaining to the small size of sample and a research design of rather limited scope, it did evidence that the Urdu CPI holds reasonably satisfactory indices of psychometric qualities by Pakistani data also. For the valid use of the test and specially as a translated test to be used in the target population, it has to be, however, revalidated anew in its own right, using essentially the same set of items and procedures . For more meaningful use of the test, it must also be seen whether education, residence (Urban-Rural) socioeconomic level and other

demographic variables affect CPI scores in our conditions and if so, these correlates should be studied through using controls for the factors to find how much they account for the test results and in what direction (Iftikhar, 1986).

Following the lead of work on translation and adaptation of CPI in Pakistan, that the present author used the translated and adapted version of CPI, with indigenously developed norms.

In Pakistan, the personality assessment for selection purposes is carried out by the psychological dimensions of the Public Service Commissions, in the capital Islamabad and at the provincial levels in Peshawar and Lahore. Armed forces also have a well established psyche dimension, for the selection of personnel into the three forces namely, Army, Navy and the Air Force. The selection is carried out at various Inter services Selection Boards and at the selection centers in the major cities as well at their respective headquarters.

Those organizations, like the Public Service Commissions of the Baluchistan and Sindh hire the services of psychologists for selection of personnel, from any one of the organizations mentioned above.

They make use of both the projective and objective personality assessment methods along with the situational tests.

METHODOLOGY

PURPOSE, OBJECTIVES AND METHOD:

Purpose of the Research:

The present research was designed to investigate the factors contributing to selection of the NWFP Public Service Commission candidates, belonging to different socioeconomic status and father's educational level, in accordance with the selection criteria. CPI was used for this purpose. As mentioned earlier in the absence of indigenously developed tests, it becomes inevitable for the researcher to use the translated and adapted version of tests.

The main aim behind the proposed study was to highlight the distribution of characteristics with in the levels of different socioeconomic status and father's education of the candidates, fulfilling and not fulfilling the selection standards of intelligence, dominance, sociability, confidence, achievement, dynamism / leadership, responsibility, social tolerance and clarity of self doubts and anxieties; in order to facilitate the commission in its selection process.

Therefore the objective of the present research was achieved through following stages:—

Stage 1: Identification of scales of CPI matching the selection criteria of NWFP Public Service Commission.

Stage 2: Classification of the candidates fulfilling / not fulfilling the selection criteria according to their Socio-Economic Status and father's education.

Stage 3: Separation and classification of the selected candidates according to their Socio-Economic Status and Father's Education fulfilling and not fulfilling the selection criteria.

Stage 4: Identification of the selection trend of the commission, towards candidates' Socio-Economic Status and Parents' Education.

Stage 5: Comparison of the selected candidates with a matched sample of un-selected candidates on the 12 CPI scales according to their Socioeconomic status and father's education.

The study intended to explore the following queries:

(1) Do the socioeconomic status and the father's education effect the personality characteristics of the subjects?

(2) Do the subjects, fulfilling the selection criteria, belong to a higher socio-economic status from among the three classes (upper-middle-lower) and a high level of father's education from among the four categories (B.A/B.Sc. and above,; Middle-Intermediate; Primary and Uneducated)?

(3) Are the socioeconomic status and the father's education, contributing factors in the selection of the subjects by the Commission, to various departments of the Government?

(4) Is the major portion of selection by the commission from the subjects belonging to a particular:

(i) socioeconomic class.
(ii) category of father's education.

(5) Is there any significant difference between the unselected and the selected subjects on the variable socioeconomic status and the father's education? and between their personality characteristics?

II. Research Design:

Stage 1: This stage aimed at the identification of the scales of CPI, comparable to the selection criteria. It was carried out in a single phase by consulting the manual and the literature for the equivalence of CPI scales and the selection criteria at Public Service Commission, NWFP.

Stage 2: The second stage aimed at the identification of the three classes of socioeconomic status and the four levels of father's education among the candidates fulfilling and not fulfilling the selection criteria. The design was a 2x3 factorial with two bipolar (low and high scores i.e. above and below the cut off point of CPI) and three (upper-middle and lower socioeconomic status) and a 2x4 factorial with two (low and high scorers) and four (B.A./B.Sc. and above; middle to intermediate; primary and uneducated parents).

Categories	Upper	Middle	Lower
Low			
High			

Categories	B.A. and above	Middle-Intermediate	Primary	Un-educated
Low				
High				

Stage 3: The third stage intended to classify the selected candidates(to various departments) who fulfilled/not fulfilled the selection criteria according to their socioeconomic status and father's education. This study was carried out in two phases:

(i) Finding out the number of candidates selected.

(ii) Percentage of subjects fulfilling/not fulfilling the selection criteria according to the socioeconomic status and the father's education. Again a 2x3 and 2x4 factorial design was followed.

Stage 4: The fourth stage was designed to explore the trend of selection at Public Service Commission, NWFP. This study was done in a single phase, where the parentage of selected candidates for both Socioeconomic Status and father's Education (mentioned in Stage 4), was analyzed.

Stage 5: This stage aimed at the selection of a matched sample as the selected subjects from the pool of the entire group. It was carried out in the following phases:

(1) A 2x2 factorial design was followed with two unselected and selected groups of subjects and their two age brackets (18-26; 27-35).

(2) A 2x4 factorial design was followed with two unselected and selected groups of subjects and their four levels of educational qualification (M.A./M.Sc., Professional; B.A./B.Sc. and F.A./F.Sc.).

(3) A 2x4 factorial design was again followed in order to identify the overlap of the subjects falling in both the categories of age and the educational level. The design was (two age brackets) age by four levels of education (as mentioned earlier).

Age	Unselected	Selected
18-26		
27-35		

Educational level	Unselected	Selected
M.A./M.Sc.		
Professional		
B.A./B.Sc.		
F.A./F.Sc.		

Educational level	18-26	27-35
M.A./M.Sc.		
Professional		
B.A./B.Sc.		
F.A./F.Sc.		

METHOD:

Stage 1: The first stage of the identification of the CPI scales, congruent to the selection criteria was done in a single phase by consulting the CPI test manual by Harrison and Gough (1957, 1987) and the California Psychological Handbook by Megargee (1972) for the definition and explanation of the CPI scales.

The identified CPI scales were Dominance, Capacity for status, Sociability, Social presence, Self-acceptance, Well being, Responsibility, Self-control, Tolerance, Achievement via independence, Intellectual efficiency and Flexibility – which were comparable to the parameters of intelligence, leadership/dynamism, responsibility, expression, confidence, social tolerance, general outlook, sociability and integrity (free

from self doubts and worries) measured on a scale of seven at the NWFP Public Service Commission.

Stage 2: This stage aimed at the classification of candidates fulfilling/not fulfilling the selection criteria into three classes of Socio Economic Status and four categories of father's education (as mentioned previously).

Sample: Sample consisted of 695 candidates who had applied for different jobs advertised by the Public Service Commission, NWFP. They included those candidates who had come for direct recruitment i.e. through ability test. Their ages varied from 18-35 years having different levels of education ranging from F.A./F.Sc. to M.A./M.Sc. and professional degrees.. Their socioeconomic status was determined through their annual family income and their father's occupation, which placed them into three classes; upper, middle and lower. The educational levels of the subjects' father was also taken into consideration and as their fathers had different educational qualifications so they were grouped into four categories (B.A./B.Sc. and above; middle-intermediate; primary and uneducated). Father's education level and occupation was taken, instead of both the parents educational level and occupation because there was a negligible size of subjects who had educated and working mothers. The sample can be regarded as representative of the NWFP population as the subjects belonged to various geographical locations of the North West Frontier Province including both urban and rural areas.

Procedure:

The subjects were given CPI which consisted of following steps:

1. Subjects were given instructions to facilitate their understanding of the inventory.

2. They were encouraged to have their own judgment about a concept, if they asked to explain a concept.

3. Then the subjects were given a questionnaire to obtain their personal information (Annexure I).

The inventory was scored and their profiles were prepared.

Subjects were then analyzed according to their socioeconomic status and parental education and the percentages of the candidates falling above and below the T-scores (high and low scorers) on the bipolar scales of CPI were obtained for the already mentioned three socioeconomic classes and the four categories of father's education.

Stage 3: In this stage a list of 95 subjects who were selected to various departments was obtained and the same procedure as in Stage III for obtaining the percentages was followed, both socioeconomic status and father's education wise.

Stage 4: During this stage, the obtained percentages of the selected 95 candidates falling in both the low and high categories of the CPI and MMPI scales with socioeconomic status and father's education, were studied and the tendency of selection at the NWFP Public Service Commission was analyzed.

Stage 5: During this stage a matched sample of 95 subjects were randomly selected. Out of the total 600 subjects,(by controlling their educational level and age) and then they were compared with the selected 95 subjects, on the 12 CPI scales, separately according to their socioeconomic status and father's educational level.

Instruments:

(a) California Psychological Inventory with 18 bipolar scales.
(b) Personal Information Questionnaire.

RESULTS, DISCUSSION

RESULTS:

The subjects in this study were administered CPI, their scores on these two tests, classified them into two categories, the low scorers and the high scorers. The low and high scorers were the ones, who had scored below and above the cut-off point on CPI (T = 40-60). There were also two other broad groups into which the subjects were divided namely, the selected and the un-selected subjects. Selected subjects (N = 95) were those who were selected by the Commission out of N = 695, after screening test and the interview, to the various departments of the Government.

The other matched group of un-selected subjects (N = 95) was randomly selected out of the total 600 candidates. SPSS, was used to help carry out statistical analysis, and for analyzing the questions raised by the study.

Table 1-24, concern our question number one and two.

Q.1 states that 'Do the socioeconomic status and the father's education effect the personality characteristics of the subjects'.

Q.2 states that 'Do the subject's fulfilling the selection criteria, belong to a high socioeconomic status from among the three classes(upper-middle-lower) and a high level of father' education from among the four categories (B.A/B.Sc and above, middle-intermediate, primary and un-educated.)

TABLE-1

A 2x3 Chi-square between the Low-High scorer categories of the 'Dominance' (Do) scale of CPI and the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low	42	70%	150	74.6%	390	89.8%
High	18	30%	51	25.3%	44	10.1%

$X^2 = 31.8$ df; 2 $p < .01$

Table-1, reflects a 2x3 Chi-square result for the three classes of the socioeconomic status and the low-high scorer categories of the CPI scale 'Do'. The table shows the

frequencies and the percentages of subjects falling in the three classes of (Upper-Middle-Lower). The findings are highly significant, $X^2 = 31.88$; df = 2; $p < .01$.

TABLE-2

A 2x4 Chi-square between the Low-High scorer categories of the Dominance (Do) scale of CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low	78	73.8	247	83.4	49	83	207	88.8
High	28	26.1	49	16.5	10	16.9	26	11.1

$X^2 = 12.20$ df = 3 $p < .01$

Table-2 reflects a 2x4 Chi-square result for the four categories of father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated and the Low-High scorer categories of the CPI scale 'Do'. The table shows the frequencies and the percentages of the subjects falling in the four educational categories of the father's education. The findings are highly significant. X^2 12.20; df = 3; $p < .01$

** The results state that the low-high scoring subjects on 'Do' scale differ significantly from each other on the variables socioeconomic status and father's education.*

TABLE-3

A 2x3 Chi-square between the Low-High scorer category of the 'Capacity for Status' (Cs) scale of the CPI and the variable socioeconomic status.

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low	29	48.3	111	55.2	322	74.2
High	31	51.7	90	44.8	112	25.8

$X^2 = 31.88$; df = 2; $p < .01$

Table-3 reflects a 2x3 Chi-square result for the three socioeconomic classes (Upper-Middle-Lower) and the Low-High scorer categories of the CPI scale 'Cs'. The table shows the frequencies and percentages of subjects falling in the three categories of the socioeconomic status. The findings are highly significant. $X^2 = 31.88$; df = 2; $p < .01$.

TABLE-4

A 2x4 Chi-square between the Low-High scorer category of the 'Capacity for status' (Cs) scale of the CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low	60	56.1	197	66.6	38	64.4	167	71.7
High	47	43.9	99	33.4	21	35.6	66	28.3

$X^2 = 8.13$; df = 3; $p < .05$

Table-4, shows the result for the four categories of the variable, father's education (B.A./B.Sc. and above, Middle-Intermediate; Primary and Uneducated) and the Low-High Scorer categories of the Cs scale of CPI. The table shows the frequencies and the percentages of the subjects falling in the four categories of the father's education. The findings are highly significant. $X^2 = 8.13$; df = 3; $p < .05$.

** The results state that the low-high scoring subjects on the 'Cs' scale differ significantly from each other on the variables socioeconomic status and father's education.*

TABLE-5

A 2x3 Chi-square between the Low-High scorer category of the 'Sociability' (Sy) scale of the CPI and the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low	45	75	130	64.7	348	80.2
High	15	25	71	35.3	86	19.8

$X^2 = 17.74$; df = 2; $p < .01$

Table-5, depicts the result for the three classes of the socioeconomic status (Upper-Middle-Lower) and the Low-High scorer categories of the CPI scale Sy. The table shows the frequencies and the percentages of the subjects falling in the three categories of the socioeconomic status. The findings are highly significant: $X^2 = 17.74$; df = 2; $p < .01$.

TABLE-6

A 2x4 Chi-square between the Low-High scorer categories of the 'Sociability' (Sy) scale of CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low	69	64.5	218	73.6	47	79.7	189	81.1
High	38	35.5	78	26.4	12	20.3	44	18.9

$X^2 = 11.98$; df = 3; $p < .01$

Table-6, reflects the result of the four categories of the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated) and the Low-High score categories of the Sy scale of CPI. The table shows the frequencies and the percentages of the subjects falling in the four categories of the father's education. The findings are highly significant: $X^2 = 11.98$; df = 3; $P < .01$.

** The results state that the low-high scoring subjects on the scale 'Sy' differ significantly from each other on the variables socioeconomic status and father's education.*

TABLE-7

A 2x3 Chi-square between the Low-High scorer categories of the 'Social presence' (Sp) scale of CPI and the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low	32	53.3	127	63.2	351	80.9
High	28	46.7	74	36.8	83	19.1

$X^2 = 35.52$; df = 2; $p < .01$.

Table-7, depicts the result of the three classes of the variable socioeconomic status (Upper-Middle-Lower) and the Low-High score categories of the 'Sp' scale and the percentages of the subjects falling in the three classes of the socioeconomic status. The findings are highly significant: $X^2 = 35.52$; df = 2; $p < .01$.

TABLE-8

A 2x4 Chi-square between the Low-High scorer categories of the 'Social presence' (Sp) scale of CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low	65	60.7	207	69.9	48	81.4	190	81.5
High	42	39.3	89	30.1	11	18.6	43	18.5

$X^2 = 20.4$; df = 3; $p < .01$.

Table-8, reflects the result of the four categories of the 'father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and the Uneducated) and the Low-High score category of the scale 'Sp' of CPI. The table shows the frequencies and the percentages of the subjects falling in the four categories of the variable father's education. The findings are highly significant: $X^2 = 20.4$; df = 3; $p < .01$.

** The results state that the low-high scoring subjects on the scale 'Sp' differ significantly from each other on the variables socioeconomic status and father's education.*

TABLE-9

A 2x3 Chi-square between the Low-High scorer categories of the 'Self-acceptance' (Sa) scale of CPI and the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low	22	36.7	68	33.8	227	52.3
High	38	63.3	133	66.2	207	47.7

$X^2 = 21.1$; df = 2; $p < .01$.

Table-9, represents the results of the three categories of the socioeconomic status (Upper-Middle-Lower) and the Low-High scorer categories of the CPI scale Sa. The table shows the frequencies and the percentages of the subjects falling in the three classes of the socioeconomic status. The findings are highly significant: $X^2 = 21.1$; df = 2; $p < .01$.

TABLE-10

A 2x4 Chi-square between the Low-High scorer categories of the 'Self-acceptance' (Sa) scale of CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low	38	35.5	126	42.6	31	52.5	122	52.4
High	69	64.5	170	57.4	28	47.5	111	47.6

$X^2 = 10.92$; df = 3; $p < .01$.

Table-10, represents the result for the four categories of the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated) and the Low-High scorer categories for the Sa scale of CPI. The table shows the frequencies and the percentages of the subjects falling in the four categories of the variable father's education. The findings are highly significant. $X^2 = 10.92$; df = 3; $P < .01$.

** The results state that the low-high scoring subjects on the scale 'Sa' differ significantly from each other on the variables socioeconomic status and father's education.*

TABLE-11

A 2x3 Chi-square between the Low-High scorer categories of the 'Well being' (Wb) scale of CPI and the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low	36	60	138	68.7	358	82.5
High	24	40	63	31.3	76	17.5

$X^2 = 24.65$; df = 2; $p < .01$.

Table-11, depicts the result of the three categories of the variable socioeconomic status (Upper-Middle-Lower) and the Low-High scorer categories of the scale Wb of CPI. The table shows frequencies and the percentages of the subjects falling in the three classes of the variable socioeconomic status. The findings are highly significant: $X^2 = 24.65$; df = 2; $p < .01$.

TABLE-12

A 2x4 Chi-square between the Low-High scorer categories of the 'Well being' (Wb) scale of CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low	71	66.4	220	74.3	42	71.2	199	85.4
High	36	33.6	76	25.7	17	28.8	34	14.6

$X^2 = 18.3$; df = 3; $p < .01$.

Table-12, depicts the result of the four categories of the father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated) and the Low-High scorer categories of the Wb scale of CPI. The table shows the frequencies and the percentages of the subjects falling in the four categories of the variable father's education. The findings are highly significant: $X^2 = 18.13$; df = 3; $P < .01$.

** The results state that the low-high scoring subjects on the scale 'Wb' differ significantly from each other on the variables socioeconomic status and father's education.*

TABLE-13

A 2x3 Chi-square between the Low-High scorer categories of the 'Responsibility' (Re) scale of CPI and the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low	29	48.3	85	42.3	203	46.8
High	31	51.7	116	57.7	231	53.2

$X^2 = 1.31$; df = 2; p = n.s

Table-13 represents the result of the three categories of the socioeconomic status (Upper-Middle-Lower) and the Low-High scorer categories of the scale 'Re' of CPI. The table shows frequencies and the percentages of the subjects falling in the three categories of the socioeconomic status. The findings are non-significant. $X^2 = 1.31$; df = 2; P = n.s.

TABLE-14

A 2x4 Chi-square between the Low-High scorer categories of the 'Responsibility' (Re) scale of CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low	43	40.2	139	47	21	35.6	114	48.9
High	64	59.8	157	53	38	64.4	119	51.1

$X^2 = 4.90$; df = 3; P = n.s.

Table-14, depicts the result of the four categories of the father's education (B.A./B.Sc. and above; Middle-Intermediate, Primary and Uneducated) and the Low-High scorer categories of the scale 'Re' of CPI. The table shows the frequencies and the percentages of the subjects falling in the four categories of the variable father's education. The findings are non-significant: $X^2 = 4.90$; df = 3; p = n.s.

** The results state that the low-high scoring subjects on the scale 'Re' do not differ significantly from each other on the variables socioeconomic status and father's education.*

TABLE-15

A 2x3 Chi-square between the Low-High scorer category of the Self control (Sc) scale of CPI and the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low	28	46.7	109	54.2	258	59.4
High	32	53.3	92	45.8	176	40.6

$X^2 = 4.29$; df = 2; p = n.s.

Table-15, shows the result of the three categories of the variable socioeconomic status (Upper-Middle-Lower) and the Low-High scorer categories of the scale Sc of CPI. The table shows the frequencies and the percentages of subjects falling in the three classes of the variable socioeconomic status. The findings are non-significant: $X^2 = 4.90$; df = 3; p = n.s.

TABLE-16

A 2x4 Chi-square between the Low-High scorer category of the 'Self control' (Sc) scale of CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low	55	51.4	169	57.1	35	59.3	136	58.4
High	52	48.6	127	42.9	24	40.7	97	41.6

$X^2 = 1.66$; df = 3; p = n.s.

Table-16, reveals the result of the four categories of the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated) and the Low-High categories of the scale 'Sc' of CPI. The table shows the frequencies and the percentages of the subjects falling in the four categories of the father's education. The findings are non-significant: $X^2 = 1.66$; df = 3; p = n.s.

** The results state that the low-high scoring subjects on the scale 'Sc' do not differ significantly from each other on the variables socioeconomic status and father's education.*

TABLE-17

A 2x3 Chi-square between the Low-High scorer categories of the 'Tolerance' (To) scale of CPI and the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low	25	41.7	105	52.2	271	62.4
High	35	58.3	96	47.8	163	37.6

$X^2 = 12.77$; df = 2; p < .01.

Table-17, represents the result of the three categories of the socioeconomic status (Upper-Middle-Lower) and the Low-High scorer categories of the scale 'To' of CPI. The table shows the frequencies and the percentages of the subjects falling in the three classes of the socioeconomic status. The findings are highly significant: $X^2 = 12.77$; df = 2; p < .01.

TABLE-18

A 2x4 Chi-square between the Low-High scorer categories of the 'Tolerance' (To) scale of CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low	50	46.7	176	59.5	28	47.5	147	63.1
High	57	53.3	120	40.5	31	52.5	86	36.9

$X^2 = 10.96$; df = 3; $p < .02$.

Table-18, depicts the result of the four categories of the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated) and the Low-High scorer categories of the scale 'To' of CPI. The table shows the frequencies and the percentages of the subjects falling in the four categories of the father's educational level. The findings are highly significant: $X^2 = 10.96$; df = 3; $p < .02$.

** The results state that the low-high scoring subjects on the scale 'To' differ significantly from each other on the variables socioeconomic status and father's education.*

TABLE-19

A 2x3 Chi-square between the Low-High scorer categories of the 'Achievement via Independence' (Ai) scale of CPI and the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low	34	56.7	128	63.7	306	70.5
High	26	43.3	73	36.3	128	29.5

$X^2 = 6.30$; df = 2; $p < .05$.

Table-19, represents the result of the three classes of the variable socioeconomic status (Upper-Middle-Lower) and the Low-High scorer categories of the scale 'Ai' of CPI. The table shows frequencies and percentages of the subjects falling in the three categories of the socioeconomic status. The findings are highly significant: $X^2 = 6.30$; df = 2; $p < .05$.

TABLE-20

A 2x4 Chi-square between the Low-High scorer categories of the 'Achievement via Independence' (Ai) scale of CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low	64	59.8	198	66.9	41	69.5	165	70.8
High	43	40.2	98	33.1	18	30.5	68	29.2

$X^2 = 4.18$; df = 3; p = n.s.

Table-20, represents the result of the four categories of the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated) and the Low-High scorer categories of the scale 'Ai' of CPI. The table shows frequencies and percentages of the subjects falling in the four categories of the variable father's education. The findings are non-significant: $X^2 = 4.18$; df = 3; p = n.s.

** The results state that the low-high scoring subjects on the scale 'Ai' differ significantly from each other on the variables socioeconomic status but do not differ on their father's educational background.*

TABLE-21

A 2x4 Chi-square between the Low-High scorer categories of the 'Intellectual efficiency' (Ie) scale of CPI and the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low	35	58.3	137	68.2	364	83.9
High	25	41.7	64	31.8	70	16.1

$X^2 = 32.36$; df = 2; p < .01.

Table-21 shows the result of the three classes of the variable socioeconomic status (Upper-Middle-Lower) and the Low-High scorer categories of the scale 'Ie' of CPI. The table shows frequencies and percentages of the subjects falling in the three categories of the variable socioeconomic status. The findings are highly significant: $X^2 = 32.36$; df = 2; p < .01.

TABLE-22

A 2x4 Chi-square between the Low-High scorer categories of the 'Intellectual efficiency' (Ie) scale of CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low	65	60.7	231	78	46	78	194	83.3
High	42	39.3	65	22	13	22	39	16.7

$X^2 = 21.40$; df = 3; $p < .01$.

Table-22, represents result between the four categories of the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated) and the Low-High scorer categories of the scale 'Ie' of CPI. The table shows the frequencies and percentages of the subjects falling in the four categories of the father's educational level. The findings are highly significant: $X^2 = 21.40$; df = 3; $P < .01$.

** The results state that the low-high scoring subjects on the scale 'Ie' differ significantly from each other on the variables socioeconomic status and father's education.*

TABLE-23

A 2x3 Chi-square between the Low-High scorer categories of the 'Flexibility' (Fx) scale of CPI and the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low	38	63.3	145	72.1	335	77.2
High	22	36.7	56	27.9	99	22.8

$X^2 = 6.18$; df = 2; $p < .05$.

Table-23, represents the result of the three classes of the variable socioeconomic status (Upper-Middle-Lower) and the Low-High scorer categories of the scale 'Fx' of CPI. The table shows frequencies and the percentages of the subjects falling in these three classes of the socioeconomic status. The findings are highly significant: $X^2 = 6.18$; df = 2; $p < .05$.

TABLE-24

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low	75	70.1	219	74	42	71.2	182	78.1
High	32	29.9	77	26	17	28.8	51	21.9

$X^2 = 3.07$; df = 3; p = n.s

Table-24 represents the result of the four categories of the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated) and the Low-High scorer categories of the scale 'Fx' of CPI. The table shows frequencies and the percentages of the subjects falling in the four categories of the variable father's education. The findings are non-significant: $X^2 = 3.07$; df = 3; p = n.s.

** The results show that the low-high scoring subjects on the scale 'Fx' differ significantly from each other on the variable socioeconomic status but do not differ from each other on their father's educational background.*

Table 25-48, refer to our question number three and four.

Q.3 states that, 'Are the socioeconomic status and the father's education, contributing factors in the selection of the subjects by the Commission, to the various departments of the Government?

Q.4 states that 'Is the major portion of the selection by the Commission, from the subjects belonging to a particular?

1. socioeconomic class,
2. category of father's education.

TABLE-25

Frequency and percentage of the selected subjects scoring Low-High on the scale 'Dominance' (Do) of CPI for the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low (68)	10	58.8	27	65.9	31	83.8
High (27)	7	41.2	14	34.1	6	16.2
95	17		41		37	

$X^2 = 4.72$; df = 2; $p < .09$.

A 2x3 Chi-square test was computed for the Low-High scorers on the scale 'Do' of CPI and the variable socioeconomic status (Upper-Middle-Lower). The table shows frequencies and the percentages of subjects falling in the three categories of the socioeconomic status. The findings are marginally significant: $X^2 = 4.72$; df = 2; $p < .09$. It means that the selected subjects scoring Low/High on the Do scale of CPI only marginally differ from each other on their socioeconomic status.

TABLE-26

Frequencies and the percentages of the selected subjects scoring Low-High on the 'Dominance' (Do) scale of CPI, for the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low (68)	8	42.1	39	79.6	2	50	19	82.6
High (27)	11	57.9	10	20.4	2	50	4	17.4
95	19		49		4		23	

$X^2 = 11.95$; df = 3; P < .007.

A 2x3 Chi-square was computed for the Low-High scorers on the scale 'Do' of CPI and the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated). The table shows frequency and the percentages of subjects falling in the four categories of the variable father's education. The findings are significant: $X^2 = 11.95$; df = 3; $p < .007$. This means that the selected subjects scoring Low/High on the 'Do' scale of CPI differ from each other on the variable father's education.

TABLE-27

Frequency and the percentage of the selected subjects scoring Low-High on the 'Capacity for status' (Cs) scale of CPI for the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low(51)	7	41.2	20	48.8	24	64.9
High(44)	10	58.8	21	51.2	13	35.1
95	17		41		37	

$X^2 = 3.32$; df = 2; P = n.s.

A 2x3 Chi-square was computed for the Low-High scorers on the scale Cs of CPI and the variable socioeconomic status (Upper-Middle-Lower). The table shows frequency and percentage of the selected subjects falling in the three classes of the socioeconomic

status. The findings are non-significant: $X^2 = 3.32$; df = 2; p = n.s. This states that the subjects scoring Low/High on Cs scale do not differ from each other significantly on the variable socioeconomic status.

TABLE-28

Frequency and the percentage of the selected subjects scoring Low-High on the 'Capacity for status' (Cs) scale of CPI for the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low(51)	5	26.3	30	61.2	2	50	14	60.9
High(44)	14	73.7	19	38.8	2	50	9	39.1
95	19		49		4		23	

$X^2 = 7.34$; df = 3; $p < .07$.

A 2x4 Chi-square was computed for the Low-High scorers on the scale 'Cs' of CPI and the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated). The table shows frequency and percentage of subjects falling in each category of the father's educational level. The findings are marginally significant: $X^2 = 7.34$; df = 3; $p < .07$; stating that the low and the high scoring selected subjects on the 'Cs' scale of CPI marginally differ from each other on the variable father's education.

TABLE-29

Frequency and percentage of the selected subjects scoring Low-High on the 'Sociability' (Sy) scale of CPI for the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low (62)	11	64.7	22	53.7	29	78.4
High (33)	6	35.3	19	46.3	8	21.6
95	17		41		37	

$X^2 = 5.24$; df = 2; $p < .08$.

A 2x3 Chi-square was computed for the low-high scorers on the scale Sy of CPI and the variable socioeconomic status (Upper-Middle-Lower). The table represents frequency and percentage of subjects falling in the three classes of the socioeconomic status. The findings are marginally significant: $X^2 = 5.24$; df = 2; $p < .08$, meaning that the

low-high scoring selected subjects on the scale Sy only marginally differ from each other on the variable socioeconomic status.

TABLE-30

Frequency and percentage of the selected subjects scoring Low-High on the 'Sociability' (Sy) scale of CPI for the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low (62)	7	36.8	34	69.4	3	75	18	78.3
High (33)	12	63.2	15	30.6	1	25	5	21.7
95	19		49		4		23	

$X^2 = 9.01$; df = 3; $p < .03$.

A 2x4 Chi-square was applied for the Low-High scorers on the 'Sy' scale of CPI and the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated). The table shows frequency and percentage of the subjects falling in the four categories of the father's educational level. The findings are marginally significant: $X^2 = 9.01$; df = 3; $p < .03$, stating that the two groups of Low-High scorers of the selected subjects differ marginally from each other on the variable father's education

TABLE-31

Frequency and percentage of the selected subjects scoring Low-High on the 'Social presence' (Sp) scale of CPI for the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low (57)	8	47.1	24	58.3	25	67.6
High (38)	9	52.9	17	41.5	12	32.4
95	17		41		37	

$X^2 = 2.10$; df = 2; p = n.s.

A 2x3 Chi-square was computed for the Low-High scorers on the scale 'Sp' of CPI and the variable socioeconomic status (Upper-Middle-Lower). The table reflects the frequency and the percentage of the subjects falling each of the three socioeconomic classes. The findings are non-significant: $X^2 = 2.10$; df = 2; p = n.s. This states that the low and high scoring selected subjects on the scale Sp, do not differ statistically from each on the variable socioeconomic status.

TABLE-32

Frequency and the percentage of the selected subjects scoring Low-High on the 'Social presence' (Sp) scale of CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low (57)	8	42.1	30	61.2	3	75	16	69.6
High (38)	11	57.9	19	38.8	1	25	7	30.4
95	19		49		4		23	

$X^2 = 3.81$; df = 3; p = n.s.

A 2x4 Chi-square was applied for the Low-High scorers on the scale 'Sp' of CPI and the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated). The table reveals the frequency and the percentage of the subjects falling in each of the four categories of the father's educational levels. The findings are non-significant: $X^2 = 3.81$; df = 3; p = n.s. This shows that the low-high scoring selected subjects on the scale Sp do not statistically differ from each other on the variable father's education.

TABLE-33

Frequency and the percentage of the selected subjects scoring Low-High on the 'Self acceptance' (Sa) scale of CPI and the variable socioeconomic status.

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low (32)	6	35.3	13	31.7	13	35.1
High (63)	11	64.7	28	68.3	24	64.9
95	17		41		37	

$X^2 = .26$; df = 2; p = n.s.

A 2x3 Chi-square was computed for the Low-High scorers on the scale Sa of CPI and the variable socioeconomic status (Upper-Middle-Lower). The table reveals the frequency and the percentage of the subjects falling in each of the three class of socioeconomic status. The findings are non-significant: $X^2 = .26$; df = 2; p = n.s. This states that the low/high scoring subjects on the 'Sa', scale do not differ from each other on the variable socioeconomic status.

TABLE-34

Frequency and percentage of the selected subjects scoring Low-High on the 'Self acceptance' (Sa) scale of CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low (32)	3	15.8	16	32.7	1	25	12	52.2
High (63)	16	84.2	33	67.3	3	75	11	47.8
95	19		49		4		23	

$X^2 = 6.40$; df = 3; $p < .09$.

A 2x4 Chi-square was applied for the Low-High scorers on the CPI scale 'Sa' and the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated). The table shows frequency and percentage of the subjects falling in each of the four categories of father's education. The findings are marginally significant: $X^2 = 6.40$; df = 3; $p < .09$. This means that the low and the high scorers on the Sa scale only marginally differ from each other on the variable father's education.

TABLE-35

Frequency and percentage of the selected subjects scoring low-high on the 'Well being' (Wb) scale of CPI and the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low (64)	9	52.9	26	63.4	29	78.4
High (31)	8	47.1	15	36.6	8	21.6
95	17		41		37	

$X^2 = 3.94$; df = 2; = n.s.

A 2x3 Chi-square was applied for the Low-High scorers on the CPI scale 'Wb' and the variable socioeconomic status (Upper-Middle-Lower). The table shows frequency and percentage of the subjects falling in the three categories of the socioeconomic status. The findings are non-significant: $X^2 = 3.94$; df = 2; p = n.s. It states that the low and the high scoring selected subjects on the scale Wb of CPI, do not statistically differ from each other on the variable socioeconomic status.

TABLE-36

Frequency and percentage of the selected subjects scoring Low-High on the 'Well being' (Wb) scale of CPI and the variable father's education:

Groups	B.A./B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low (64)	9	47.4	37	75.5	2	50	16	63.6
High (31)	10	52.6	12	24.5	2	50	7	30.4
95	19		49		4		23	

$X^2 = 5.53$; df = 3; p = n.s.

A 2x4 Chi-square was computed for the Low-High scoring selected subjects on the scale 'Wb' of CPI and the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated). The table reveals frequency and percentage of the subjects falling in each of the four categories of the father's educational level. The findings are non-significant: $X^2 = 5.53$; df = 3; p = n.s. This means that the low-high scoring subjects on the scale 'Wb' of CPI do not statistically differ from each other on the variable father's education.

TABLE-37

Frequency and percentage of selected subjects scoring Low-High on the 'Responsibility' (Re) scale of CPI and the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low (45)	9	52.9	19	46.3	17	45.9
High (50)	8	47.1	22	53.7	20	54.1
95	17		41		37	

$X^2 = .259$; df = 2; p = n.s.

A 2x3 Chi-square was computed on the Low-High scoring selected subjects on the CPI scale 'Re' and the variable socioeconomic status (Upper-Middle-Lower). The table reveals frequency and percentage of subjects falling in each of the three classes of the socioeconomic status. The findings are non-significant: $X^2 = .259$; df = 2; p = n.s. It means that the low-high scoring selected subjects on CPI 'Re' scale do not statistically differ from each other on the socioeconomic status.

TABLE-38

Frequency and percentage of selected subjects scoring Low-High on the 'Responsibility' (Re) scale of CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low (45)	8	42.1	24	49	1	25	12	52.2
High (50)	11	57.9	25	51	3	75	11	47.8
95	19		49		4		23	

$X^2 = 1.27$; df = 3; p = n.s.

A 2x4 Chi-square was computed for the Low-High scoring subjects on the scale 'Re' of CPI and the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated). The table shows frequency and percentage of the subjects falling in each of the four categories of the father's educational level. The findings are non-significant: $X^2 = 1.27$; df = 3; p = n.s. This means that the low-high scoring selected subjects on the scale Re of CPI, do not statistically differ from each other on the variable father's education.

TABLE-39

Frequency and percentage of selected subjects scoring Low-High on the 'Self control' (Sc) scale of CPI and the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low (56)	10	58.8	25	61	21	56.8
High (39)	7	41.2	16	39	16	43.2
95	17		41		37	

$X^2 = .143$; df = 2; p = n.s.

A 2x3 Chi-square was applied for the Low-High scoring selected subjects on the CPI scale Sc and the variable socioeconomic status (Upper-Middle-Lower). The table shows frequency and percentage of the subjects falling in each of the three classes of socioeconomic status. The findings are non-significant: $X^2 = .143$; df = 2; p = n.s. It means that the low-high scoring selected subjects on the Sc scale of CPI do not statistically differ from each other on the variable socioeconomic status.

TABLE-40

Frequency and percentage of selected subjects scoring Low-High on the 'Self control' (Sc) scale of CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low (56)	11	57.9	32	65.3	1	25	12	52.2
High (39)	8	42.1	17	34.7	3	75	11	47.8
95	19		49		4		23	

$X^2 = 3.16$; df = 3; p = n.s.

A 2x4 Chi-square was computed for the Low-High scoring selected subjects on the scale Sc of CPI and the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated). The table shows frequency and percentage of subjects falling in each category of the father's educational level. The findings are non-significant: $X^2 = 3.16$; df = 3; p = n.s. This states that the low-high scoring selected subjects on the scale Sc do not statistically differ from each other on the variable father's education.

TABLE-41

Frequency and percentage of selected subjects scoring Low-High on the 'Tolerance' (To) scale of CPI and the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low(53)	8	47.1	22	53.7	23	62.2
High(42)	9	52.9	19	46.3	14	37.8
95	17		41		37	

$X^2 = 1.21$; df = 2; p = n.s.

A 2x3 Chi-square was computed for the Low-High scoring selected subjects on the scale To of CPI and the variable socioeconomic status (Upper-Middle-Lower). The table shows frequency and percentage of subjects falling in each of the three categories of the socioeconomic status. The findings are non-significant: $X^2 = 1.21$; df = 2; p = n.s. This shows that the low-high scoring selected subjects on the scale 'To' do not statistically differ on the variable socioeconomic status.

TABLE-42

Frequency and percentage of selected subjects scoring Low-High on the 'Tolerance' (To) scale of CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low (53)	9	47.4	29	59.2	0	0	15	65.2
High (42)	10	52.6	20	40.8	4	100	8	34.8
95	19		49		4		23	

$X^2 = 6.65$; df = 3; $p < .09$.

A 2x4 Chi-square was computed for the Low-High scoring subjects on the 'To' scale of CPI and the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated). The table shows frequency and the percentage of the subjects falling in the four categories of the father's educational level. The findings are marginally significant: $X^2 = 6.65$; df = 3; $p < .09$. This shows that the low-high scoring subjects on the scale To, only marginally differ from each other on the variable father's education.

TABLE-43

Frequency and percentage of selected subjects scoring Low-High on the 'Achievement via independence' (Ai) scale of CPI and the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low (59)	9	52.9	28	68.3	22	59.5
High (36)	8	47.1	13	31.7	15	40.5
95	17		41		37	

$X^2 = 1.38$; df = 2; p = n.s.

A 2x3 Chi-square was computed for the Low-High scoring subjects on the 'Ai' scale of CPI and the variable socioeconomic status (Upper-Middle-Lower). The table shows frequency and percentage of the subjects falling in the three categories of the socioeconomic status. The findings are non-significant: $X^2 = 1.38$; df = 2; p = n.s. This means that the low-high scoring selected subjects on the CPI scale Ai, do not statistically differ on the variable socioeconomic status.

TABLE-44

Frequency and percentage of selected subjects scoring Low-High on the 'Achievement-via-independence' (Ai) scale of CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low (59)	11	57.9	32	65.3	3	75	13	56.5
High (36)	8	421	17	34.7	1	25	10	43.5
95	19		49		4		23	

$X^2 = .943$; df = 3; p = n.s.

A 2x4 Chi-square was computed for the Low-High scoring selected subjects on the scale 'Ai' of CPI and the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated). The table shows frequency and percentage of the subjects falling in the four categories of the father's educational level. The findings are non-significant: $X^2 = .943$; df = 3; p = n.s. This means that the low-high scoring selected subjects on the Ai scale, do not statistically differ on the variable father's education.

TABLE-45

Frequency and percentage of selected subjects scoring Low-High on the 'Intellectual efficiency' (Ie) scale of CPI and the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low (65)	9	52.9	27	65.9	29	78.4
High (30)	8	47.1	14	34.1	8	21.6
95	17		41		37	

$X^2 = 3.70$; df = 2; p = n.s.

A 2x3 Chi-square was applied for the Low-High scoring selected subjects on the scale 'Ie' of the CPI and the variable socioeconomic status (Upper-Middle-Lower). The table shows frequency and percentage of the selected subjects falling in each of the three classes of the socioeconomic status. The findings are non-significant: $X^2 = 3.70$; df = 2; p = n.s. This means that the low-high scoring subjects on the CPI scale Ie, do not statistically differ on the variable socioeconomic status.

TABLE-46

Frequency and percentage of selected subjects scoring Low-High on the 'Intellectual efficiency' (Ie) scale of CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low (65)	8	42.1	37	75.5	3	75	17	73.9
High (30)	11	57.9	12	24.5	1	25	6	26.1
95	19		49		4		23	

$X^2 = 7.63$; df = 3; $p < .06$.

A 2x4 Chi-square was computed for the Low-High scoring selected subjects on the 'Ie' scale of CPI and the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated). The table shows frequency and the percentage of the subjects falling in each of the four categories of father's education. The result is marginally significant: $X^2 = 7.63$; df = 3; $p < .06$. This means that the low-high scoring selected subjects on the CPI scale Ie, only marginally differ from each other on the variable father's education.

TABLE-47

Frequency and percentage of the selected subjects scoring Low-High on the 'Flexibility' (Fx) scale of CPI and the variable socioeconomic status:

Groups	Upper		Middle		Lower	
	f	%	*f*	%	*f*	%
Low (71)	9	52.9	32	78	30	81.1
High (24)	8	47.1	9	22	7	18.9
95	17		41		37	

$X^2 = 5.30$; df = 2; $p < .07$.

A 2x3 Chi-square was employed for the Low-High scoring selected subjects on the 'Fx' scale of CPI and the variable socioeconomic status (Upper-Middle-Lower). The table shows frequency and percentage of subjects falling in each category of the socioeconomic status. The findings are marginally significant: $X^2 = 5.30$; df = 2; $p < .07$. This means that the low-high scoring subjects on the Fx scale of CPI only marginally differ from each other on the variable socioeconomic status.

TABLE-48

Frequency and percentage of the selected subjects scoring Low-High on the 'Flexibility' (Fx) scale of CPI and the variable father's education:

Groups	BA/B.Sc. and above		Middle-Intermediate		Primary		Uneducated	
	f	%	*f*	%	*f*	%	*f*	%
Low (71)	13	68.4	41	83.7	1	25	16	69.6
High (24)	6	31.6	8	16.3	3	75	7	30.4
95	19		49		4		23	

$X^2 = 8.04$; df = 3; P < .05.Integrity: (is honest and dedicated).

A 2x4 Chi-square was computed for the low-high scoring subjects on the 'Fx' scale of CPI and the variable father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated). The table shows frequency and percentage of the subjects falling in the four categories of the father's educational level. The findings are significant: $X^2 = 8.04$; df = 3; $p < .05$. This means that the low-high scoring subjects on the scale Fx, statistically differ from each other on the variable father's education.

Table 49-62, refer to our question number five.

Q.5 states that 'Is there significant difference between the unselected and the selected subjects on the variables socioeconomic status and the father's education? and between the personality characteristics of the two groups?

TABLE-49

A 2x3 factorial between the un-selected and the selected subjects and the socioeconomic status:

Groups	Upper	Middle	Lower	Total
unselected(N=95)	9	24	62	95
Selected (N=95)	17	41	37	95

$X^2 = 13.22$; df = 2; $p < .01$.

Table-49 reflects a 2x3 Chi-square result for the three classes of socioeconomic status and the un-selected and selected subjects. Table shows the frequency of subjects belonging to upper, middle and lower socioeconomic status. The findings are statistically significant: $X^2 = 13.22$; df = 2; $P < .01$. The results show that the unselected and the selected subjects statistically differ from each other on the variable socioeconomic status.

TABLE-50

A 2x4 factorial between the un-selected and the selected subjects and the father's education.

Groups	BA/B.Sc. and above	Middle-Intermediate	Primary	Uneducated	Total
Unselected (N=95)	13	44	5	33	95
Selected (N=95)	19	49	4	23	95

X^2 =3.29; df = 3; p = n.s.

Table-50 reflects a 2x4 Chi-square result for the four categories of father's education (B.A./B.Sc. and above; Middle-Intermediate; Primary and Uneducated) and the unselected and selected subjects. Table shows the frequency of the subjects falling in these four categories of father's educational level. The findings are statistically not significant: X^2 = 3.29; df = 3; p = .348. This shows that the unselected and the selected subjects do not statistically differ from each other on the variable father's education.

TABLE-51

One way analysis of variance on the 'Dominance' (Do) scale of CPI between unselected and selected subjects:

Source of Variation	SS	df	MS	F	P
Groups	161.18	1	161.18	2.18	n.s.
Residual	13876.21	188	73.81		
Total	14037.39	189	74.27		

Table-51, shows the result for the 'Do' scale score between the unselected and selected subjects. The data show a non-significant main effect of Dominance scale; F(1, 188) = 2.18; p = n.s. This shows that the Dominance scale of CPI is statistically non-significant in differentiating between the unselected and the selected subjects.

TABLE-52

One way analysis of variance on the 'Capacity for status' (Cs) scale of CPI between un-selected and the selected subjects.

Source of Variation	SS	df	MS	F	P
Groups	148.54	1	148.54	8.82	P < .01
Residual	3164.31	188	16.83		
Total	3312.86	189	17.52		

Table-52 depicts the result for the 'Cs' scale score between the unselected and selected subjects. The data shows a significant main effect of the Cs scale, F = (1, 188) = 8.82; $p < .01$. The result shows that Cs scale is statistically significant in differentiating between the unselected and the selected subjects.

TABLE-53

One way analysis of variance on the 'Sociability' (Sy) scale score of CPI, between unselected and the selected subjects:

Source of Variation	SS	df	MS	F	P
Groups	202.18	1	202.18	7.24	P < .01
Residual	5246.67	188	27.90		
Total	5448.86	189	74.27		

Table-53 depicts the results for the 'Sy' scale score between the unselected and the selected subjects. The data shows a significant main effect of the Sy scale, F = (1, 188) = 7.24; $p < .01$. This shows that the Sy scale is statistically significant in differentiating between the unselected and the selected subjects.

TABLE-54

One way analysis of variance on the 'Social presence' (Sp) scale score of CPI between unselected and the selected subjects:

Source of Variation	SS	df	MS	F	P
Groups	126.44	1	126.44	3.68	P < .06
Residual	6449.26	188	34.30		
Total	6575.71	189	34.79		

Table-54 shows the results for the 'Sp' scale score between the unselected and the selected subjects. The data reveals a marginal significant main effect of the 'Sp' scale, F = (1, 188) = 3.68; $p < .06$. This shows that the 'Sp' scale is somewhat statistically significant in differentiating between unselected and selected subjects.

TABLE-55

One way analysis of variance on the 'Self acceptance' (Sa) scale of CPI between unselected and the selected subjects:

Source of Variation	SS	df	MS	F	P
Groups	53.68	1	53.68	4.06	P < .05
Residual	2481.41	188	13.19		
Total	2535.10	189	13.41		

Table-55 reveals the result of the Sa scale score between the unselected and the selected subjects. The data shows a marginal significant main effect of the Sa scale, F (1, 88) = 4.06; $p < .05$. This shows that the Sa scale is to some extent statistically significant in differentiating between unselected and the selected subjects.

TABLE-56

One way analysis of variance on the 'Well being' (Wb) scale of CPI between unselected and the selected subjects:

Source of Variation	SS	df	MS	F	P
Groups	451.83	1	451.83	3.45	P < .07
Residual	24555.32	188	34.30		
Total	25007.16	189	34.79		

Table-56 shows the result for the 'Wb' scale score between the unselected and the selected subjects. The data shows a marginal significant main effect of the 'Wb' scale, F = (1, 188) = 3.45; $p < .07$. This shows that the 'Wb' scale is somewhat statistically significant in differentiating between the unselected and the selected subjects.

TABLE-57

One way analysis of variance on the 'Responsibility' (Re) scale of CPI between unselected and the selected subjects.

Source of Variation	SS	df	MS	F	P
Groups	30.400	1	30.400	.967	n.s.
Residual	5909.89	188	31.43		
Total	5940.29	189	31.430		

Table-57 represents the result for the 'Re' scale score between the unselected and the selected subjects. The data shows a non-significant main effect of the 'Re' scale, F = (1,

188) = .967; p = n.s. This shows that 'Re' scale is statistically non-significant in differentiating between unselected and the selected subjects.

TABLE-58

One way analysis of variance on the 'Self control' (Sc) scale of CPI between unselected and the selected subjects:

Source of Variation	SS	df	MS	F	P
Groups	69.605	1	69.60	1.19	n.s.
Residual	10925.07	188	58.112		
Total	10994.67	189	58.173		

Table-58 depicts the results for the 'Sc' scale score between unselected and the selected subjects. The data shows a non-significant main effect of the 'Sc' scale, F = (1, 188) = 1.19; p = n.s. This shows that the 'Sc' scale is statistically non-significant in differentiating between unselected and the selected subjects.

TABLE-59

One way analysis of variance on the 'Tolerance' (To) scale of CPI between unselected and the selected subjects:

Source of Variation	SS	df	MS	F	P
Groups	24.337	1	24.337	.850	n.s.
Residual	5385.57	188	28.647		
Total	5409.916	189	28.624		

Table-59 depicts the result for the 'To' scale score between the unselected and the selected subjects. The data shows non-significant main effect of the 'To' scale, F = (1, 188) = .850; p = n.s. This shows that the 'To' scale is statistically non-significant in differentiating between unselected and the selected subjects.

TABLE-60

One way analysis of variance on the 'Achievement-via-independence' (Ai) scale score of CPI between unselected and the selected subjects:

Source of Variation	SS	df	MS	F	P
Groups	59.137	1	59.137	4.65	P < .04
Residual	2387.83	188	12.701		
Total	2446.96	189	12.94		

Table-60 shows the result for the 'Ai' scale score between unselected and the selected subjects. The data displays a marginal significant main effect of the 'Ai' scale, F = (1, 188) = 4.65; p < .04. This shows that the 'Ai' scale is to some extent statistically significant in differentiating between unselected and the selected subjects.

TABLE-61

One way, analysis of variance on the 'Intellectual efficiency' (Ie) scale of CPI between unselected and the selected subjects:

Source of Variation	SS	df	MS	F	P
Groups	238.78	1	238.78	2.59	n.s.
Residual	173.04.589	188	92.04		
Total	17543.374	189	92.82		

Table-61 shows the result for the 'Ie' scale score between unselected and the selected subjects. The data shows a non-significant main effect of the 'Ie' scale, F = (1, 188) = 2.59; p = n.s. This shows that the 'Ie' scale is statistically non-significant in discriminating between unselected and the selected subjects.

TABLE-62

One way analysis of variance on the 'Flexibility' (Fx) scale of CPI between unselected and the selected subjects:

Source of Variation	SS	df	MS	F	P
Groups	.426	1	.426	.041	n.s.
Residual	1950.737	188	10.376		
Total	1951.163	189	34.79		

Table-62 shows result for the 'Fx' scale score between unselected and the selected subjects. The data reveals a non-significant main effect of the 'Fx' scale, F = (1, 188) = .426; p = n.s. This states that the 'Fx' scale is statistically non-significant in differentiating between unselected and the selected subjects.

DISCUSSION:

The study of personality, socioeconomic status and father's education as contributing factors to selection, being an exploratory study did not as such follow any theoretical framework and therefore no hypotheses were formulated. The study did raise questions, which were analyzed statistically.

The results of the study reflect, first the analyses for the candidates fulfilling/not fulfilling the selection criteria according to their socioeconomic status and the father's education.

Perusal of table 1-12, 17-19, 21-23 reveals that the subjects' personality, characteristics such as Dominance, dynamism/leadership, sociability, social tolerance, confidence, and intelligence are effected by their socioeconomic background and their father's educational level, whereas tables 13-16; 20 and 24, show that the socioeconomic status and the fathers' education do not contribute in the development of qualities like Self control, Achievement, to some extent independent thinking and responsibility in the personality on the whole.

Table 1-12, 17-19, 21-23, indicate that the low and high scoring subjects differ significantly from each other on their socioeconomic status and father's educational level, for the scales Dominance, Capacity for status, Sociability, Social presence, Self acceptance; Well being, Tolerance, Achievement via independence on SES, Intellectual efficiency and Flexibility (partially on SES) of CPI.

In contrast, tables 13-16, 20 and 24, reveal that the subjects scoring low-high on the scales Responsibility, Self control, Achievement via independence (partially), Flexibility (partially on FE) of CPI do not differ from each other on their socioeconomic status and father's educational level.

The significance and non-significance of the findings would be discussed in the light of the questions raised by the study.

Our first question states that 'do the socioeconomic status and the father's education effect the personality characteristics such as dominance/dynamism/leadership, sociability,

self control, confidence, social tolerance, responsibility, achievement and intelligence of the subjects.

It is generally assumed that economic soundness leads to mental and physical satisfaction as majority of our desires could be gratified, and more educated a person, the more rational he becomes in relationships and thinking. So when we analyze our findings in the light of these two assumptions it shows that most of the subjects fall in the category "low scorers" on the scales. If looked upon separately which highlights the fact that the personality characteristics do get effected by one's socioeconomic status (in our case it was measured by the annual family income and father's occupation) and the father's educational level.

While in some of the cases, i.e. for the scales 'Responsibility', 'Self control', Achievement via independence' and 'Flexibility' the subjects (the low and the high scoring) do not differ from each other on their socioeconomic status and father's educational level.

The result could be analyzed in the light of our sample — The candidates coming up before the Public Service Commission, who by virtue of just this act exhibit a sense of responsibility. It could further be justified in regard to their similarity on the scales 'Self control', 'Achievement via independence' and 'Flexibility' in the light of our Pathan culture and society, where the male is encouraged to have an independent thinking, and prefer situations involving decision-making. This trait is in turn the legacy of their long-standing independence, love for freedom and openness. It is further supported by the performance of the subjects, on the above-mentioned scales, which supports and strengthens already existing notions about Pathan, as a nation being aggressive, impulsive, volatile and emotional.

Our second question, which states that 'Do the subjects fulfilling the selection criteria, belong to a high socioeconomic status from among the three classes (upper, middle, lower) and high level of father's education from among the four categories (B.A./B.Sc. and above; middle-intermediate; primary and uneducated)?

When the data is analyzed it is revealed that most of the subjects fulfilling the selection criteria are from upper socioeconomic status and highly educated father. These subjects have greater percentage, in comparison to other groups on the socioeconomic status and the father's educational level. The scales are Dominance, Capacity for status,

Sociability, Social presence, Self acceptance (partially), for father's education. Well being, Self control, Tolerance, Achievement-via-independence, Intellectual efficiency and Flexibility.

Except for scales Sociability, Self acceptance and Responsibility, where the high scoring subjects are from the middle socioeconomic status. Further for the scale 'Responsibility', the high scoring subjects have father's with primary educational level. If one analyzes this scoring tendency of the subjects, one would revert to explanation as already mentioned that economic satisfaction brings with it, personal worth, health, confidence, tolerance, intellectual and social awareness, sense of achievement and many such qualities. Therefore, it is of no surprise that subjects scoring high on the CPI scales, have these qualities by virtue of their status and father's educational level.

As mentioned earlier, responsibility is a quality which seems to be an important feature of the candidates in general. Also this general presumption of middle class being confident sociable and having personal worth is supported by the trend of the data.

The second portion of the analysis show the result for the selected subjects fulfilling/not fulfilling the selection criteria. And the trend of selection of commission. Table-25-48 deal with our question three and four.

Question three states that 'Are the socioeconomic status and the father's education, contributing factors in the selection of the subjects, by the commission to various departments of the Government?

Question four states that "Is the major portion of selection by the commission from the subjects belonging to a particular:

(i) socioeconomic status.
(ii) category of father's education?

Table-25 to 48 represent the results for subjects selected by the commission to various departments of the NWFP Government. The tables show that the major selection is being done from the middle socioeconomic status and the second category i.e. middle-intermediate of the father's educational level.

Another thing which is very significant and is being followed consistently, is that the major selection is from the low scorers on the CPI scales for both the variables i.e. socioeconomic status and for the father's education.

As regards to our question three, four, the socioeconomic status and father's education do seem to be contributing factors in the selection of the subjects, because the commission is following a consistent pattern, as mentioned earlier. The reasons could be that the major portion of the subjects applying to the various posts from the middle socioeconomic status are performing in a better way during the interview in comparison to the upper and the lower class. The reasons could be because of the majority of our middle class usually prefer to be more job oriented either in the Government or Public Sector. The parents usually like their children to be in service as it seems to be the only way of achieving success, prestige and status involving lesser risk in comparison to business and other investment related projects. Although the commission has more choice out of the lower class candidates as the size of the applicants from the lower class are more in number (434/695). Or the commission has no choice but to select, those from the middle class due to zonal allocation (annexure).

The same reasons may also apply to the selected subjects belonging to the categories (middle-intermediate) of the father's educational level.

Why the number of subjects scoring low on the CPI scales and not fulfilling the selection criteria , of dynamism, confidence, social tolerance, sociability, intelligence, achievement are being selected in comparison to high scoring subjects except for the scale responsibility and self acceptance scale, where the selection ratio is more for the high scoring subjects.

The reasons could be again as mentioned earlier either the zonal allocation or the lack of choice with the commission or perhaps due to the fact that the test CPI is a test developed in West, though the local norms were used, still there may be certain psychometric properties of this test which need to be further probed and explored, and which could not somehow be wholly unearthed during the research.

The third portion of analysis is comparison between the unselected and the selected.

Tables 49-62 refer to our question number five, which states that 'Is there any significant difference between the unselected and the selected subjects on the variables socioeconomic status and the father's education? and between their personality characteristics?'

Tables 49-50, deal with the first part of our question number 5, where a 2x3 Chi-square result reveal that the unselected and the selected subjects differ from each significantly on their socioeconomic status but do not differ significantly on their father's educational background.

Table 51-62, refer to the second part of the question five. The result of the ANOVA, carried out on the unselected and the selected subjects for each of the 12 scales of CPI, identified as equivalent to the selection criteria of the commission.

The two groups significantly differentiate from each other as far as their ambition and attempts to appraise those qualities that lead to status and personal worthiness participative temperaments, is concerned. They marginally differ from each other on measures of verve, spontaneity in social interactions and situations where achievement is rewarded.

Whereas in qualities such as confidence, intelligence, social tolerance, flexibility, achievement orientation, control over anxieties and self doubts, and responsibility the subject do not differ from each other.

The reason, why those candidates fulfilling the criteria do not get selected, is more probably the zonal allocation as mentioned earlier which in effect places premium as place of birth rather than merit.

The fact that, the study carried out was an exploratory study, having dimensions studied specially in relation to selection of subjects of various socioeconomic status and the father's educational level, being one of its kind in Pakistan. Therefore in the absence of a theoretical framework, the lead of research becomes difficult and several novel aspects come up.

A review of the literature on CPI, provides an understanding and its wide band application to various situations, that the present research was taken up. Its useful outcomes

in predicting behavior in clinical, training and vocational settings, is that one gets impressed by the research done on this remarkable self report inventory.

However, one should remain aware of how external factors can influence the usefulness of a test. For example values may enter into making decisions of hiring or not hiring a particular applicant. Therefore the validity of a test is not the sole determinant of usefulness of a test.

GENERAL DISCUSSION AND CONCLUSION:

The main aim behind the present investigation was to facilitate the NWFP Public Service Commission, in its selection, by studying the personality characteristics of the candidates applying for the various jobs at the Public Service Commission, Peshawar. Those who fulfill or do not fulfill the selection criteria with reference to socioeconomic status and the father's education. Candidates belonged to different socioeconomic levels with different father's educational standards. The present research was therefore taken up to investigate the contributing factors to selection. CPI was used for the research. The scores of the subjects on the test, placed them into the categories the high/low scorers.

The socioeconomic status of the subjects was divided into upper-middle-lower, according to the subjects' annual family income and the father's occupation. Their father's education was also divided into four categories i.e. B.A./B.Sc. and above; middle-intermediate; primary and uneducated.

The sample of the study consisted of 695 candidates applying for various jobs at the Public Service Commission, NWFP. Their age was between 18-35 years and the educational level was from F.A./F.Sc. to Masters/Professional degrees.

The research was carried out in five stages. The data was subjected to Chi-square analysis and ANOVA. Further, frequency and percentage of the subjects falling in the three socioeconomic classes and the four categories of the father's education was calculated.

The conclusion of the study was that the low-high scoring subjects were significantly different from each on the scales: Do, Cs, Sp, Sy, Sa, Wb, To, Ie, Ac, Fx (partially on SES).

They did not differ from each other on: Re and Sc and partially on Ac and Fx (on father's educational level), when studied as a whole group of 695.

The low-high scoring selected subjects are either marginally different or similar to each other on the CPI scales, in most of the cases.

Further the unselected and the selected subjects were significantly different from each other on their socioeconomic status but do not differ on their father's educational level.

The unselected and the selected subjects were significantly different from each other on the scales: Cs, Sy, Sa. While on: Sp, Wb, and Ai, they were marginally different. Where as no significant difference was found between the two groups on: Do, Re, Sc, To, Ie and Fx scales.

Still further, it was also found that the Commission is selecting subjects from among the low scoring subjects on the CPI and from the middle socioeconomic status and the subjects with father's middle-intermediate educational level.

The study was an exploratory investigation, which was primarily designed with an aim of facilitating the selection system at the NWFP Public Service Commission. The findings of the research suggest that, the low scoring subjects may be getting selected perhaps due to the shortage of candidate's fulfilling the selection criteria, and the fact that the low-high scoring selected subjects do not differ on certain scales, due to their common characteristic of being candidates for the Public Service Commission, and also due to the reason that they come from a set up which encourages situations of decision making, emotionality, aggressiveness and changeability/impulsivity in thinking, or perhaps the test CPI, needs to be further probed.

ANNEXURE

ROTATIONAL CYCLE OF 24 VACANCIES BLOCK

VACANCY ROTATION	ZONAL ALLOCATION
1st	Merit
2nd	Zone-1
3rd	Zone-2
4th	Zone-3
5th	Merit
6th	Zone-4
7th	Zone-5
8th	Zone-1
9th	Merit
10th	Zone-2
11th	Zone-3
12th	Zone-4
13th	Merit
14th	Zone-5
15th	Zone-1
16th	Zone-2
17th	Merit
18th	Zone-3
19th	Zone-4
20th	Zone-5
21st	Merit
22nd	Zone-1
23rd	Zone-2
24th	Zone-3

MARKING SYSTEM OF THE NWFP PUBLIC SERVICE COMMISSION

Total Marks of the Interview = 40

A+	Excellent	...	30
A	Good	...	26
B	Above Average	...	22
C	Average	...	18
D	Below	...	14
E	Unfit	...	10

The candidates are marked on a scale of 7 as indicated below:

7. Excellent
6. Very Good
5. Good
4. Average (qualifying grade)
3. Below Average
2. Poor
1. Very Poor

PARAMETERS

1. Capacity to learn/Intelligence.
2. Responsibility/Initiative (tries to take new assignments).
3. Achievement (Works hard).
4. Flexibility: (is tolerant and helpful towards his colleagues and subordinates).
5. Dynamism (leadership/dominance). (is able to communicate his ideas).
6. Sociability: (is able to mix, and be friendly with his superiors and subordinates).
7. Confidence: (expressive, is able to put his ideas across).
8. Integrity: (is honest and dedicated), Freedom from self doubts and anxieties.

BIO-DATA FORM

Name----------Roll No.----------Education----------

Age----------

Education Institutions attended previously:

1. _____(Schooling)

2. _____(Matriculation)

3. _____(Intermediate)

4. _____(Bachelor Degree)

5. _____(Masters)

Father's education, income (annual) and occupation_____
_____

Residence (Present) & (Permanent)_____
_____

References

15. Liebert M. Robert (1978). Personality Strategies and Issues (3rd ed.). Dorsey Press, Illinois.

16. McLonnel V. James (1974). Understanding Human Behavior: An Introduction to Psychology. San Francisco. Halt, Rinehart and Winston Inc.

17. Megargee (1977). The California Psychological Inventory Handbook. Jossey-Bass Inc., Publishers. Washington.

18. Megee R. (1980). Sociology An Introduction (2nd ed.). Chicago Halt, Rinehart and Winston.

19. Morgan T. Clifford, King, Weisz, Schopler, (1988). Introduction to Psychology (Seventh edition). McGraw Hill Book Company, New York.

20. Murphy R. Kevin and Davidshofer O. Charles (1988). Psychological Testing Principles and Applications. Prentice - Hall Internal, Inc.

21. Policy Decisions, NWFP Public Service Commission, 1990.

22. Peterson Christopher (1988). Personality. Harcourt Brace Jovanovich Publishers. San Diego.

23. Pervin, A. Lawrence (1989). Personality, Theory and Research. John. Wiley and Sins, Inc. Singapore.

24. Sarason G.I. (1972). Personality: An Objective Approach (2nd ed.). Sydney John Wiley and Sons, Inc.

25. Young K. (1963). Handbook of Social Psychology (Revised ed.), London Routledge and Kegan Paul Ltd.