READCLSSCENT SELF-CONCEPT; ITS KELATION TO SELF-CONCEPT AS INFERRED BY TEACHERS AND TO ACADEMIC ABILITY

(AN INDEPENDENT STUDY)

BY

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APPROVAL SHEET

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DEDICATION

Dedicated to my late dad Badu,
my beloved wife Naomi and children Shimagye,
Sheyiye and Shiyibwa.

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It is with joy, I acknowledge the help of quite a good number of persons who in one way or the other have encouraged me towards the production of this work.

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ABSTRACT

The objectives of the study were to identify the followiings:

(a) The construct validity of their self-concepts; and

(b) the differences, if any, between the sexes in their academic attainments.

For construct validity, the self-doacription questionnaire (SDQ) of Marah, Parker and Smith (1983) was adopted for the study and the teacher ratings were also obtained on a 9 point scale for the purpose. Besides, the invesgator obtained, their school marks in mathomatice, social studies,English and overall mean of the school marks from their previous examination.

The self-description questionnaire (SDQ) consisted of seven categories suclv as physical ability, physical appearreance, relationships with peers, relationships with parents, reading, mathematics and school subjecta. The mean of the first four category yielded the nor-academic self-concept (NACJ) and the mean of the last category yielded their academic self-concepts (ACD), while the mean of the seven categories gave the investigator their total self-concept (TOT).

TABLE OF CONTENTS

	Page
Approval Sheet - - - -	i
Dedication - - - - -	ii
Acknowledgement - - - -	iii
Abstract - - - - -	iv
Table of Contents - - - -	vi
List of Tables - - - -	vii
CHAPTER I: Introduction - -	1
CHAPTER II: Review of Literature -	6
CHAPTER III: Aims and Hypotheses -	37
CHAPTER IV: Experimental Methodology -	39
CHAPTER V: Analysis of Data and Results	44
CHAPTER VI: Critique, Conclusions, Implication and Recommendations	70
Bibliography - - - -	77
Appendix I - - - - -	79
Appendix II - - - - -	83
Appendix III - - - - -	88

LIST OF TABLES

		Page
Table 5.1:	Means and Standard deviations of variables - - - -	45
Table 5.2:	Correlation Data Matrix - -	47
Table 5.3:	Analysis of variance - physical appearance (Teachers' ratings) -	60
Table 5.4:	Analysis of variance - relationship with peers (Teachers' ratings) -	61
Table 5.5:	Analysis of variance - relationship with parents (Teachers' ratings)	62
Table 5.6:	Analysis of variance - Mathematics (Teachers' ratings) - -	63
Table 5.7	Analysis of variance - School Subjects (Teachers' ratings) -	64

CHAPTER I

INTRODUCTION

The self-concept of the preadolescents has been a suitable area for the researcher to enter into, and this area has been studied by Marsh, Parker and Smith (1983) for the 11 year olds to find the ~~convergent~~ construct validity of the scale with teacher ratings and students academic ability. Three diverse samples (Total N=958 students) were used in this study and the results showed that the validity of the scale ranged from r = .24 (for relationship with parents) to r = .52 (for mathematics, self-concept) and it was found that the self-concept was higher in academic areas than non-academic areas, the academic self-concept for the high S.E.S. sample (social economic status) group being r = .74. The teacher ratings on this SDQ (self-description questionnaire) was obtained with care after the teachers were instructed fully as to how the 9-point response scale has to be filled in. Inspite of this care, the authors were aware of the mistakes creeping in the responses of the teachers as bias and the authors made corrections for the biases to get adjusted ratings. The research already, published showed

the validity coefficient for both and adjusted ratings of theirs.

The above research was good for the invesgator to try out in Nigeria in the form of an empirical research for the 11 year olds (boys and girls) to examine how the self-concepts of the pupils as responded to in the SDQ appear and with this purpose in mind, the invesgator adopted their scale of SDQ in last form of G.R.A. L.E.A. primary school Zaria. The invesgator was fortunate in having one sample from one school also in having one class teacher to give responses to the ratings (9-point scale of information of each of the pupils after instructions were given to him to fill in the ratings appropriately. There is no need for adjustment of the teacher ratings of this research on the basis of the following two grounds:

(a) The teachers in Nigerian context know each and every one of the pupils more or less thoroughly about their background and their relationship with their friends, peers and parents; and

(b) The teachers were fully instructed to use the full variability of the range of ratings having a mean of five to scale down or up a pupil on the basis of the ratings for each of the seven categories of the SDQ. Further,

since the pupils came from the same class of the same school, there was no necessity in standardising their academic ability performances and hence the invesgator obtained only the school marks of the last previous examination in maths, English and social studies and, the invesgator obtained the mean of the three subjects from them.

The self-description questionnaire (SDQ) contained seventy two items on seven categories arranged randomly, and the English of these items are all meaning full for the 11 year olds of Nigeria. The scale was arranged in the Likert-type 5-point scale ranging from false, mostly false, sometime false, sometime true, mostly true to true, and the items to quote an example were like: I like reading, I look forward to mathematics, I like the way I look, etc.

On this type of question children who are given examples are to give the right responses to each of the items and there was thus, no question of any form of biased responses from them. The categories of the responses to the SDQ scale are as follows;

(i) Physical ability/sports.

(ii) Physical appearance with peers.

(iii) Relationship with peers.

(iv) Relationship with parents.

(v) Reading.

(vi) Mathematics

(vii) School subjects.

From the above categories the first four categories were added up to give the non-academic self-concept (NACD) and the last three categories were added up to give the academic self-concept (ACD), while the addition of all the seven categories yield the total self-concept (TOT).

The fact that self-concept are meaningful, i.e. they give a true picture of the things they relate, has been used in the assessment of this research. How are the self-concepts arising for the students has been discussed in the review of literature in the next chapter of this invesgation. It is true to say in this connection that by the end of the primary schooling, a pupil gets a fair and stablized form of views about himself and about his participation in the world. A good child at school knows that he is good in academic performances and the question of his doing well in those subjects remains axiomatic. The minority, say about 1% of the population whose self-concepts are not really true pictures of the self-concepts has been a bother for the invesgator in this

research were correlations concerned. With these ideas in mind the investigator in this empirical research went on to get some figures of contruct validity of the SDQ and also to obtain the analyses of variance for the sex of the children, to give the final view of the construct validity of the instrument, give the final view of the construct validity of the instrument. The objective of this study therefore was to obtain:

(a) the contruct validity for the seven categories of the questionnaire of the self-concept (SDQ), with the teacher ratings, and

(b) to obtain the correlations of their academic performance with their own views of their ability to performance.

The next chapter deals with theoretical background how the self-concepts are acquired.

aflective domain and the sychomotive domain. These components are applicable to self-concept. By illustration, every human being in ideal circumstance knows what he or she really worth or is in terms of superiority or inferiority in relation to others in the group, since he possesses a full knowledge of himself, this of course forms the cognitive domain of the self; human beings, because of their unpredictiveness, sophistry, it is not easy to identify persons feelings about self. However, under normal conditions it is rational to hypothesize that every individual has some sort of evaluation of his behaviour and abilities. By an illustration, an individual could tend to believe he or she is ugly as he or she is short and fat. Possession of such an assessment of self represent his or her affective domain of self-concept. On the other hand, a human being behaves in a manner, he or she wants others within the group to regard him or her to be, such behaviour could be in accordance with the other two components of his self-concept. This behaviour therefore falls in conformity with his or her cognition and feelings about the self; it would represent the behavioural component of his concept. Self-concept as already recorded takes place out of the socialisation process of behaviour interactions of individuals within the groups. Cooley (1902) in his

he sees them, whereas the "me" reflects the reactions of others to the individual. A psycho-analyst distinguishes between the self and the ego, the former being the object which the latter perceives (symonds 1951). The trait-and-factor psychologists defines the self as the aggregate or composite of the individual's typical reaction patterns, such as dorminance co-operativeness, introversion, etc.

Guilford (1959) states that the self is functional and as well as structural and it motivates the individual to action and organizes his perceptions of himself and the environment. From this view point, the self in question "includes those aspects of the perceptual field to which we refer when we say "I" or "me" and the self-concept consists of these percepts organized into various dimensions, the metadimension and systems, each of which defines a different aspect of personality structure and functioning. This is probably correct here to state that submissiveness is one of the dimensions of self-concept, self-esteem as one of its metadimensions and regnancy one of the metadimensions of a self-concept, system.

The "self" influences vocational choice, because as Super (1953) puts it "the choice of an occupation is one of the points in life at which a young person

is summoned or called upon to state in unambiguous manner his concept of himself, to say definitely "I am this or that kind of man". In the process of an individual life he or she plays a variety of roles, functions which provide him with an opportunity to discover who he is and what he wants to be. In games and work activities, he or she tries out the abilities and evaluates them against his accomplishments and the reactions of others. It is usual, he finds that somethings and gains he does a sense of satisfaction from them. Above all, these successes tend to develop in him picture of himself as one wh writes well or as one who is always on time and these numerous little specific pictures of aspects of oneself begin to add up, in due course to a picture of the "self", (Ibid). With time, as the individual grows older, he integrates the various pictures he has of himself into a consistent self-concept, which he strives to preserve and enhance through all his activities, with particular reference to his occupational activities.

The individual select an occupation which will be computible with his self-concept and which will allow him to make it a reality by permitting him to play the role he wants to play. Super on (a) how the self-concept is formed, (b) how it is translated into occupational terms and how it is implemented in the

individuals work life, identifies five aspects of evolution of the self-concepts, viz:

(a) exploration,

(b) identification,

(c) differentiation,

(d) role playing, and

(e) reality testing.

Exploration is of high significance because it is the first phase in the formation of the self-concept and which is critical to its being meaningfully related to appropriate occupational roles. The concepts of identity and self are influitively satisfying means or devices of attributing motivation for occupational choice to the person choosing. Thus according to Tiedman (1963), self and vocational development intract and affect each other as the individual copes with the problems of pursuing a course of training or deciding upon a career.

In attempt to illustrate this interaction, Tiedman (et al 1963) has analysed the cases of four boys, based upon interview data, who are in various stages of vocational development. The concepts which he used came primarily from Eriksons (1959) work on the relationship of identity to the life cycle. Thus he traced the career decision-making process through

such periods of developmental crisis as basic trust autonomy, initiative, industry and identity formation. Basically congruence between the self-concept and the chosen occupation is determined by the degree of comparability.

Interpersonal Theory of the Self

Mukherjee (1978) has confirmed the fact, that in interpersonal behaviour of a human being, his ultimate goal is to achieve some form of congruency in his behaviour pattern to others by embarking on what his fellow group members would want to see or enjoy seeing him do, at the same time not absolutely disengaging himself from his own beliefs and convictions on what is supposed to be done or should be done. During the course of this, various forms of stabilishing merchanisms enter into the operation. Such as:

(a) Misperception: It is common, in certain groups and societies expectations are in disagreement with the formed self-concept of an individual and changes take place in his own evaluation of his self-concept. This is based on the misperception of others reactions in that group. The individual on this pseudo perception, would seem to portray most often that attribute which others cherish in him or her. This is done simply to achieve a kind of congruency between

"self" and others expectations.

(b) Selective Interaction: In socio-metry of children at school, it is common to see unique patterns interactions. Individual children designate a limited number of fellows, to interact with. This tend to maintain the congruency between the personal self-concepts and the wishes of those being interacted with too.

(c) Selective Evaluation of the Other Person: The individual, in the bid to conform, he continually evaluate others various expectations, he consorts with. For those not of any sign: finance, less attention is paid. And on the other hand, those that are of some importance, then their own expectations of him would matter, in this, he would modify his own behaviour to suit the needs.

(d) Selective Evaluation of Self: At any point in time, the individual understands some aspects of him are at variance with the wishes or behaviour of others within the group, then he devalue those particular aspects which are not in agreement, then make the very best use of all the others of himself in order to achieve congruency.

(e) Response Evocation: An individual would consciously or otherwise behave in a particular manner so as to maintain the congruency of the situation. This is practicable in instances, where the individual evokes compatible responses in others so that he may continue to experience congruency.

(f) Affective Congruency: Rogers (1951) suggested individuals have needs for self-enhancement as they continuosly intimate others, so that they could form good opinions about them. There are others who manifest feelings of worthlessness and inferiority in their behaviours.

(g) Affective-Cognitive Congruency: It is found common that individuals try to achieve congruency of the cognitive and affective aspects of their self-concepts. For example, if an individual's self-concept is made up of his intelligent behaviour and handsome features, he would normally strive hard to achieve congruency in the two aspects of his self from the interactions with others, where his intelligent behaviour will be appreciated and his handsome features will be admired. Since self-concept consists of the attitudes of the individual towards self as an object, it is only natural that he would label himself positively valued traits like intelligence, politeness

kindness, gentility, etc. Edwards (1957) states, that human beings generally tend to have a powerful tendency to ascribe to themselves various positively valued personality traits.

Generally speaking, concepts grow out of the efforts of individuals striving to create a balance between the manifestations of their behaviour and the expectations of the other members of the group. Secord and Backman (1961, p. 21 - 32) confirm this assertion when he stated, "individual's concepts about themselves grow out of various strivings to achieve congruency between their behaviour manifestations and others expectations or behaviour. To them three elements constitute congruency factor: (a) an aspect of self, (b) individuals of his behaviour relevant to that aspect and (c) his beliefs about how the other person behaves towards him or feels towards him as far as that aspect of his self is concerned."

The Growth of the Self

Socialisation is an important aspect of human education. It is the process, the human being, helpless in the first instance, for that matter, becomes tamed, hospitable and sociable to other members of the group or the society. A human being is best studied not as an entity, but in the framework of his relationship

with other people. It follows the same pattern in the growth or formation of an individual's self-concept. Adjustment, modifications of self-concept are processes which continue to witness changes, so long, as the individual lives in the group. A man ever made such a similar statement, when he arrogantly declared, "a woman has no religion so long as she is not married". Mead (1934) in considering, the self growth, noted, "it is useless to look at the mind of a man from the point of view of the individual organism, though it has its centre of attention there". From his point of view an approach to such a topic, should consider the "social inter-course" which takes place through the language of communication and gestures. This is a unique feature to human beings alone, though animals possess a crude language, which lack cognitive basis as a result it is insignificant comparably. Through conversations, he maintained, human beings acquired meanings of various gestures, these, they later on internalise them into their 'own selves". Hence they become important, since they bear meanings for them and would use them later, for example, a child observes his mother smiles, followed by her cuddling. The child soon understands this to mean an expression of happiness and pleasure. He later internalises this

this gesture and the corresponding meaning. The sort become significant variables in the child's self-concept.

Human beings as already established possess a more powerful medium of social intercourse and this is in the use of a language. This explains internalisation of the meanings conveyed by language by stating that an uttered sentence or command evokes some physical action in the cognition of an individual. When a child pronounce, "please bring a chair" it evokes in the mind of the speaker and the listener an activity of bringing a chair. If a child is appreciated because of his goodness in something by his parents, saying; "Johnny is a good boy" then the child internalises into himself three things viz: the approved act; his parents approval of the act and the interpretation of that act as being good. At this point, the child, could imagine, if he does other things well, he could likely receive similar approvals, which will mark him as being "good". Under this, Argyle (1969) in considering the result of "introduction" that it is possible for the child to think later if he is asked or tempted to behave differently: "If I do this, then I would kick myself". From the two ways, the child learn to behave in the way others of the

group would like him to behave.

In the process of socialisation, the individual become subjected to varied influences of attitudes, of others within the society or the group. There the individual tries to internalize as much as possible all in the persuit of conformity to the norms of the society. Mead maintains that during the process of socialisation individuals take upon themselves a host of others' attitudes towards them. "How they should behave". The gathering of such attitudes, taken place during the long process of growth. During which the individual take attitudes from the school masters, parents, friends, peer groups, heroes, heroines novels and films, etc. By internalising such attitudes of others, the individuals create in themselves the concept of "the generalized other" as Meads calls it. It is this, "generalised other" that gradually shape what become of the children, as their self-concept.

From the internalisation of the attitudes of others, an individual begins to think of "I" and "me" as he says to himself: "I am me", of the behaviour of the individual represent "I" of his behaving self and this becomes the "me", of his self concept of the following moment. "I" has a direction and it is self-expressive, while "me" is the totality of underlying

aspects of an individuals "self" or "self-concept".

From the internalisation of, "the generalised other", individuals tend to behave in a such a manner others would want them to behave and as they appreciate others expectations; they strive to develop a kind of personality which is consistent with the norms of the respective societies. It should be noted however, that not all individuals are moulded in the same pattern from the internalisation process of others attitudes. There lies enough room for diversification among the unifying process. This point is embedded in the fact that individuals tend to select some of these attitudes and rejecting the rest.

Erikson (1959) views the development of personal identity from his theory of socialisation arising out of resolutions of the psycho-social crises corresponding to the psycho-sexual stages of Freud's theory of personality development. His work is essentially on mutuality of the effects of interaction to which he is exposed right from his early years of growth. This comes about the interactions of the needs of the individual and the various socialising agencies of the environment, thus seducing the child to his particular life style. When he begins to walk, he

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depends on the proper rate and sequence of these muturational, interactional processes.

Erikson (1959) maintains, at the oral stage of the individual, the instinctive function is that of incorporation. "The psychosocial mode of functioning of this incorporating behaviour is the generation of the child's awareness, that he is 'one who can get' and since he is given something by his milieu to incorporate, he becomes also aware of the fact that he is who can get to be the giver".

Harry Stack, Sullivian, a new-Freudian support the early differentiation of the individuals personality formation, as he suggests personification of a good or bad mother. According to him, this develops right from the early age of growth depending on the kind of affection of the mother the child got. It is this orientation, he takes when he must have attained the final growth. Roe (1958) (unpublished paper) has written extensively on the subject matter. From her writings, she agrees that such children that get love and acceptance of the mother grow to be sociable, open mindedness, and are great scientists, Unlike their counterparts who have been rejected by the two needs of mother, they grow to be solitary, submissive and

conversative, sometime end up being aggressive because of the maternal neglect. Such individuals and up as carpenters, butchers and have vocations in which they can exhib their aggressive acts.

At the anal stage the child's awareness results in his internalisation of his psycho-social resolution of the crisis corresponding to this stage, when he thinks for self: 'I am one what I will'. Further at his Phallic stage, this awareness results in his thinking. "I am what I will be". When he is at his Letency stage, acquisition of values, knowledge about the successes and failures of the behaviour, confine him to think: "I am what I learn". At the genetal stage, he think thus: "I am one who can lose and who can find oneself in another". And at the adulthood, having internalised values and socialised aflectively in the process they think thus: "to take care of, to be through having been and to face not being" with regard to his milieu.

Erikson (1959) in his thesis has agreed with the fact that there are possibilities of individuals growing up in the same physical and social environment to emerge with differences in self-concepts. His theory had further postulated that occassional moratoriums can be declared in the growth and development of identity

of the child till satisfactory resolutions of the crises are attained by him. however, little evidence exist as to how simple observation of an individual's own physical behaviour transfers to one's cognitive awareness of various sorts. Langer (1969) elaborate on this, when he states, the growth of the self or self-concept is essentially a dynamic process, a process of the ongoing interaction.

Finally, on the growth of self, Purkey states, "self is organized, the self is dynamic, and the self is learned". Self is organized implies; complex system of organized and incorporated beliefs, values and cognition of the individual's abilities and attitudes. It is possible from an organized self-concept of a child, to be aware of the fact that he is more intelligent than the average child, that he is an athlete of some level of competence; that his social interactions with others in the group is to a particular degree. However at any point in time, this same child fails at certain task, which previousily, he saw himself as competent to manipulate, a new dimension of himself comes. He might need to change the prior value on such a task. On the opposite, if due to poor or harsh environmental condition, the individual was not capable of performing that task, but surprisingly, he finds

himself performing successfully a task, he never felt comfortable about to perform before, his previous self-concept regarding that change alters, while the former changes to "not being that good" and the latter to "being quite good", in academic engagements.

The "me" of I

Mead (1934) in his book titled: Mind, Self and Society, expatiate on this concept of "Me of I". (a) "I" is the concious agent or the person behaving in any interactional situation and it is the "I" of his self; (b) there is the "Me" of the self of a person or agent which is referred to by others in situations of interaction. A charismatic leader in a conversation would use the first person "I" but in the society, he might use "me". This "me" assumes a better dimension of the self-image, self-esteem and ideal self.

"Self image here is the descriptive part of an individual's self-concept. This connotes, what the person thinks he is. Self-esteem on the other hand, relates to the self-concept, how favourably he regards himself.

Generally, especially young children always have at the back of their minds certain ideal behaviours,

they aspire to possess, these kind of characteristics form the ideal-self" of their self-concepts. The self-image also develops as a result of the interaction with other members in the group, of which he internalises the results of an evaluation of such behaviour into his own self-concept.

A good example is of a child who receives some reinforcements of, from his parents, teachers and friends. Whichever way this reinforcements take really it is this orientation which will form an aspect of his self-image. An example is of a child who is witty and so gets reinforcements based on his wit. Automatically his self-image will have an aspect of this witty characteristic and in which ever way he interacts, he considers himself to be witty amongst others of the group. Whenever, he is praised and approved of the witty character, he sees it as a favourable habit to be witty. Still amongst other mambers of the group, this particular child could still see some aspects of their worth, which he would cherish to have in addition to his ideal-self. There exist a great difference between self-image and ideal-self. It is reported that, most individuals in their socialisation processes fix their goals above the level of their characteristics of their respective self-images. It is also believed

that individuals during the process of interactions, the individuals do not portray their true representations of self-images. This action is common when the individual is in the group of strangers or he is a stranger inmate in a new land. Campbell (1969) calls this type of behaviour "reactive responses".

The self-esteem of individuals mainly arises from the nature and frequency of reinforcements as a result of interactions with others. It is formed by internalisation of the attitudes of others towards the individuals concerned. Assuming parents of a child internalise the fact that he is not doing well in academics, and the long run, the child finds he actually cannot perform academic tasks of a particular nature, then he becomes a problem needing a special care. For if no prompt action is taken his life is likely to be jeoperdized, because of the negative values of him held by his parents. It is a documented fact in educational psychology, that 'no child is born stupid'. On the other hand a child who is constantly reminded that he is bright, needs be done with caution. For he could be seen by the parents as bright but in reality, his performance is below expectation at school.

The two children mentioned equally have a problem. Normal personality development requires for optimal achievement, that self-image should be in agreement with realities of self. Merits to be awarded to what the individual has achieved and not on what has not be attained. Once this is done, ideals of behaviour and personality characteristics could be inculcated into him to form his ideal-self.

Goffman (1956) in his thesis, the presentation of "self" in every day life, emphasizes that individuals during the process of interactions strive to attain a "working consensus". This connotes an act of pretence as self-esteems of individuals may not always be valid in the sense that they do not fall in realities about the respective self-images of the members in an interaction. "The theory of on working consensus holds good in interaction situations between strangers who meet for the first time in some conferences, meeting or gathering" with the aim of taking a decision on something. Such a reinforcement of the individual's behaviour like the above may establish a kind of permanent personality manifestations and his behaviour. It is usual to find children who are friendly and polite and others boastful in the assessment of their own capabilities. The study of psychology explain the

differences and it should be found in the behaviour of the children and adults alike.

From the available literature, it has been pointed out that problems in education stems from the fact, thatadolescents mostly carry with them false self-images by avoiding stark realities. It is more beneficial in making any meaningful achievement in education when and if the individuals appreciate the gap or differences existing between what they think they are and what they actually are.

Peter Mcphali (1967) calls adolescance, a period of social experimentation. A muscular boy, might decide to try out a fight with others since he perceives himself as having an attribute being part of reality. The same thing with a girl who decides to put on smiling face all the time to evoke admirations of the onlookers. These practices are common amongst the adelescents. If for instance, a child observes that his previousily held values about his intelligence are no longer true i.e. the gap between his cherished self-image of being a very bright child and reality about his intelligence and brightness is now apparent to him, there could be a number of possible outcomes from this:

(a) he may show signs of anxiety or neurosis and he may become maladjusted in his later behaviour;

(b) he may reconcile himself to his new finding about the fact that there are brighter children than himself; and

(c) he may ignore the results of his findings and continue to cherish that he is really intelligent irrespective of the new experience.

In all the above instances school achievement is bound to suffer. Both the psychologists and the guidance counsellors can really save the situation. Afterall, it has been said, that "no child is born stupid", the environment really makes him as one it implies: manipulation of the environment by the teachers can therefore avert the situation. Mukherjee (1978) writes to confirm this statement, "whatever may be the case or the strategy adopted by the experiencing child, it must be remembered by all of us that it is the objective of all education programmes to render help to these children undergoing conflicts as above."

It is should be clear to practising teachers it is not what self-identity children carry that matter,

what ideal-self what self-image children they carry that matter". It has been proved as will be cited in some experiments soon to follow, that many youths carry with them false self-concepts may be acqured through social interactions with follow group members. It is in this regard teachers are being repeated by called upon, not only teachers, but even parents, should be cautions when making comments on a child's performance. Shertzer and Stones (1978) while on defects of testing, stated that testing label a child as bright, average and poor, which becomes an indelible mark on such a child. That this label him for life, especially those labelled poor affect them psychologically both at school and outside the school. It has always been a professional advice that, never should the educator internalise negative values such as "never do well child!" "very weak child!" etc. such derogatory statements from educator are not known for any good. For doing any of these is not really helping the situation.

B. Research Background

In one of the research, a studies on self-concept Staines (1958) found out that self-concept of children could be changed positively or negatively by teaching. From the research, he found out that (a) self pictures

are learned structures, (b) changes of these self-pictures as they interact with others in the group and (c) teaching strategy can be so designed that s specific changes in the directions sought for can be effected. Enough literature has been written on the effect of teachers remarks such as, "you are very good", "come and help the class!" "please be a group leader of group A!" "what an excellent child in character". Jones and Boyley (1950) confirm the above assertion. Adult and peer attitudes toward the adolescent, as well as their treatment and acceptance of him are related to his physical status. As a consequence according to the above observation, they acquire different patterns of overt social behaviour. It is possible therefore to hypothesize that groups differing in physical status will also differ in more covert aspects of behaviour and personality.

In another research carried out by P.H. Mussen and M.C. Jones reported in Whitehead (1975) set out to measure the relationship between the adolescents physical status and their underlying motivations self-conceptions and interpersonal attitudes in which TAT (Themotic Apperception Tests) was used. The subjects included 37 year old males. The test was made up of 18 items.

One of their findings included more of the physically accelerated ones had positive self-concepts.

Also the result showed, that the relatively few of the physically retarded boys were unwilling or unable to face their own feelings and emotions as shown by the test. The physically accelerated boys are likely to experience environmental circumstances which are much more conducive to good psychological adjustment. Hence their psychological picture as reflected in their TAT stories was more of a favour.

It is note worthy about adolescents success or failure, as well as ease or tension, in handling their problems will be determined to a large degree by the socio-psychological forces to which they are subjected during this time, and these, as it is seen, **May** significantly be related to their rate of maturation. Thus, physical status during adolescence mediated through the socio-psychological environment may exert profound and lasting influences on the personality. For this reason, many aspects of the adults behaviour and personality seem consistent with their adolescents adjustments, attitudes and motivations.

One major weakness of the above experiment is of great concern at least on reliability basis. The sample was absolutely too small in size to justify the confirmations of some of the researchers hypothesis as already done. It was noted, that the researchers had 37 subjects or cases only. A sample of 100 and above could give a more reliable result.

In a related research work carried out in Nigeria Kabiru (1979) M.Ed. thesis, set out to know if there exist any relationships between personality factors (interms of extraversion, neuroticism, lie) and achievement; (b) to see the relationship between self-concepts (in terms of motivation, task orientation, problem solving, class membership) and achievement and (c) to see the relationship between attitudes and the achievement. The study involved 200 subjects drawn from a secondary school in Kano State in Nigeria.

The results of the research highlighted interesting features of the self-concepts of the adolescents and their achievement motivation.

There emerged significant correlation between attitudes towards mathematics and the task orientation. (b) the scores on mathematics yielded positive correlation with non-verbal reasoning, extroversion,

anxiety, lie, motivation and class membership variables. This was high among the boys. This implies that the extroverted boys were more anxious "fakers" of the responses on the personality.

From the above research, it can be viewed that achievement in whatever form depends much on how "self" perceived himself. It is along with the perception and interest that boost the ego in problem solving say in mathematics as cited. Iketuonye (1978) M.Ed. thesis and Denga (1975), have jointly noted the importance of individual's potentials being in positive correlation with his aspirations - self-concepts. Iketuonye states that it is useful to study the processes of students' aspirations in order to discover whether their aspirations result from an effective appraisal of the limits imposed by their own abilities, available opportunities, social expectations and relevant environmental factors.

The above studies did not however go into details of children's self-concepts and what more to determine the effects of the parental attitudes in the achievement of children.

However in a related research work Aboyade (1978) set out to find out the relationships between academic

performances, socio-economic background and the parental interraction. Already, many studies have noted, that children with healthy relationship with their peers and parents have more self-assurance and confidence and therefore tend, on the average to perform significantly better than their counterparts, who are not so socially matured. His research involved 190 students drawn from three secondary schools in Kaduna. Some of his findings included:

(a) a significant correlation between parental education and quality of home, interaction class membership, English, Science and general educational achievements.

(b) Significant positive correlation with interaction of motivation, task orientation and educational achievement.

The search has stressed the importance of parental positive interactions with the children if any meaningful self-concepts are to be formed and which will be achievement orientated. The immense importance of parental attitudes towards children has already been illustrated, Mukherjee (1978) has stated, "particularly parents should be extremely careful in making comments on a child's performance and we recall at this stage the saying of Holt; "No child starts off stupid in life".

Parents, teachers and all others involved in child's education, are cautioned accordingly, that among the children there are over-estimators and underestimators of themselves. The outcome of Edward and Mariam Clifford (1967) experiment, confirms that there is hope of corrections. That with proper planning the gap between the self-concept and the reality can be bridged. Further, it is stated, with adequate planning in teaching, many of the underachievers could be helped to realise their promise and the over-ostimators of self abilities could be helped, for maximum benefit.

CHAPTER III

AIMS AND HYPOTHESES

The aims of the study were to find about the self-concepts of the children of the last class of primary school in northern Nigeria and aims were based upon finding the totality of the self-concepts of the children. And noting their uniqueness from what their class teachers feel about them. From these basic objectives, the aims can be broadly be divided into the two categories viz:

(a) The self-concepts of the children should have a high positive correlation with their school achievements; and

(b) There should be no difference between their self-concepts assessed by the children and the self-concept of their as assessed by the teachers.

From the above aims the following hypotheses of the study are stated:

(i) Hypothesis I: There will be a positive correlation between the academic self-concept (ACD) of the children and their achievements in the school subjects.

(ii) Hypothesis II: There should be also a positive correlation between their non-academic self-concept (NACD) and their school achievements.

(iii) Hypothesis III: There will be a high positive correlation between the total self-concepts of the children and their school achievements.

CHAPTER IV

EXPERIMENTAL METHODOLOGY

A The Sample

The sample of the study has been obtained from the last class of G.R.A. L.E.A. primary school Zaria. The sample consisted of 58 boys and 46 girls, totalling 104 children. The empirical nature of the study was satisfied as the entire population of the schools last class was considered in the sample and the study was aiming to find the relationships mainly of their self-concepts with their achievements. Further, by the age when a child arrives at the last class of a primary school, it is reasonable to believe that he attains some form of stability in their self-concepts. Also, before class masters of the primary school, have a knowledge of their childrens performances in the school, their relationships with their peers and parents as well.

B. Tests Used

The invesgator in this study used the pre-adolescents self-concept scale of Marsh, Parker and Smith (1983). It consisted of 72 items which could be responded to in the Likert type of responses as false,

mostly false, sometime false, sometime true, mostly true and true. The items were scored according to the responses falling in one of the 5 alternatives given. The score of the positive items ranged from 1 to 5 and for the negative items it ranged from 5 to 1 gradings.

The scale was divided into 7 categories of physical ability/sports, physical appearance, relationship with peers, relationship with parents, reading, mathematics, and school subjects. Item of the categories were then randomized and given to the children to respond. There were also some transformed scores.obtained from the responses by summing up the children's scores on the physical ability, physical appearance, relationship with peers, and relationship with parents and calling the total scores as the non-academic self-concept (NACD). The total of the scores of the children in reading, mathematics and school subjects was given the name of academic self-concept (ACD), and was used as such. The total of the NACD scores and the ACD scores, being the total of the 7 categories of scores of the self-concept questionnaire was called as the total self-concept scores (TOT). All the scores were used for the purpose of this study.

The class masters were also approached by the invesgator and were explained about the research. They were equally requested to fill in a rating scale of 9-points (1 the lowest and 9 the highest) in their ratings. The rating scales were obtained from the teachers for all the 7 categories of the self-concept questionnaire. From the rating scales, transformed scores for the NACD and the ACD were obtained and then the TOT, was calculated. In short the investigator obtained a parallel picture of the self-concepts of the children given by their class masters.

Next the investigator obtained the responses of the children as far as their "intelligence" (Non-verbal reasoning) was concerned for this purpose the investigator used the pictorial test of AH4 Part II (Alice Heim 1970). This test was necessary to see the extent of correlations of "intelligence" with the various attainments. Lastly the investigator obtained their school marks of the preceding terminal examination in mathematics, English and social studies in percentages.

Scoring of the Tests

The investigator scored the children's responses of the self-concept questionnaire according to the responses falling in the 5 alternatives for each of

the items. For the positive items the alternative boxes were to be scored as 1, 2, 3, 4 or 5, and for the negative items the scores were 5, 4, 3, 2, or 1 for the boxes were set as false, mostly false, sometime false, sometime true, mostly true, and true. The scores of each of the 7 categories were summed separately and the total scores of physical ability, physical appearance, relationship with peers and relationship with parents were summed as to give the non-academic self-concept (NACD) of the children. The total of the scores of reading, mathematics and school subjects categories yielded the academic self-concept (ACD) scores of the children. The total self-concept scores (TOT) was obtained as the total of both NACD and ACD scores.

The teachers' ratings on the 9-point scale for all the 7 categories of the self-concept was obtained by the invesgator separately on the rating scale and from the teachers' ratings, the transformed scores of their both NACD and ACD together with the TOT were also obtained.

The investigator scored the responses of the children to the AH4 part II test, for every correct answer, the children were given a score of 1 ignoring

the wrong answers. Lastly the school marks of the previous terminal examination of the children in mathematics, English and social studies were also obtained.

D. Data Matrix

The data matrix of this empirical study consisted of their sex and the scores in the self-concept, scale, teachers' ratings on the scale, the transformed scores of NACD, ACD and TOT from both the children responses and the teachers' ratings and the school marks on the terminal examination in percentages of mathematics, English, social studies and the overall mean of the school achievements.

The next chapter deals with the analysis of the data and the discussion following the results.

CHAPTER V

ANALYSES OF DATA AND RESULTS

AI. The investigator used Ahmadu Bello University computer Services to do the statistical analyses in this investigation. SPSS (Statistical Package for Social Sciences) computer programmes were used for the analysis of the data matrix in this research. At first, the means and the standard deviations are reproduced below in Table 5.1 as follows:

Table 5.1

Means and Standard Deviations

Variables	Mean Boys	S. D.	Mean Girls	S. D.	Mean Total	S.D. Total
Physical ability	30.32	7.19	30.00	7.38	30.16	7.28
Physical appearance	33.60	7.86	33.00	7.95	33.30	7.91
Relationship with Peers	31.73	7.52	30.31	8.32	31.02	7.92
Relationship with Parents	31.36	7.09	31.17	7.46	31.26	7.27
Reading	34.47	8.14	34.50	8.89	34.49	8.52
Mathematics	33.20	7.76	32.78	8.31	32.99	8.04
School Subjects	33.28	7.74	33.00	8.47	33.14	8.11
AH4	11.43	5.14	11.45	5.01	11.44	5.08
Physical ability (Teachers rating)	5.84	1.82	5.77	1.84	5.81	1.83
Physical appearance (Teachers rating)	5.57	1.59	5.21	1.74	5.39	1.67
Relationship with peers (Teachers rating)	5.74	1.77	5.40	1.71	5.57	1.74
Relationship with parents (Teachers rating)	5.72	1.96	5.35	1.86	5.54	1.91
Reading (Teachers rating)	3.39	2.09	3.09	1.91	3.24	2.00
Mathematics (Teachers rating)	3.80	2.01	3.35	1.97	3.57	1.99
School Subjects (Teachers rating)	5.26	1.85	5.00	1.96	5.13	1.91
Mathematics (School scores)	35.49	21.18	34.31	22.60	34.90	21.89
English (School scores)	48.83	22.51	42.85	21.10	45.84	21.81
Social Studies (School scores)	54.35	23.96	52.29	24.98	52.32	24.47

In the above table, the means for the boys and the girls and their respective standard deviations are shown. In addition the overall mean and its corresponding standard deviation for the sexes taken together also shown. The results will be used to see the significant differences between these two means by appropriate statistical analysis later on in this chapter.

AII. Next, the inter-correlation of the data matrix was found by applying Pearson correlation computer programme and they are given below in Table 5.2 as follows;

	(Teachers' rating)	(Teachers' rating)	(Teachers' rating)	Mathematics	English	Social Studies	M3 Mean of School scores
Physical ability PA	.105	.141	.244	.034	.153	.064	.089
Physical appearance	.164	.055	.082	.195	.312	.240	.284
Relationship with Pe	.175	.252	.265	.081	.173	.052	.122
Relationship with pe	.288	.243	.359	.112	.314	.184	.236
Reading	.050	.191	.185	.356	.444	.357	.440
Mathematics	.156	.027	.136	.175	.270	.201	.249
School Subjects	.115	.158	.186	.320	.384	.324	.393
Mean of PAI = RPI	.111	.232	.295	.147	.324	.213	.261
Mean of RGI - SSI	.118	.262	.194	.334	.408	.337	.409
Mean of PAI - SSI	.179	.212	.251	.244	.389	.265	.349
	.057	.031	.232	.212	.216	.104	.179
Physical ability (PA	.404	.282	.631	.127	.004	.129	.125
Physical appearance	.178	.366	.795	.043	.256	.139	.154

Note:

x signifies P $<$.05, df = 102 for a two tailed test

xx signifies P $<$.01, df = 102 for a two tailed test

xxx signifies P $<$.001, df = 102 for a two tailed test.

From the correlation matrix above the following significant correlations at their respective levels are noted as follows:

(i) Physical ability correlated significantly at .001 level of confidence (P $<$.001, df = 104-2 = 102, for a two tailed test), with physical appearance, relationship with peers, relationship with parents, reading, mathematics, school subjects, mean of non-academic self-concept (NACD), mean of academic self-concept (ACD), and total self-concept (TOT) and also correlated significantly at .01 level of confidence (P $<$.01, df = 104-2 = 102, for a two tailed test) with the teachers rating of physical ability and total self-concept, and further correlated at .05 level of confidence (P $<$.05, df = 104-2 = 102 for a two tailed test), with the teachers' ratings of relationship with peers, relationship with parents, school subjects, mean of non-academic self-concept (NACD), mean of

academic self-concept (ACD) and also with their English scores.

(ii) Physical appearance correlated significantly at .001 level of confidence ($P < .001$, df = 104-2 = 102, for a two tailed test) with relationship with peers, relationship with parents, reading, mathematics, school subjects, then mean of non-academic self-concept (NACD), then mean of academic self-concept (ACD), then the mean of total self-concept (TOT) and English scores; it also correlated significantly at .01 level of confidence ($P < .01$, df = 104-2 = 102, for a two tailed test) with AH4, social studies and the mean of the school subjects, and it also correlated significantly at .05 level of confidence ($P < .05$, df = 104-2 = 102, for a two tailed test), with teachers' ratings for the school subjects and their mathematics scores.

(iii) Relationship with peers correlated significantly at .001 level of confidence ($P < .001$, df = 104-2 = 102, for a two tailed test) with relationship with parents, reading, mathematics, school subjects, non-academic self-concept (NACD), academic self-concept (ACD), total self-concept and teachers' ratings of school subjects; and it also correlated

significantly at .05 level of confidence ($P < .05$ df = 104-2 = 102, for a two tailed test) with teachers' ratings of physical ability, physical appearance, relationship with peers, reading, mathematics, mean of non-academic self-concept (NACD), mean of total self-concept and the English scores; and it further correlated with the mean of teachers' ratings of academic self-concept (ACD) at .01 level of confidence for df = 104-2 = 102, for a two tailed test.

(iv) Relationship with parents correlated significantly at .001 level of confidence ($P < .001$, df = 104-2 = 102 for a two tailed test) with reading, mathematics, school subjects, mean of non-academic self-concept (NACD) mean of academic self-concept (ACD), mean of total self-concept, (TOT) and teachers' ratings of physical appearance, relationship with peers, school subjects, non-academic self-concept (NACD), total self-concept (TOT) and their English scores; it also correlated significantly at .01 level of confidence ($P < .01$, df = 104-2 = 102, for a two tailed test) with teachers' ratings of physical ability, relationship with parents, mathematics, academic self-concept (ACD) and the mean of school subjects;

and it also correlated significantly at .05 level of confidence ($P < .05$, df = 104-2 = 102, for a two tailed test) with AH4, reading, and social studies.

(v) The reading variable correlated significantly at .001 level of confidence ($P < .001$, df = 104-2 = 102 for a two tailed test) with mathematics, school subjects, non-academic self-concept (NACD) academic self-concept (ACD), total self-concept (TOT) and the children's scores in mathematics, English, social studies and the mean of the school subjects respectively. It also correlated significantly with the teachers' ratings of school subjects at .01 level of confidence ($P < .01$, df = 104-2 = 102 for a two tailed test) and it further correlated also with AH4, teachers' ratings, of reading scores, mathematics scores, academic self-concept (ACD) and with mean of the total self-concept (TOT) at .05 level of confidence ($P < .05$, df = 104-2 = 102 for a two tailed test).

(vi) The mathematic's scores correlated significantly at .001 level of confidence ($P < .001$, df = 104-2 = 102 for a two tailed test) with school subjects, non-academic self-concept (NACD), academic self-concept (ACD) and total self-concept (TOT); it

also correlated significantly with their scores of English and the overall mean scores at .01 level of confidence ($P < .01$ df = 104-2 = 102 for a two tailed test); and it also correlated with the teachers' ratings of physical ability, relationship with peers, relationship with parents non-academic self-concept (NACD), mean of total self-concept (TOT), their mathematics and social studies scores at .05 level of confidence ($P < .05$, df = 104-2 = 102 for a two tailed test).

(vii) The school subjects scores correlated significantly at .001 level of confidence ($P < .001$, df = 104-2 = 102 for a two tailed test), with non-academic self-concept (NACD), academic self-concept (ACD), total self-concept (TOT), mathematics, English, social studies and mean of the school subjects scores, and it also correlated significantly at .05 level of confidence ($P < .05$, df = 104-2 = 102 for a two tailed test) with AH4 and teachers ratings of mathematics, school subjects, academic self-concept, (ACD) and total self-concept (TOT).

(viii) The children's non-academic self-concept (NACD) correlated significantly at .001 level of confidence ($P < .001$, df = 104-2 = 102 for a two tailed test),

with their academic self-concept (ACD), the total self-concept (TOT), teachers' ratings of school subjects and their total self-concept (TOT) and their English scores; it has correlated significantly at .01 level of confidence ($P < .01$, df = 104-2 = 102, for a two tailed test) with teachers' ratings for mathematics and the mean of academic self-concept (ACD) and their overall mean of school subjects scores; and it also correlated with AH4, teachers' ratings of physical ability, physical appearance, relationship with peers, relationship with parents, reading, mean of non-academic self-concept (NACD) and the children's scores in mathematics and social studies all at .05 level of confidence ($P < .05$, df = 104-2 = 102 for a two tailed test).

(ix) Children's academic self-concept (ACD) correlated significantly at .001 ($P < .001$, df = 104-2 = 102 for a two tailed test), with the mean of the total self-concept (TOT) and their scores of mathematics, English, social studies and the overall mean of the school subjects scores; it also correlated significantly with teachers ratings for school's subjects at .01 level of confidence ($P < .01$, df = 104-2 = 102 for a two tailed test); and it also

correlated with AH4 and teachers' ratings of mathematics, their academic self-concept (ACD) and the mean of total self-concept (TOT).

(x) Children's mean of total self-concept correlated significantly at .001 level of confidence with their English scores and the mean of the scores of the school subjects ($P < .001$, df = 104-2 = 102 for a two tailed test); it also correlated significantly at .01 ($P < .01$, df = 104-2 = 102 for a two tailed test) with the teacher's ratings of school subjects and the mean of total self-concept (TOT) and also with their scores in mathematics and social studies; it further showed correlation at .05 level of confidence ($P < .05$, df = 104-2 = 102 for a two tailed test) with AH4 and teacher's ratings of physical ability, physical appearance, relationship with peers, relationship with parents, mathematics, the mean of Non-academic self-concept (NACD) and the mean of academic self-concept (ACD).

(xi) Children's AH4 scores, correlated significantly at .01 level of confidence ($P < .01$, df = 104-2 = 102 for a two tailed test) with the teacher's reatings for the performance in mathematics and

their total self-concept (TOT), and it correlated significantly with the teacher's ratings of physical ability, physical appearance, relationship with peers, reading, school subjects, mean of non-academic self-concept (NACD), and their scores in mathematics, English and the mean of overall school subjects scores.

(xii) Teachers ratings of the children's physical ability correlated significantly with teachers ratings of physical appearance, relationship with peers, relationship with parents, mean of non-academic self-concept (NACD) and the mean of total self-concept (TOT), all at .001 level of confidence ($P < .001$, df = 104-2 = 102 for a two tailed test), it also correlated significantly at .01 level of confidence ($P < .01$, df = 104-2 = 102 for a two tailed test) with the teachers' ratings of their performance in mathematics; and it also correlated significantly with the teachers' ratings of their performance in school subjects and of their academic self-concept (ACD) and it correlated negatively and significantly at .05 level of confidence with their mathematics and social studies scores.

299740

(xiii) The teachers' ratings of their physical appearance correlated significantly at .001 level of confidence ($P < .001$, df = 104-2 = 102 for a two tailed test), with the teachers' ratings of relationship with peers, relationship with parents, mathematics, school subjects, mean of non-academic self-concept (NACD) mean of academic self-concept (ACD) and mean of total self-concept (TOT) it also correlated significantly at .01 level of confidence ($P < .01$, df = 104-2 = 102 for a two tailed test) with teachers' ratings of their reading, scores, and their performance in English; and it also showed correlation significantly at .05 level of confidence with the scores in social studies and the mean of their overall school subjects scores.

(xiv) The teachers' ratings of the relationshi with peer scores correlated significantly at .001 level of confidence ($P < .001$, df = 104-2 = 102 for a two tailed test), with the teachers' ratings of the

relationship with the teachers' ratings of the relationship with parents, mathematics, non-academic self-concept (NACD) and the total self-concept (TOT); and it also correlated significantly with teachers' ratings of school subjects and academic self-concept (ACD) and their English scores at .05 level of confidence ($P < .05$, df = 104-2 = 102 for a two tailed test).

(xv) The teachers' ratings of relationship with parents, correlated significantly at .001 level of confidence ($P < .001$, df = 104-2 = 102 for a two tailed test) with the non-academic self-concept (NACD), and the total self-concept (TOT), and it showed further significant correlations at .05 level of confidence with the teachers' ratings of their mathematics performance and their scores in English and their social studies ($P < .05$, df = 104-2 = 102 for a two tailed test).

(xvi) The teachers' ratings of reading scores correlated significantly at .001 level of confidence with their ratings in mathematics, school subjects, academic self-concept (ACD), total self-concept (TOT), and their scores in mathematics, English, social studies and the overall mean of the school

subjects scores, at .001 level of confidence ($P < .001$, df = 104-2 = 102 for a two tailed test).

(xvii) The teachers' ratings of mathematics performance correlated significantly at .001 level of confidence ($P < .001$, df = 104-2 = 102 for a two tailed test) with the teachers' ratings of their performance in school subjects, their non-academic self-concept (NACD), academic self-concept (ACD), total self-concept (TOT) and their scores in mathematics, English, social studies and overall mean of the school subjects scores.

(xviii) The teachers' ratings of their performance in school subjects correlated significantly with their ratings of academic self-concept (ACD), total self-concept (TOT) and their performance in mathematics, English, social studies and their overall mean of the school subjects scores ($P < .001$, df = 104-2 = 102 for a two tailed test), and it also showed significant correlation with the teachers' ratings of their non-academic self-concept (NACD), ($P < .05$, df = 104-2 = 102 for a two tailed test).

(xix) The teachers' ratings of their non-academic self-concept (NACD) correlated significantly with their

ratings of total self-concept (TOT) at .001 level of confidence ($P < .001$, df = 104-2 = 102 for a two tailed test); it also correlated significantly with the teachers' ratings of academic self-concept (ACD) at .01 level of confidence ($P < .01$, df = 104-2 = 102 for a two tailed test); and it also showed significant correlation with children's scores in English at .05 level of confidence (P .05 df = 104-2 = 102 a two tailed test).

(xx) The teachers' ratings of their academic self-concept (ACD), correlated significantly with their ratings of total self-concept, and their performances in mathematics, English, social studies and the overall mean of school subjects scores all at .001 level of confidence (P .001, df = 104-2 = 102 for a two tailed test).

(xxi) The teachers' ratings of the total self-concept (TOT) correlated significantly at .001 level of confidence with their performance in English, social studies and the overall mean of the school subjects scores ($P < .001$, df = 104-2 = 102 for a two tailed test); and it also showed correlated significance at .05 level of confidence with their mathematics scores (P .05, df = 104-2 = 102 for

a two tailed test).

(xxii) The childrens' performance in mathematics, English and social studies and the mean of the school subjects scores showed significant correlation all at .001 level of confidence ($P < .001$, df = 10^4-2 = 102 for a two tailed test).

Analysis of Variance: Physical Appearance, Teachers Ratings

The investigator with the help of the computer programme, worked out the analysis of variance (SPSS) of the difference of the mean of the various variables used in the study and only the significant results are reproduced below. Table 5.3 reproduces analysis of variance results of the teachers' ratings of physical appearance as follows;

Table 5.3

Analysis of Variance: Physical Appearance (Teachers' Ratings)

Mean Boys 5.57

Mean irls 5.21

Groups	Sun of Square	Mean Square	Degree of Freedom	F F	P
Between Groups	28.4978	28.4978	1		
Within Groups	264.3868	2.5920	102		
Total	292.8868	-	103	10.9944	<.001

From the above table, it is clear that the boys' ratings were significantly better than the girls' ratings at .001 level of confidence.

Table 5.4 reproduces the analysis of variance results of the teachers' ratings for the boys and girls of their relationship with the peers in the following outline of the table.

Table 5.4

Analaysis of Variance: Relationship with Peers
(Teachers' Ratings)
N = 104

Means Boys 5.74

Means Girls 5.40

Groups	Sum of Square	Mean Square	Degree of Freedom	F	P
Between Groups	15.5024	15.5024	1		
Within Groups	308.4880	3.0244	102		
Total	323.9904	-	103	5.1258	<.001

It is clear from the above table that the boys have more ratings for the relationship with their peers differing at .001 level of confidence.

Table 5.5 reproduce the analysis of variance results of the teachers' ratings of the relationship with parents for the boys and girls as follows:

Table 5.5

Analysis of Variance: Relationship with Parents
(Teachers' Ratings)
N = 104

Mean Boys 5.72

Mean Girls 5.35

Groups	Sum of Square	Mean Square	Degree of Freedom	F	P
Between Groups	18.5709	18.5709	1		
Within Groups	375.3425	3.5895	102		
Total	393.9134	-	103	5.0333	<.001

It is clear from the above table that the boys had significantly greater ratings than the girls differring at .001 level of confidence.

Table 5.6 shows the analysis of the teachers' ratings for the performance in mathematics of boys and girls.

Table 5.6

Analysis of Variance: Mathematics (Teachers' Ratings)
N = 104

Mean Boys 3.80

Mean Girls 3.35

Groups	Sum of Square	Mean Square	Degree of Freedom	F	P
Between Groups	26.9383	25.9388	1		
Within Groups	397.8208	3.8022	102		
Total	424.7596	-	103	7.0851	<.001

This shows significant difference indicating the boys having more ratings than the girls (P <.001).

Table 5.7 shows the analysis of variance results of the teachers' ratings of the school subjects performance as follows:

Table 5.7

Analysis of Variance: School Subjects
(Teachers' Ratings)
N = 104

Mean Boys 5.26

Mean Girls 5.00

Groups	Sum of Square	Mean Square	Degree of Freedom	F	P
Between Groups	9.5050	9.5050	1		
Within Groups	340.9565	3.3427	102		
Total	350.4615	-	103	2.8435	<.001

It is clear that the boys performed significantly better than the girls, differing themselves at .001 level of confidence.

Table 5.8 shows the analysis of variance results of the children's performance in English as follows:

Table 5.8

Analysis of Variance: English
(Teachers' Ratings)
N = 104

Mean Boys 48.83

Mean Girls 42.85

	Sum of Square	Mean Square	Degree of Freedom	F	P
Between Groups	4692.5638	4692.5638	1		
Within Groups	47456.3208	465.2580	102		
Total	52148.883	-	103	10.0859	<.001

It is noted from the above table that the boys perform significantly better in English than the girls defferring themselves at .001 level of confidence.

B. Discussion of the Results

This research consisted of getting an awareness of the self-concept responded to by the class 6 primary school children themselves and also getting the teachers' ratings on it and finally obtaining their mathematics, English and social studies scores. The self-concept questionnaires consisted of seven categories of questions of which the mean of physical ability, physical appearance, relationship with peers and relationship with parents form the non-academic self-concept (NACD) and then, the mean of reading, mathematics and school subjects forming the academic self-concept (ACD) and the mean of all the seven categories, forming the total self-concept (TOT). In the same way the (NACD), (ACD) and the (TOT) parts of the self-concept from the teachers' ratings were calculated. Besides the percentage scores of the children in mathematics, English and social studies were obtained and a mean of the school subjects scores (M_3) was also calculated.

(i) Firstly, the boys and the girls scores were recorded separately and their means and standard deviation were also calculated. Apart from the English and social studies scores, the other scores means of both the boys and girls are more or less same and hence it will be a fair conclusion from this table that the children did not differ between the sexes very much as can be interpreted from the results of the means (Table 5.1).

Next the inter-correlation of all the variables put together for both the boys and the girls were done (Table 5.2), and comments on this correlation have already been made before.

The non-academic self-concept (NACD) of the children correlated amongst others with teachers ratings of school subjects and English scores (Vide: (viii) of AII). Further the inter-correlations of the NACD with other ACD and TOT and also with teachers' ratings for mathematics and the mean of the subjects scores have also been established there. On the basis of this significant correlations hypothesis I is supported.

(ii) The academic self-concept of the children correlated amongst others with the mathematics, English, social studies and the mean of the school subjects scores (Vide; (ix) of AII above). Further it correlated with their TOT and their teachers' ratings for school subjects and it also correlated with the school scores and also with the AH4 scores. On the basis of this correlation hypothesis II of this research is supported.

(iii) The total self-concept of the children correlated with their English scores and also with the mean of the scores of the school subjects (Vide (x) of AII above). On the basis of this correlation hypothesis III is supported.

(iv) The AH4 scores correlated with teachers' ratings for their mathematics and their total self-concept amongst others.

(v) Teachers' ratings of NACD correlated amongst others with the scores in English (Vide (xix) of AII above). On the basis of this hypothesis I is supported.

(vi) Teachers' ratings of ACD correlated significantly amongst others with their performances in mathematics, English, social studies and M_3 (Vide: (xx) of AII above). On the basis of this, hypothesis II is supported.

(vii) The teachers' ratings of the TOT correlated amongst others with their English, social studies and M_3 scores (Vide: (xxi) of AII above). On the basis of this, hypothesis III is supported.

(viii) The investigator was then interested to look at Table 5.1 to see if the boys and the girls differred significantly in their means of the scores of the study. Table 5.3 shows that the boys performed significantly better in their teachers' ratings of physical appearance.

(ix) The analysis of variance results for the teachers' ratings on the relationship with peers show that the boys performed significantly better than the girls (Table 5.4).

(x) The teachers' ratings of their relationship with parents showed higher, significant scores for the boys than the girls (Table 5.5).

(xi) The teachers' ratings on their mathematics scores show that the boys perform significantly better than the girls (Table 5.6).

(xii) The teachers' ratings on the school subjects scores show that the boys perform significantly better than the girls (Table 5.7).

(xiii) The teachers' ratings on their English scores show that the boys performed significantly better than the girls (Table 5.8).

These differences in the performances between the boys and the girls could be a real differences in the performances in those subjects of the boys and the girls which the means table (Table 5.1) could not establish. This study however is not concerned with the differences in these performances of the boys and the girls and no hypothesis was therefore formed out of it.

The results of this investigation has shown enough evidence to support the hypotheses of this research and have pointed out the importance of the self-concept, NACD, ACD and the TOT, in education.

The next chapter deals with the critique, conclusion and recommendation of this study.

CHAPTER VI

CRITIQUE, CONCLUSIONS, IMPLICATION AND RECOMMENDATIONS

Critique

The non-academic self-concept (NACD) of the pupils correlated at .211 with teachers' ratings of NACD and it also correlated from r = .147 to r = .324 with mathematics, English and social studies and it further correlated r = .261 with the mean of the overall school scores. The ACD of students correlated with the teacher ratings, r = .168, and from .334 to .409 with the academic attainments. The total self-concept of the students correlated with the teacher ratings, r = .261 and from .244 to .389 with academic attainments.

From the correlations above which are all significant we get a fair picture of the construct validity of the instrument and we notice that the total self-concepts of the pupils correlated both with the teachers (r = .261) ratings of self-concept to .349 for their overall school performance, the validity coefficient for their English performance being maximal at r = .389.

The construct validity of the instruments therefore has been fairly established at r = .261 (significant at .01 level of confidence, df = 104-2 = 102). On the academic ability the total self-concept of the students correlated significantly with mathematics, English, social studies and the overall school means ranging from .244 to .349 and thereby, explains the validity of the instruments responded to by the pupils.

The analysis of variance results show a significant difference in the teacher ratings of the self-description questionnaire (SDQ) from the pupils responses of the boys and the girls in physical appearance, relationship with peers, relationship with parents, mathematics, English, and the school subjects showing that the boys obtained significantly higher scores than the girls. These differences could be real difference between the sexes of the samples and no comments seem to be necessary on this. Now it is necessary for the investigator to talk about the experimental validity of this research which is undertaken.

Campbell (1969) says of the external validity i.e. respresentativeness of the findings of this research to wider areas outside, the sample undertaken by saying

that, if external validity cannot be assured, it can be sacrificed by the researcher.

This research was based on empirical sample which was not representative of any population outside and what is found here true for the sample has to be checked for its own internal validity by examining the various internal validity factors one by one. The sample consisted of 104 pupils, boys and girls who were present for the investigator to respond to questions throughout the investigation period. There was no case of experimental mortality and hence that internal validity factor was non-existent. On the question of reactive responses care was taken to get the truthful answers on the SDQ and hence the risk of getting reactive responses either from the pupil or the teachers concerned were minimal. On the question of history the factor does not arise since the experiment was finished in one sitting and the history factor did not change. The same arguement goes for the maturation factor of internal validity and it can be safely held that the internal validity factors of history and maturation were also non-existent. The investigator had no trouble in scoring their responses and to get the teacher ratings and the school's scores and hence there was no factor of experimental decay.

Speaking about the last factor of internal validity, i.e. statistical regression of the mean, it can be safely said that the investigator did not look for in his sampling any chosen criteria for the selection of the extreme groups in which case the statistical regression of the mean would have been maximal, and hence on this ground it can be safely held that the statistical regression of the mean factor was not active in this research. Summarising therefore it can be said that the research is internally valid.

Conclusions

(i) The self-description questionnaire is a valid instrument to find the non-academic self-concept, the academic self-concept, and the total self-concept of the pupils of the last class of the primary school.

(ii) The construct validity of the instrument in the categories of the NACD, ACD and TOT has been established.

(iii) The validity coefficient of the instrument for the academic ability of the students ranged from .244 to .389 for the academic performances of the pupils.

Implications

The knowledge acquired from the study of "self" today has in no doubt educated both the teachers and the parents involved in child education, that effective manipulation of the physical, social and economic environment could be utilized to help in developing a mature, healthy personality of the youths.

Already, this research has established the fact that, among the youths, there exist overraters and underraters of their competences. From available literature, warning has been issued to those involved in the child education, to observe caution in using derogatory statements on a child such as: "you are stupid". Afterall it is agreed, no child is born stupid, they are made by the environment. Care should be taken of the children who tend to underrate their potentials and abilities in academic performances by bringing them into a suitable teaching environment by minimal steps in learning so that success at every step can carry them forward. On the other hand children who overrate themselves, interms of their abilities, should be confronted with tasks of this sort, so that they might realise their limitations. However, nothing should be done during teaching with the aim of defeating these children in their enterprises, but only to make

them aware of their limitations in their capabilities.

The "ideal self" of the children can be shaped properly by a principled teacher, in such a way, that the ideals are realistic for them to achieve, and not sheer fantasies. A good teacher should endeavour the using of cues and instances in his teaching to inculcate that. Generally a practising teacher is everything, he is a counsellor or a pastoral leader of the children, he instructs. He can organise, properly his strategies in teaching to keep the children motivating to strive for these ideals for themselves which are not too unrealistic for them to aspire for.

The psychology of self-concept of a child is a subset of socialisation of the child, the importance of this topic in teacher education, therefore need not be overemphasised, it's of importance in determining their effectiveness.

Recommendations

From the findings and implications of this research there arises the immediate need for the re-appraisal of teacher education. The development of mature and healthy personality of the youths squarely lies in the hands of the teacher. Their understanding of the psychology of the self-concept

of children, should be a yardstick of their success on the job. This implies, the term "self-concept" need be an independent course of study in teacher education.

On the other hands, the parents who also are involved in the informal education of the children need to be vast in this topic in education for effective performance of the role.

The educational planners, though not directly involved, need be aware of the effects of poor environment of study on the youths.

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APPENDIX I

H. W. MARSH, J. W. PARKER AND I. D. SMITH 75

SELF DESCRIPTION QUESTIONNAIRE

Name ..... Boy ..... Girl ..... Grade/Year .....

Age ..... School ..... Teacher .....

This is a chance to look at yourself. It is not a test. There are no right answers and everyone will have different answers. Be sure that your answers show how you feel about yourself. PLEASE DO NOT TALK ABOUT YOUR ANSWERS WITH ANYONE ELSE. We will keep your answers private and not show them to anyone.

When you are ready to begin, please read each sentence and decide your answer. (You may read quietly to yourself as I read aloud.) There are five possible answers for each question — "True", "False", and three answers in between. There are five boxes next to each sentence, one for each of the answers. The answers are written at the top of the boxes. Choose your answer to a sentence and put a tick (✓) in the box under the answer you choose. DO NOT say your answer out loud or talk about it with anyone else.

Before you start there are three examples below. Somebody named Bob has already answered two of these sentences to show you how to do it. In the third one you must choose your own answer and put in your own tick (✓).

		FALSE	MOSTLY FALSE	SOMETIMES FALSE, SOMETIMES TRUE	MOSTLY TRUE	TRUE	
EXAMPLES							
1.	I like to read comic books.....	☐	☐	☐	☐	☑	1
2.	In general, I am neat and tidy.....	☐	☐	☑	☐	☐	2
3.	I like to watch T.V.	☐	☐	☐	☐	☐	3

(Bob put a tick in the box under the answer "TRUE". This means that he really likes to read comic books. If Bob did not like to read comic books very much, he would have answered "FALSE" or "MOSTLY FALSE".)

(Bob answered "SOMETIMES FALSE, SOMETIMES TRUE" because he is not very neat, but he is not very messy either.)

(For this sentence you have to choose the answer that is best for you. First you must decide if the sentence is "TRUE" or "FALSE" or somewhere in between. If you really like to watch T.V. a lot you would answer "TRUE" by putting a tick in the last box. If you hate watching T.V. you would answer "FALSE" by putting a tick in the first box. If your answer is somewhere in between then you would choose one of the other three boxes.)

If you want to change an answer you have marked you should cross out the tick and put a new tick in another box on the same line. For all the sentences be sure that your tick is on the same line as the sentence you are answering. You should have one answer and only one answer for each sentence. Do not leave out any of the sentences.

If you have any questions put up your hand. Turn over the page and begin. Once you have started, PLEASE DO NOT TALK.

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The University of Sydney
1981

Preadolescent Self-Concept

	FALSE	MOSTLY FALSE	SOME TIMES FALSE, SOME TIMES TRUE	MOSTLY TRUE	TRUE	
1. I am good looking	1					1
2. I'm good at all SCHOOL SUBJECTS	2					2
3. I can run fast	3					3
4. I get good marks in READING	4					4
5. My parents understand me	5					5
6. I hate MATHEMATICS	6					6
7. I have lots of friends	7					7
8. I like the way I look	8					8
9. I enjoy doing work in all SCHOOL SUBJECTS	9					9
10. I like to run and play hard	10					10
11. I like READING	11					11
12. My parents are usually unhappy or disappointed with what I do	12					12
13. Work in MATHEMATICS is easy for me	13					13
14. I make friends easily	14					14
15. I have a pleasant looking face	15					15
16. I get good marks in all SCHOOL SUBJECTS	16					16
17. I hate stories and games	17					17
18. I'm good at READING	18					18
19. I like my parents	19					19
20. I look forward to MATHEMATICS	20					20
21. Most kids have more friends than I do	21					21
22. I am a nice looking person	22					22
23. I hate all SCHOOL SUBJECTS	23					23
24. I enjoy stories and games	24					24

		FALSE	MOSTLY FALSE	SOME TIMES FALSE, SOME TIMES TRUE	MOSTLY TRUE	TRUE	
25.	I am interested in READING	25	☐	☐	☐	☐	☐ 25
26.	My parents like me	26	☐	☐	☐	☐	☐ 26
27.	I get good marks in MATHEMATICS	27	☐	☐	☐	☐	☐ 27
28.	I get along with other kids easily	28	☐	☐	☐	☐	☐ 28
29.	I do lots of important things	29	☐	☐	☐	☐	☐ 29
30.	I am ugly	30	☐	☐	☐	☐	☐ 30
31.	I learn things quickly in all SCHOOL SUBJECTS	31	☐	☐	☐	☐	☐ 31
32.	I have good muscles	32	☐	☐	☐	☐	☐ 32
33.	I am dumb at READING	33	☐	☐	☐	☐	☐ 33
34.	If I have children of my own I want to bring them up like my parents raised me	34	☐	☐	☐	☐	☐ 34
35.	I am interested in MATHEMATICS	35	☐	☐	☐	☐	☐ 35
36.	I am easy to like	36	☐	☐	☐	☐	☐ 36
37.	Overall I am no-good	37	☐	☐	☐	☐	☐ 37
38.	Other kids think I am good looking	38	☐	☐	☐	☐	☐ 38
39.	I am interested in all SCHOOL SUBJECTS	39	☐	☐	☐	☐	☐ 39
40.	I am good at sports	40	☐	☐	☐	☐	☐ 40
41.	I enjoy doing work in READING	41	☐	☐	☐	☐	☐ 41
42.	My parents and I spend a lot of time together	42	☐	☐	☐	☐	☐ 42
43.	I learn things quickly in MATHEMATICS	43	☐	☐	☐	☐	☐ 43
44.	Other kids want me to be their friend	44	☐	☐	☐	☐	☐ 44
45.	I like being the way I am	45	☐	☐	☐	☐	☐ 45
46.	I have a good looking body	46	☐	☐	☐	☐	☐ 46
47.	I am dumb in all SCHOOL SUBJECTS	47	☐	☐	☐	☐	☐ 47
48.	I can run a long way without stopping	48	☐	☐	☐	☐	☐ 48

Preadolescent Self-Concept

		FALSE	MOSTLY FALSE	SOME-TIMES FALSE, SOME-TIMES TRUE	MOSTLY TRUE	TRUE	
49.	Work in **READING** is easy for me	49					49
50.	My parents are easy to talk to	50					50
51.	I like **MATHEMATICS**	51					51
52.	I have more friends than most other kids	52					52
53.	Overall I have a lot to be proud of	53					53
54.	I'm better looking than most of my friends	54					54
55.	I look forward to all **SCHOOL SUBJECTS**	55					55
56.	I am a good athlete	56					56
57.	I look forward to **READING**	57					57
58.	I get along well with my parents	58					58
59.	I'm good at **MATHEMATICS**	59					59
60.	I am popular with kids of my own age	60					60
61.	I hate myself	61					61
62.	I have nice features like nose, and eyes, and hair	62					62
63.	Work in all **SCHOOL SUBJECTS** is easy for me	63					63
64.	I'm good at throwing a ball	64					64
65.	I hate **READING**	65					65
66.	My parents and I have a lot of fun together	66					66
67.	I enjoy doing work in **MATHEMATICS**						67
68.	Most other kids like me						68
69.	Overall I am good at things I like to do	69					69
70.	I like all **SCHOOL SUBJECTS**	70					70
71.	I learn things quickly in **READING**	71					71
72.	I am dumb at **MATHEMATICS**	72					72

APPENDIX II

NON-VERBAL REASONING TEST (AH4 PART II)

In the test that follows you will find some items which are in the form of pictures. The items are there to test your understanding of some sort of relationships between the pictures of every item. The right answer is one of the five alternatives given for every question. These alternative marked 1, 2, 3, 4 and.5. When you find the correct answer, write the NUMBER of the correct alternative in the space provided at the right hand margin of the test. The test is not difficult; though the questions become difficult gradually. If you find any item to be difficult, then do not waste time on it; proceed to the following ones. There will be 10 minutes only for you to complete this test. Please remember that very few can complete the test in 10 minutes. So do not worry.

Now turn the page and let us look at the examples.

Item No. 1 has the correct answer as No. 4.

Item No. 2 has the correct answer as No. 2.

DO YOU UNDERSTAND?

Will you now work out the items 3 to 10. When you finished I shall tell you the correct answers and please check.

Student's Name:_____

Form or Class:_____

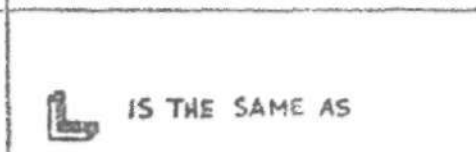
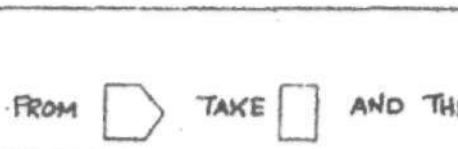
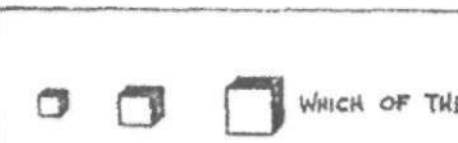
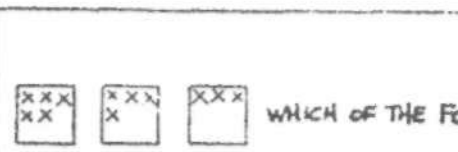
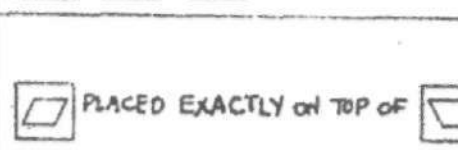
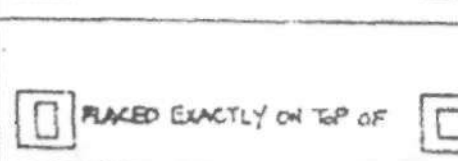
Sex:_____ Age:_____

School:_____

_____

5.

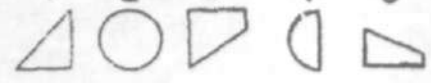
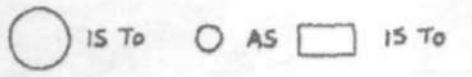
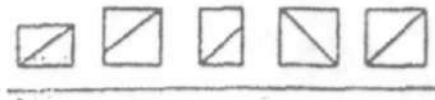
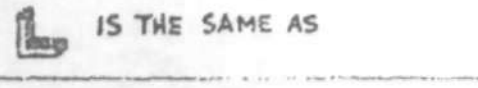
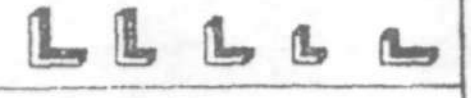
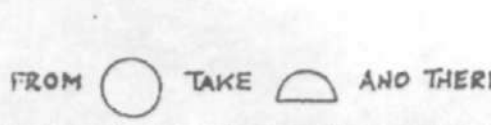
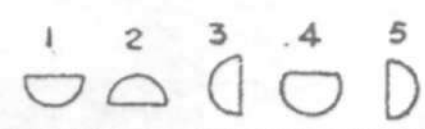
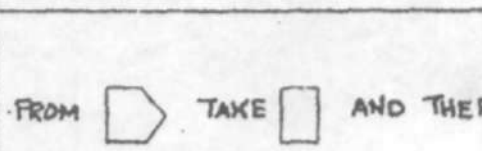
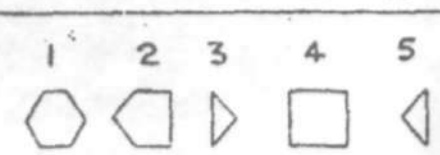
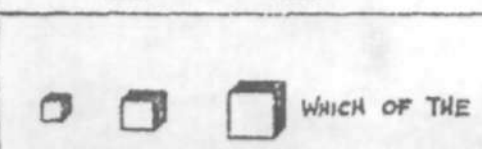
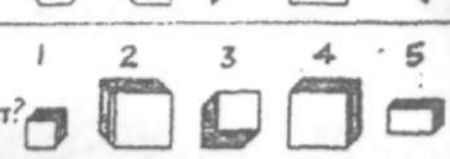
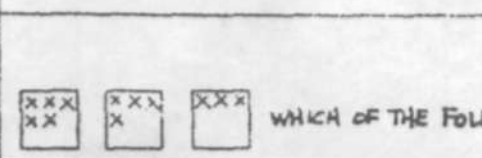
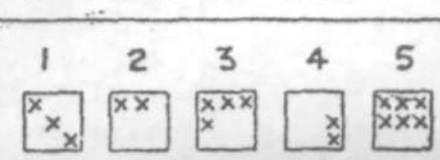
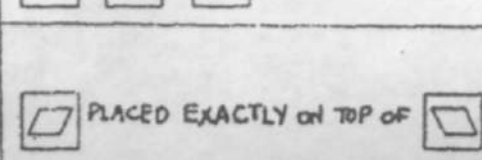
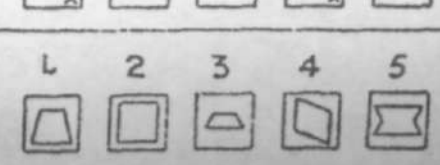
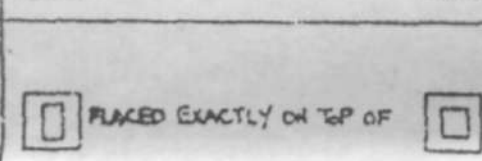
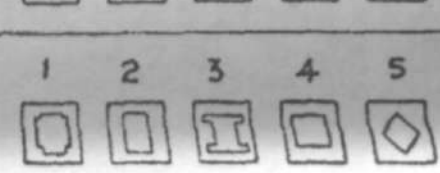
PART II.
EXAMPLES.

	DO NOT WRITE ANYTHING ON THIS PAPER.	1	2	3	4	5
						
						
						
						
						
						
						
						
						
						

DO NOT TURN OVER UNTIL YOU ARE TOLD TO DO SO.

5.

PART II.
EXAMPLES.

QU. No	DO NOT WRITE ANYTHING ON THIS PAPER.	1	2	3	4	5
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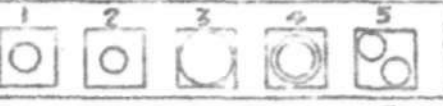
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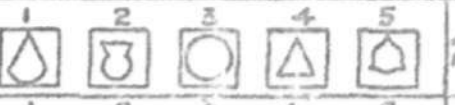
E.

	DO NOT WRITE ANYTHING ON THIS PAPER.		QU. Nº
1	IS TO AS IS TO	1 2 3 4 5	1
2	IS THE SAME AS	1 2 3 4 5	2
3	FROM TAKE AND THERE IS LEFT	1 2 3 4 5	3
4	WHICH OF THE FOLLOWING COMES NEXT?	1 2 3 4 5	4
5	PLACED EXACTLY ON TOP OF GIVES THE FOLLOWING OUTLINE.	1 2 3 4 5	5
6	IS TO AS IS TO	1 2 3 4 5	6
7	IS THE SAME AS	1 2 3 4 5	7
8	FROM TAKE AND THERE IS LEFT	1 2 3 4 5	8
9	WHICH OF THE FOLLOWING COMES NEXT?	1 2 3 4 5	9
10	PLACED EXACTLY ON TOP OF GIVES THE FOLLOWING OUTLINE.	1 2 3 4 5	10
11	IS TO AS IS TO	1 2 3 4 5	11
12	IS THE SAME AS	1 2 3 4 5	12
13	FROM TAKE AND THERE IS LEFT	1 2 3 4 5	13
14	WHICH OF THE FOLLOWING COMES NEXT?	1 2 3 4 5	14
15	PLACED EXACTLY ON TOP OF GIVES THE FOLLOWING OUTLINE	1 2 3 4 5	15
16	IS TO AS IS TO	1 2 3 4 5	16
17	IS THE SAME AS	1 2 3 4 5	17
18	FROM TAKE AND THERE IS LEFT	1 2 3 4 5	18
19	WHICH OF THE FOLLOWING COMES NEXT?	1 2 3 4 5	19
20	PLACED EXACTLY ON TOP OF GIVES THE FOLLOWING OUTLINE.	1 2 3 4 5	20
21	IS TO AS IS TO	1 2 3 4 5	21

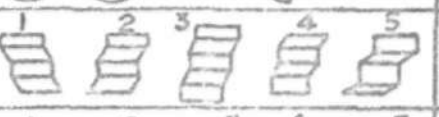
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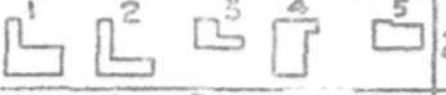
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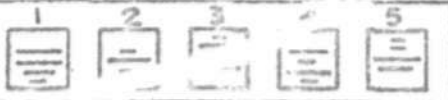
24  WHICH OF THE FOLLOWING COMES NEXT?  24

25  PLACED EXACTLY ON TOP OF  GIVES THE FOLLOWING OUTLINE  25

26  IS TO  AS  IS TO  26

27  IS THE SAME AS  27

28 FROM  TAKE  AND THERE IS LEFT  28

29  WHICH OF THE FOLLOWING COMES NEXT?  29

30  PLACED EXACTLY ON TOP OF  GIVES THE FOLLOWING OUTLINE  30

31  IS TO  AS  IS TO  31

32  IS THE SAME AS  32

33 FROM  TAKE AND THERE IS LEFT  33

34  WHICH OF THE FOLLOWING COMES NEXT?  34

35  PLACED EXACTLY ON TOP OF  GIVES THE FOLLOWING OUTLINE  35

36  IS TO  AS  IS TO  36

37 IS THE SAME AS 37

38 FROM TAKE AND THERE IS LEFT 38

39 WHICH OF THE FOLLOWING COMES NEXT? 39

40 PLACED EXACTLY ON TOP OF GIVES THE FOLLOWING OUTLINE 40

41 IS TO AS IS TO 41

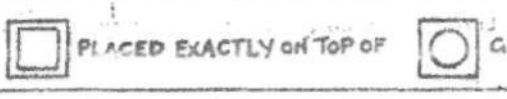
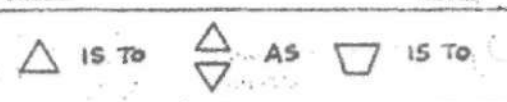
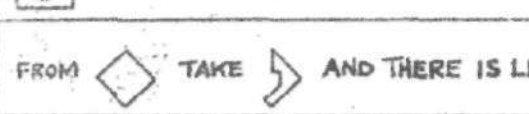
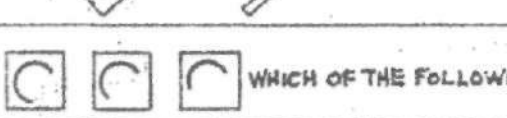
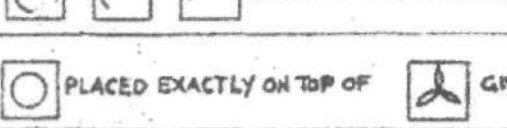
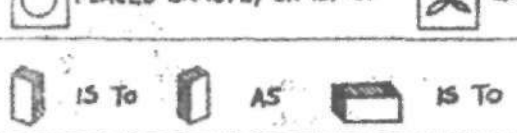
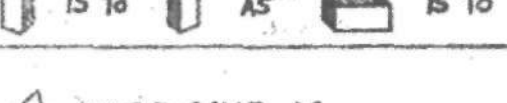
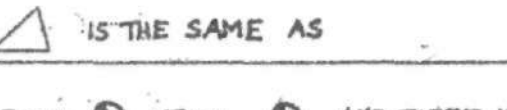
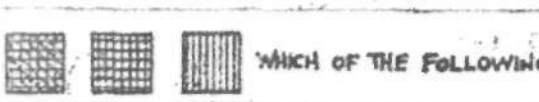
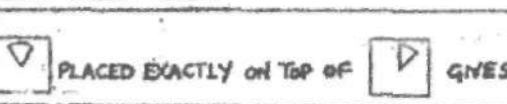
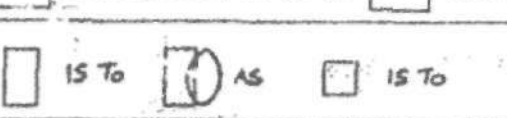
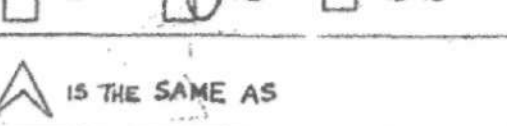
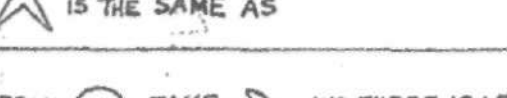
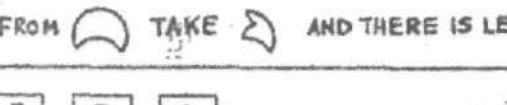
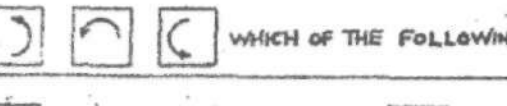
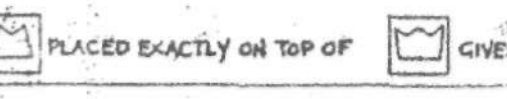
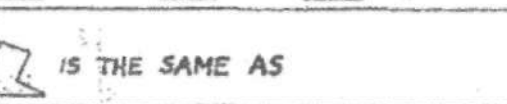
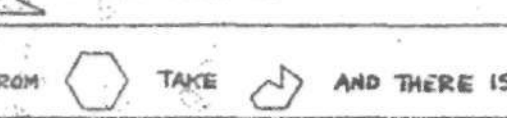
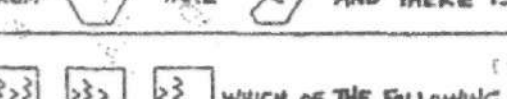
42 IS THE SAME AS 42

43 TAKE AND THERE IS LEFT 43

44 WHICH OF THE FOLLOWING COMES NEXT? 44

GO ON TO THE NEXT PAGE.

8.

QU. Nº	DO NOT WRITE ANYTHING ON THIS PAPER.	QU. Nº
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END OF PART II.

Serial No.	Sex	Physical Ability 1	Physical Appearance 2	Relationship with Peers 3	Relationship with Parents 4	Reading 5	Mathematics 6	School Subjects 7	Non-academic Self-concept 8	Academic Self-concept 9	Total Self-concept 10	AH4	Physical Ability 1	Physical Appearance 2	Relationship with Peers 3	Relationship with Parents 4	Reading 5	Mathematics 6	School Subjects 7	Non-academic Self-concept 8	Academic Self-concept 9	Total Self-concept 10	ENG	MATHS	S/ST	AVE.
1	1	32	38	40	35	37	36	37	36.2	36.6	36.4	8	6	5	6	6	2	3	8	5.7	4.3	5.1	20	15	50	28.3
2	1	36	44	41	38	46	50	50	39.7	48.6	43.5	12	6	4	5	6	4	3	7	5.2	4.6	5.0	60	60	59	59.6
3	1	32	33	40	35	41	39	39	35	39.6	37.0	13	3	3	5	4	2	3	5	3.7	3.3	3.5	50	69	66	61.6
4	1	28	37	34	31	36	34	25	32.5	31.6	32.1	8	3	2	3	2	1	2	4	2.5	2.3	2.4	10	10	38	19.3
5	1	21	29	30	22	31	36	30	25.5	32.3	28.4	7	3	2	3	3	1	2	4	2.7	2.3	2.5	10	10	28	16
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33	2	33	32	24	17	32	36	31	26.5	33	29.2	8	4	4	2	3	2	2	5	3.2	3	3.1	60	58	62	60
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35	2	51	55	33	27	28	27	36	41.5	30.3	37	10	4	5	3	3	2	3	5	3.7	3.3	3.5	17	25	35	25.6
36	2	24	31	38	25	32	35	36	29.5	34.3	31.5	12	6	5	3	4	3	3	6	4.5	4.0	4.2	20	40	50	36.6

38	1	35	37	32	26	44	44	44	32.5	44	37.4	17	8	6	7	7	2	8	7	7.0	7.5	7.1	90	84	80	84.6
39	2	43	46	44	43	50	37	50	44	45.6	44.7	10	8	7	8	8	9	8	8	7.7	8.3	8	45	88	100	77.6
40	1	26	27	35	40	29	32	42	32	34.3	33	23	8	8	7	7	7	8	8	7.5	7.6	7.5	80	60	90	76.6
41	2	43	50	50	45	50	34	50	47	44.6	46	12	8	8	8	8	8	8	8	8	8	8	45	100	95	80
42	1	30	27	32	37	30	32	38	31.5	33.3	32.2	12	8	8	8	8	3	4	7	8	4.6	6.5	60	72	80	70
43	2	33	26	27	35	42	43	28	30.2	37.6	36.4	15	8	8	8	8	3	6	7	8	5.3	6.8	45	88	80	71
44	1	36	28	28	40	38	47	42	33	42.3	37	8	8	8	8	8	3	7	7	8	5.6	6.7	65	56	75	63.3
45	2	33	37	34	37	44	37	33	35.2	38	36.4	18	8	8	8	8	3	8	8	8	6.3	7.2	45	80	90	71.6
46	1	31	29	24	31	21	32	21	29	24.6	27.1	9	8	8	8	8	4	6	7	8	5.6	7	35	64	80	59.6
47	1	42	33	38	35	48	46	43	37	45.6	40.7	11	7	6	7	7	2	3	5	6.7	3.3	5.2	35	48	75	52.6
48	2	35	34	30	29	26	46	30	29.5	34	31.4	14	7	8	8	8	4	5	6	7.7	5	6.5	35	52	70	52.3
49	2	37	35	30	27	35	33	28	34.7	32	33.5	9	8	8	8	8	4	6	7	8.0	5.6	7	20	72	55	49
50	2	31	36	37	29	27	31	40	32.2	32.6	33	20	8	8	8	8	6	5	7	8.0	6	7.1	35	68	58	53.6
51	1	39	38	44	43	38	37	35	41	36.6	39.1	6	8	5	8	8	3	5	7	7.2	5	6.2	35	44	55	44.6
52	2	37	37	34	43	35	46	33	37.7	38	37.8	13	8	8	8	8	5	5	7	8,0	5.6	7	20	52	60	44
53	1	37	46	35	37	41	41	43	38.7	41.6	40	16	7	7	7	7	1	1	4	7	2	4.8	10	44	90	48
54	2	25	20	27	26	31	41	35	27	35.6	30.7	13	6	6	5	5	5	7	5	5.5	5.6	5.5	30	48	30	36
55	1	41	46	46	41	42	42	42	43.5	42	42.8	11	8	8	8	8	1	6	7	8.0	4.6	6.5	30	48	40	39.3
56	2	41	46	46	45	38	42	42	44.5	40.6	42.8	12	8	6	8	8	3	5	7	7.5	5	6.4	10	48	35	31
57	2	33	37	31	42	34	41	33	35.7	36	35.8	11	8	8	8	8	1	1	4	8,0	2	5.4	10	60	30	33.3
58	2	33	38	42	37	46	38	37	37.5	40.3	38.7	12	8	8	8	8	1	2	5	8	3.6	5.7	20	44	48	37.3
59	2	37	46	40	35	34	36	38	39.5	36	38	18	8	8	8	8	2	6	7	8	5	6.7	40	36	20	32
60	2	35	33	35	39	35	42	40	35.5	39	37	15	8	4	7	8	1	1	4	6.7	2	4.7	10	40	55	35
61	2	38	27	27	32	29	28	29	31	28.6	30	11	8	8	8	8	2	3	4	8.0	3	5.8	10	40	65	38.3
62	1	35	36	38	41	40	36	37	37.5	37.6	37.5	9	8	8	8	8	1	1	3	8	1.6	5.2	20	24	40	28
63	1	29	34	30	26	36	29	32	29.7	32.3	30.8	8	6	4	6	6	1	1	2	5.5	1.3	3.7	20	36	35	30.3
64	2	24	19	25	24	25	24	16	23	21.6	22.4	7	7	6	8	8	2	3	5	7.2	3.3	5.5	0	20	30	16.6
65	2	32	33	28	35	31	30	43	32	34.6	33.1	12	8	8	8	8	1	1	3	8	1.6	5.7	20	24	40	24.6
66	2	37	41	41	41	29	42	33	40	34.6	37.7	15	8	8	8	8	2	3	5	8	3.3	6	0	32	30	20.6
67	1	33	43	33	37	45	50	40	36.5	45	40.1	13	7	6	8	8	1	1	1	7.2	1.0	4.3	10	16	15	13.6
68	1	23	33	30	32	29	30	28	29.5	29	29.2	6	6	6	7	7	1	1	1	6.5	1.0	4	0	24	5	9.6
69	1	3	10	11	6	7	14	10	7.5	10.3	8.7	5	7	6	6	6	1	1	1	6.2	1	4	0	8	20	9.3
70	1	39	45	43	39	39	41	41	29.0	40.3	33.8	10	8	8	8	8	2	2	3	8.0	2.3	5.5	10	16	15	13.6
71	1	34	29	27	27	32	26	23	29.2	27	28.2	18	7	7	8	8	1	1	1	7.5	1	4.7	0	16	10	8.6
72	1	5	6	1	5	5	0	5	4.2	3.3	3.8	10	8	5	6	7	1	1	2	6.5	1.3	4.2	0	0	10	3.3
73	1	30	27	27	27	20	26	29	27.7	25	26.5	8	8	3	6	7	1	1	1	6	1	3.8	0	12	5	5.6
74	1	26	37	32	30	42	38	42	31.2	40.6	35.2	10	2	3	3	3	2	2	3	2.7	2.3	2.5	40	50	60	50
75	1	29	30	30	33	38	32	33	30.5	34.3	32.1	11	4	4	5	5	3	4	6	4.5	4.3	4.4	43	40	90	57.6
76	1	30	33	33	26	47	23	32	33.0	34.0	33.4	12	3	4	5	5	3	4	5	4.2	4	4.1	34	60	50	48
77	1	27	34	22	30	30	27	30	28.2	29	28.5	9	3	3	4	5	3	3	5	3.7	3.6	3.7	40	50	50	46.6

81	1	27	23	47	30	38	28	33	31.7	33	32.2	3	7	6	6	5	8	7	7	6	7.3	6.5	37	57	60	5[illegible].3
82	1	18	33	15	26	27	24	26	23	25.6	24.1	7	4	7	5	6	7	7	7	5.5	7	6.1	39	54	80	57.6
83	1	33	40	39	36	29	37	42	36.5	36	36.2	16	3	4	4	5	4	4	5	4	4.3	4.1	20	45	51	38.6
84	1	37	44	26	33	46	44	48	35	46	39.7	7	9	5	5	6	2	2	4	6.2	2.6	4.7	15	45	61	40.3
85	1	25	41	21	38	45	43	38	31	42	35.8	12	3	5	5	6	2	2	4	4.7	2.6	3.2	31	74	[illegible]0	78.3
86	1	27	34	25	26	36	30	31	28	32.3	29.8	17	7	7	7	6	3	4	4	6.7	3.6	5.4	31	71	[illegible]0	47.3
87	1	36	30	28	33	32	29	28	31.7	29.6	30.8	20	6	9	8	8	8	7	9	7.7	8	7.9	45	80	58	61
88	1	36	38	40	31	45	35	34	36.2	38	37	10	7	5	5	7	3	2	4	6	[illegible]	4.7	50	60	63	61
89	2	32	32	35	31	34	35	37	32.5	35.3	33.7	10	4	5	5	5	3	3	4	4.7	[illegible].3	4.1	52	62	70	61.3
90	2	25	22	29	29	31	24	31	26.2	28.6	27.2	7	5	5	7	7	8	6	7	6	7	6.4	40	62	100	67.3
91	2	25	43	34	36	29	37	29	34.5	31.6	33.2	15	4	5	5	5	4	5	5	4.7	4.6	4.7	44	56	60	53.3
92	2	23	40	28	26	46	30	30	29.2	35.3	31.8	14	5	6	6	7	3	4	4	6	3.6	5	50	77	70	65.6
93	2	23	26	20	23	27	32	25	23	28	25.1	11	5	6	6	3	3	4	5	5	4	4.5	63	65	85	71
94	2	18	32	31	31	38	39	34	28	37	31.8	15	6	6	6	7	4	5	6	6.2	5	5.7	46	62	60	58
95	2	37	26	33	34	31	31	41	32.5	34.3	33.2	5	5	5	7	7	3	6	6	6	5	5.5	45	60	46	50.3
96	2	29	40	34	33	44	34	32	34	36	35.1	13	4	5	5	7	2	3	4	5.2	3	4.2	61	87	90	79.3
97	2	25	34	23	25	31	37	40	26.7	36	30.7	8	3	4	5	6	1	2	3	4.5	2	3.4	71	76	90	79
98	2	27	25	34	30	26	29	27	29	27.3	28.2	6	5	7	6	7	9	7	7	6.2	7.6	6.8	50	50	70	56.6
99	2	27	34	36	35	25	36	34	33	31.6	32.4	5	4	8	7	7	5	4	6	6.5	5	5.8	47	56	70	57.6
100	2	24	29	25	24	30	18	29	25.5	25.6	25.5	10	3	7	7	7	4	4	8	6	7.3	5.7	44	56	60	53.3
101	2	28	33	32	28	30	30	30	30.2	30	30.1	7	3	6	6	7	2	3	3	5.5	2.6	4.2	40	50	70	53.3
102	2	16	31	22	23	30	30	22	23	27.3	24.8	7	4	8	7	8	4	5	7	6.7	5.3	6.1	61	86	90	79
103	2	23	28	29	30	30	25	30	27.5	28.3	27.8	13	3	5	5	6	2	3	3	4.7	2.6	3.8	30	45	60	45
104	2	30	29	30	36	39	32	33	31.2	34.6	32.7	5	3	6	6	7	3	3	3	5.5	3	4.4	40	59	45	48
105	2	23	29	28	30	36	39	33	27.5	36	31.1	14	3	7	6	8	3	5	5	6	4.3	5.2	40	64	65	56.2

38	1	20	36	40	28	40	24	31	22	28.3	25.6	11	3	4	7	5	6	4	5	4.7	5	4.9	18	30	30	26
39	1	17	29	32	36	42	38	32	26	37	32.3	18	7	5	6	4	4	3	4	6	5.8	4.7	53	92	34	55.3
40	1	26	47	48	28	30	27	32	40	29.3	34	5	5	6	7	5	5	5	6	6	5.2	5.3	39	50	29	39.7
41	1	28	41	30	33	36	32	50	33	37.8	35.7	12	4	4	5	6	7	4	5	4.3	5.5	5.0	28	20	35	27.7
42	1	25	36	41	28	32	46	36	34	34	34.9	8	5	4	4	5	4	5	7	4.3	5.3	4.9	40	69	139	82.7
43	1	26	30	39	41	35	37	41	31.7	38.5	35.6	9	3	6	4	5	7	4	3	4.3	4.3	4.6	28	68	38	44.7
44	1	30	28	37	39	38	32	35	31.7	36	34.1	18	4	5	6	7	5	5	5	5	5.5	5.3	32	48	60	46.1
45	1	20	40	39	25	43	25	40	29.7	33.3	31.7	15	2	4	5	6	7	5	5	3.7	5.3	4.9	19	42	40	33.7
46	1	17	43	40	39	28	18	42	33.3	32.8	32.4	17	4	3	6	7	4	4	3	4.3	4.5	4.4	90	85	95	90
47	1	30	19	33	36	41	33	41	27.3	37.8	33.3	19	6	5	7	4	5	5	7	6	5.3	5.6	90	95	95	93.3
48	1	39	38	40	42	36	34	39	39	37.8	38.3	20	5	4	5	6	4	6	7	4.7	5.8	5.3	65	95	85	81.7
49	1	15	41	36	29	30	47	50	30.7	39	35.4	14	8	2	3	5	6	7	6	4.3	6	5.3	70	85	70	75
50	1	19	34	35	31	11	28	39	29.3	27.3	28.1	13	5	6	4	5	4	3	8	5	5	5.0	90	100	80	90
51	1	20	44	37	34	44	44	41	36.7	23.3	37.7	10	4	3	4	4	5	2	4	3.7	3.8	3.7	65	75	53	64.3
52	1	29	48	27	35	28	46	50	34.7	39.8	37.6	17	5	4	2	3	5	3	6	3.7	4.3	4.0	40	60	50	50
53	1	26	42	39	36	49	32	43	35.7	40	38.1	19	4	4	3	6	4	7	7	3.7	6	5.0	85	78	50	70
54	1	30	46	44	45	31	10	39	40.0	31.3	35	21	5	6	4	2	5	6	6	5.0	4.8	4.9	55	60	65	60
55	1	40	33	45	36	38	37	47	39	39.5	39.3	19	4	5	7	4	5	6	7	5.3	5.5	5.4	70	65	65	66.7
56	1	18	28	40	31	38	40	41	28.7	37.5	33.7	20	4	3	4	5	7	5	4	3.6	5.3	4.6	60	55	70	61.7
57	2	19	40	26	32	21	9	40	28.3	25.8	26.7	13	5	6	5	3	4	5	4	5.3	4.0	4.0	80	65	55	66.7
58	2	39	44	50	45	33	23	36	44.3	34.3	37.1	7	4	3	5	3	5	7	5	4.7	5.0	4.6	90	80	85	85
59	2	40	43	27	39	34	16	45	36.7	33.5	34.9	8	5	5	6	5	7	6	8	5.3	6.5	6.0	50	25	10	28.3
60	2	50	40	43	34	48	42	29	44.3	38.3	40.9	14	4	3	3	4	5	4	4	3.3	4.3	3.9	60	5	50	38.3
61	2	35	29	45	29	39	16	42	36.3	31.5	33.6	16	3	2	4	5	3	2	4	3.0	3.5	3.3	55	25	35	38.3
62	2	19	35	42	9	22	39	37	32	26.8	29	17	5	5	4	6	3	4	5	4.7	4.5	4.6	35	10	50	31.7
63	2	27	50	39	40	28	50	36	38.7	38.5	38.6	25	3	3	4	5	3	4	4	3.3	4.0	3.7	25	45	45	38.3
64	2	26	37	28	34	31	26	45	30.3	34	32.4	13	7	6	5	4	4	2	3	6.0	3.3	4.4	40	5	3	16
65	2	17	28	36	49	50	42	39	27	45	37.3	17	3	4	5	6	7	5	7	4.0	6.3	5.3	40	5	30	25
66	2	20	43	48	43	38	45	46	37	43	40.4	6	4	4	5	7	4	4	4	4.3	4.0	4.6	40	15	60	38.3
67	2	42	44	39	41	42	30	44	41.7	39.3	40.3	18	6	3	4	4	3	5	4	4.3	4.0	4.1	50	25	40	38.3
68	2	30	29	37	40	41	38	39	32	39.5	36.3	7	6	3	6	6	3	4	4	5.0	4.3	4.6	45	20	9	24.7
69	1	40	35	29	28	44	26	30	34.7	32	33.1	19	4	3	5	2	4	5	3	4.0	3.5	3.1	50	70	53	57.7
70	2	24	28	27	38	48	30	31	29.3	36.3	32.3	19	7	7	4	7	7	3	6	6.3	7	6.6	53	92	34	59.7
71	2	37	31	42	40	38	35	34	37.5	35.7	36.7	12	8	7	4	7	6	7	4	6.5	5.7	6.1	42	70	54	55.3
72	2	35	35	46	41	39	47	41	39.3	42.3	40.6	9	7	7	5	8	7	7	6	6.8	6.7	6.7	39	50	30	39.7
73	2	37	25	36	45	32	26	30	35.6	29.3	33	13	3	5	4	7	2	2	3	4.8	3.3	3.7	28	20	35	27.7
74	2	27	27	32	32	38	23	22	29.5	27.7	28.7	10	6	5	4	7	4	7	6	5.5	5.7	5.6	30	40	69	46.3
75	2	27	28	24	37	46	43	33	29	40.7	34	11	4	5	2	7	6	6	5	4.5	5.7	5	28	68	38	44.7
76	2	37	18	29	30	30	29	28	28.5	29	28.7	10	4	5	2	4	6	5	6	3.8	5.7	4.6	32	48	50	46.7
77	2	32	33	39	38	33	30	22	35.5	28.3	32.4	13	5	7	4	7	5	7	4	5.8	5.3	5.6	19	42	40	33.7
78	1	41	42	31	27	35	16	36	32.3	29	32.6	16	6	6	3	5	6	4	7	5	5.7	5.3	90	85	95	90
79	1	44	32	22	29	36	12	47	31.8	31.7	31.7	20	5	5	3	4	6	5	5	4.3	5.3	4.7	90	95	95	93.3

81	1	21	42	35	35	38	35	42	33.3	38.3	35.4	10	5	6	3	5	7	4	5	4.8	5.3	5	70	85	70	75.0
82	1	23	36	32	41	50	29	43	33	40.7	36.3	23	6	6	3	5	5	5	6	5	5.3	5.1	90	100	80	90.0
83	1	43	30	38	45	39	37	45	39	40.3	39.6	8	5	7	2	5	6	4	5	4.8	5	4.9	40	60	50	50.0
84	1	50	42	30	40	45	17	46	30.5	36	38.6	13	5	7	5	6	5	4	5	5.8	4.7	5.3	85	70	50	71.0
85	1	50	50	37	25	44	20	31	40.5	31.7	36.7	12	4	5	3	6	6	3	4	4.5	4.3	4.4	55	60	65	60.0
86	1	44	46	22	28	45	17	41	35	34.3	34.7	18	3	7	2	5	4	4	4	4.3	4	4.1	60	55	70	61.7
87	1	41	38	35	38	32	18	43	38	31	35	7	5	3	6	4	5	2	5	4.5	4	4.3	80	65	55	66.7
88	1	19	32	35	45	47	46	40	32.8	44.3	37.7	12	4	6	3	6	6	4	5	4.8	5	4.9	90	80	85	85.0
89	1	26	50	44	46	42	49	46	41.5	45.7	43.3	14	3	5	3	5	3	4	4	4	3.7	3.9	50	25	10	28.0
90	1	48	40	28	32	31	12	43	37	28.7	33.4	23	2	5	3	6	2	2	3	4	2.3	3.3	55	25	35	38.0
91	1	47	40	27	29	35	16	37	35.8	29.3	33	16	4	5	3	6	3	3	5	4.5	3.7	4.1	35	10	50	31.7
92	1	23	43	38	46	38	40	50	37.5	42.7	39.7	8	4	4	5	2	6	4	5	3.8	5	4.3	25	45	45	38.3
93	1	29	29	32	38	42	48	25	32	38.3	34.7	15	5	5	2	4	5	6	5	4	5.3	4.6	50	25	40	38.3
94	2	38	32	27	34	34	22	44	32.8	33.3	33	14	4	3	7	4	6	5	4	4.5	5.0	4.7	65	85	75	75.0
95	2	20	32	38	26	34	50	46	29	43.3	35.1	17	7	7	2	6	7	7	7	5.5	7.0	6.1	90	75	80	81.7
96	2	24	50	44	46	33	36	50	41	39.7	40.4	5	4	6	3	5	4	4	4	4.5	4.0	4.3	60	50	50	53.3
97	2	50	48	36	28	50	21	49	40.5	40	40.2	17	5	7	6	6	6	5	6	6	5.7	5.9	70	80	50	66.7
98	2	36	29	35	39	36	15	45	34.8	32	33.6	17	5	5	4	5	6	5	5	4.8	5.3	5.0	75	80	70	75.0
99	2	50	48	31	25	34	36	32	38.5	34	36.6	16	5	6	5	7	5	5	6	5.8	5.3	5.6	75	30	60	55.0
100	2	23	32	29	35	34	30	32	29.8	32	30.7	11	6	7	3	6	6	4	4	5.5	4.7	5.1	70	30	35	45.0
101	2	32	34	29	28	23	8	35	30.8	22	27	11	4	7	3	5	5	4	5	4.8	4.7	4.7	80	55	40	58.3
102	2	42	32	33	29	33	18	35	34	28.7	31.7	12	4	7	3	7	6	5	4	5.3	5	5.1	75	70	35	60.0
103	2	26	50	39	48	44	50	50	40.8	48	43.9	13	5	7	5	6	5	4	4	5.8	4.3	5.1	70	30	45	48.3
104	2	26	50	35	43	48	44	48	38.5	46.7	42.0	17	7	6	4	5	7	5	4	5.5	5.3	5.4	90	80	65	78.3
105	2	33	28	29	39	36	37	39	32.2	37.3	34.4	12	3	4	7	4	2	3	3	4.5	2.7	3.7	10	5	30	15.0
106	2	31	42	29	31	41	41	36	33.3	39.3	35.9	15	4	5	5	3	4	2	4	4.3	3.3	3.9	65	5	40	37.7
107	2	27	46	36	44	44	42	42	38.3	42.7	40.1	11	4	5	4	5	3	3	4	4.5	3.3	4.0	10	25	50	28.3
108	2	25	38	30	39	44	21	31	33.0	32.0	32.6	6	3	6	6	3	4	4	4	4.5	4.0	4.9	50	15	30	31.7
109	2	30	38	36	36	29	46	36	35.0	37	35.9	18	4	5	5	4	4	4	4	4.5	4.0	4.3	50	40	45	45.0
110	2	24	40	47	34	40	33	45	36.3	39.3	37.6	12	4	7	4	3	2	3	4	4.5	3.0	3.9	75	45	40	53.3
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	40	32	[illegible]	33	31	35.3	33.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5.0	3.3	3.6	35	5	40	26.7