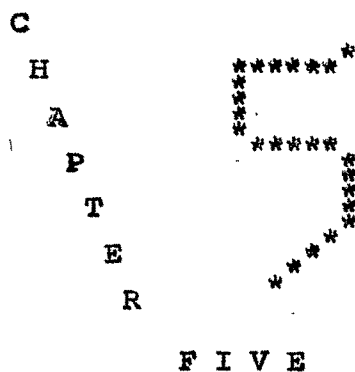


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SUMMARY AND CONCLUSIONS

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5.1. Introduction

Gifted and talented children have been the focus of growing interest among researchers during the past sixty years. The literature on talented is so vast and varied that it cannot be dealt with exhaustively in a thesis concerning some specific aspects of talented students. Numerous longitudinal and cross section researches have been conducted in order to understand the nature, measurement and development of talent. A study of the literature for talented children reveals many definition based on IQ scores or high performance on achievement

measures. Investigators have not shown any agreement regarding the location of cut off point above which all children may be regarded as gifted. The trend to day is toward broader definition of talent. The gifted child is one who shows consistently remarkable performance in any worthwhile line of endeavour. The research and development efforts revealed that talentedness involves both academic and non-academic forms of talented accomplishments, and these efforts helped broaden definition to include a wider range of outstanding traits, and thus to utilize a variety of means of identification. Most researchers use a variety of screening techniques including both subjective and objective measures to search out talented students. Most of these measures lack precision. Hence, the use of multiple criteria for identifying talented students is becoming more wide spread. Emphasis is now being placed upon the creative child than upon the gifted child. Study of the gifted now includes many different types of unusual children those with all sorts of special talents as well as creative tendencies. This expanded notion of giftedness and talent continues to be expressed in terms of those abilities and expression of high level performance that contribute to success in academic pursuits.

The talented child is viewed as high potential for our scientific economy and social progress. Talented children are likely to be leaders of tomorrow in all walks of life. They are the ones who can contribute for the uplift and welfare for the common people. All cultures are mainly dependent upon people of intellectual competence.

In our schools it is not easy to search out talented students due to lack of proper facilities and availability of instruments. The student is unaware about his talent, aptitudes and interests. The parent or teacher does not know the child's potential. The student's talent is only recognized when he can put on a good show. Talented child is not a rare phenomenon in our society or school, but one has to search him, train him and encourage him so that he may be useful to society and the nation.

Talent requires encouragement for its full development. The encouragement may come from parents, teachers, peers, institutions or other models. By identification with his parents, the child acquires the family pattern of behaviour and important ways of behaving thinking and feeling. Many complex behaviour patterns, ideals, values, roles, attitudes and personality characteristics are acquired through the process of identification. Identification is a fundamental

mechanism of personality development and socialization.

Identification with the parent of his own sex leads to the child's appropriate sex-typing - the adoption of personality traits, social and emotional behaviour and attitudes considered appropriate to his own sex. Identification with others may result in modification of the original parental patterns and new, different, sometimes unique modes of thought and behaviour may emerge. In this investigation, identification is regarded as a process of affiliation with one or more persons serving as model. Various researchers explain identification process by representing certain theories and speculation as well as facts. 'Psychoanalytic theory' and 'Social Learning theory' have provided the most widely accepted explanation of the identification process. This study postulates a social learning theory, in which one's identifying figures and the achievement values are presumed to be related to subjects' own achievement values, and those in turn are related to actual achievement.

The relation between identification and motivation is very close. Since identification itself may become a motivating force, one tends to identify with those who provide suitable reinforcements. Motivation would manifest itself through an individual's personality structure, his attitudinal structure and his value structure. Values are assumed to be central

ingredient in academic motivation. Researches have shown that motivation is a function of available stimuli, openness to experiencing, perceptual style, dissonance, anxiety and physiological functioning of an individual. Thus, motivation, identification and school achievement are complexly related. The interrelationships of motivation, identification and academic achievement may vary depending upon the degree of talent.

5.2. Problem of this Investigation

The present investigation has been carried out to study identification patterns, motivation and school achievement of talented students. The present study is an attempt to assess the subjects' degree of identification with mother, father, teacher and peers and to assess the school achievement values attributed by them to each identifying model. The study is also an attempt to assess the subjects' own achievement values, the motivation to learn and their behaviour orientation. The purpose of this investigation is to determine the relevant identification and modeling variables in school achievement of talented, average and below average students. More specifically it aimed at study the following :

- (1) Identification patterns of talented, average and below average subjects.
- (2) Subjects' degree of identification with mother, father, teacher and peers.
- (3) School achievement values attributed by the subjects to each identifying model.
- (4) Subjects' own achievement values and motivation to learn.
- (5) Behaviour orientation which include academic achievement orientation, peer affiliation orientation, non-conformity orientation and independence orientation.
- (6) Determination of the relevant identification and modeling variables which might account for the achievement differences.
- (7) Relationships of academic achievement as well as self achievement value with identification of models, models' achievement values, motivation to learn, academic achievement orientation, peer affiliation, non-conformity and independence orientation.
- (8) Relationships of behaviour orientation with motivation, achievement and self achievement value.
- (9) Interrelationships among academic achievement, self achievement value, motivation to learn and academic achievement orientation.
- (10) Interrelationships of identification and achievement values of various models.

5.3. Review of Literature

The various researches carried out so far in the area of talent have been reviewed by classifying them under the following categories :

- (1) Studies concerning traits and characteristics of gifted and talented students.
- (2) Studies concerning identification patterns and motivation of talented students.
- (3) Studies concerning academic and non-academic accomplishments of talented students.

The review of literature includes information concerning specific areas which have been studied, methodologies that have been followed and new trends or developments which are most prevalent. These studies are concerned with investigations of the early lives of eminent persons, outstanding abilities and traits of merit scholars, talent search and comprehensive exploration of the talents, and achievements of adolescents. Various studies reveal that talented children function at levels far in advance to their age-mates. They are superior in both qualitative and quantitative characteristics of mental ability. The studies also reveal that academic and non-academic forms of talented accomplishments are minimally related to one another.

5.4. Sample

The sample of the present study consisted of 960 students - 480 boys and 480 girls - studying in eighth, ninth and tenth grades of various 24 Gujarati medium high schools located in Surat, Baroda, Kaira and Mehsana districts of Gujarat State. Subjects were divided into three main groups each of 320 subjects as talented, average and below average in accordance with the degree of talent they possessed. Equal number of boys and girls from urban and rural areas was included in each main group. The age of the students varied from twelve to eighteen years. The distribution of the subjects according to talents, sex and residential area is shown below :

Subjects (960)											
Talented (320)				Average (320)				Below Average (320)			
Boys (160)		Girls (160)		Boys (160)		Girls (160)		Boys (160)		Girls (160)	
U	R	U	R	U	R	U	R	U	R	U	R
(80)	(80)	(80)	(80)	(80)	(80)	(80)	(80)	(80)	(80)	(80)	(80)
(U = Urban R = Rural)											

The investigator tried to select subjects with varying background. The subjects came from families of all educational,

and socio-economic levels. Boys and girls of eighth through tenth grade were used as subjects since their high school age represents transition from earlier depending upon parents to a more peer-oriented and a more independent self-directed system of values. The variables of sex and residential area are included with a view to studying differences, if any, between groups based on these variables.

5.5. Tools Used

Preparing tools for measurement of a relatively comprehensive concepts like talent, motivation and identification, is a difficult task. The major difficulties which a researcher comes across is the lack of proper instrumentation and appropriate measurement techniques. In this investigation tools were constructed to assess talented behaviour, motivation to learn, identification with models, school achievement values and behaviour orientation. The various tools used in this investigation are as follows :

(1) Assessment of Talented Behaviour : Four measures including group intelligence test, teacher judgment, behaviour check-list and non-academic performance were used for identification of talented, average and below average

students. Behaviour check-list of 27 items was developed for this purpose. Standardized Desai-Bhatt test of Intelligence was used to assess intellectual level of the subjects.

(2) Assessment of School Achievement : Academic achievement was measured in terms of examination marks the subjects obtained in two tests conducted during the year. The investigator was aware of the various biases that are found in the use of marks.

(3) Assessment of Motivation to Learn : An objective tool of 43 items 'Index of Motivation' based on JIM Scale was developed for assessing motivation to learn. The subject was asked to indicate whether he agrees or disagrees with the item. The scoring key was developed empirically.

(4) Assessment of Identification with Models : A tool of 20 behaviour referrent items 'Items for Identification' was developed for assessing the subjects' identification with mother, father, teacher and peers. The subject was asked to indicate the extent to which he patterns his behaviour after each of the four models.

(5) Assessment of School Achievement Values : An instrument consisting of fifteen school achievement related items 'Achievement Value Items' was developed to assess the subjects' own achievement values and the model's achievement values attributed by the subjects. This required the subject to state the extent to which he values achievement and the extent to which he thinks his parents, teachers and peers value achievement.

(6) Assessment of Behaviour Orientation : A tool of 40 items was developed for assessing behaviour orientations which includes 10 items for each of the four dimensions - academic achievement orientation, peer affiliation, non-conformity and independence orientation. The subject was required to indicate the extent of his agreement or disagreement on a statement.

Standardized group test of intelligence developed by Desai and Bhatt was used to assess intellectual level. Other tools as discussed above were developed. Reliability of the tools developed by the investigators was ascertained by using test-retest procedure. The tools were administered in three sessions in order to sustain interest and motivation of the subjects and to avoid the feeling of fatigue and boredom.

5.6. Conclusions

The various results were analyzed by using appropriate statistical techniques. Significance of differences among means of boys and girls and also of urban and rural subjects in respect of the variables were studied by applying the 't' test. Correlations were computed separately for boys and girls and also for rural as well as urban subjects to see how and to what extent subjects' motivation, achievement value and academic achievement are correlated with identification and achievement value of the models and also with behaviour orientation. Overall correlations among these variables were also computed for talented, average and below average subjects. Based on the analysis of results, the following conclusions were inferred :

- (1) Academic achievement varies directly as a function of the degree of talent in both boys and girls.
- (2) The talented, average and below average boys as well as girls differ significantly from one another in respect of self achievement value, father identification as well as father achievement value, teacher achievement value, ^{achievement} academic orientation, non-conformity and independence orientation, the more talented subjects obtaining a higher mean scores than the less talented subjects.

- (3) Peer-affiliation orientation rather than peer identification varies directly as a function of the degree of talent among boys.
- (4) Talented boys differ significantly from average and below average boys in respect of motivation, mother identification and peer achievement value but the average boys do not differ significantly from below average boys in these respects.
- (5) The talented, average and below average girls differ significantly from one another in motivation, mother identification as well as mother achievement value, and peer identification as well as peer achievement value, but they do not differ in teacher identification. The talented and average girls also differ significantly from below average girls in peer-affiliation orientation.
- (6) Boys differ significantly from girls at each of the three levels of talent in mother identification, teacher identification, teacher achievement value and peer achievement value but they do not differ at any level of talent in academic achievement orientation, peer affiliation and non-conformity.
- (7) Talented boys do not differ significantly from talented girls in motivation, peer identification, self achievement value and independence orientation but they differ significantly in achievement, father identification and parental achievement value.
- (8) Average boys differ significantly from average girls in motivation, self achievement value and father achievement value but they do not differ significantly in respect of achievement, father identification, peer identification, mother achievement value and independence orientation.

- (9) Below average boys differ significantly from below average girls in respect of achievement, peer identification, mother achievement value and independence orientation but they do not differ significantly in motivation, father identification, self achievement value and father achievement value.
- (10) The talented, average and below average subjects of urban residence as well as rural residence differ significantly from one another in respect of achievement, motivation, father identification, self achievement value, father achievement value, academic achievement orientation, non-conformity and independence orientation.
- (11) The talented, average and below average subjects of urban residence differ significantly from one another in respect of mother achievement value and peer achievement value but they do not differ significantly from one another in respect of teacher identification.
- (12) Urban talented as well as average subjects differ significantly from urban below average subjects in respect of peer identification, teacher achievement value and peer affiliation orientation but urban talented subjects do not differ significantly from urban average subjects in these respects.
- (13) Talented, average and below average subjects of rural residence differ significantly from one another in case of teacher achievement value. Rural talented and average subjects as well as average and below average subjects do not differ significantly from each other in respect of mother identification, teacher identification and peer affiliation orientation but rural talented subjects differ significantly from rural below average subjects in these respects.

- (14) Urban subjects do not differ significantly from rural subjects at any level of talent in respect of motivation, father identification, self achievement value, father achievement value, non-conformity and independence orientation but they differ from one another in respect of teacher identification.
- (15) Urban and rural talented subjects as well as urban and rural average subjects differ significantly from each other in respect of peer identification, mother achievement value and peer affiliation orientation. Urban talented subjects differ from rural talented subjects in respect of achievement, teacher achievement value and academic achievement orientation.
- (16) Urban and rural average as well as below average subjects do not differ significantly from each other in respect of achievement, mother identification, teacher achievement value, peer achievement value and academic achievement orientation.
- (17) Self achievement value of talented boys is significantly correlated with mother, teacher and peer achievement value, self achievement value of average boys is also significantly correlated with the achievement value of mother and teacher but self achievement value of below average boys is not significantly correlated with the achievement value of any model.
- (18) Self achievement value of talented girls correlates significantly with the achievement value of mother as well as peers but the achievement value of average as well as below average girls does not seem to be closely associated with the achievement value of the models.

- (19) Father achievement value does not correlate significantly with the achievement value of any group of boys or girls.
- (20) Parental, teacher and peer identification does not seem to contribute to self achievement value of girls.
- (21) Father identification as well as teacher identification is closely associated with self achievement value of talented and average boys but in case of below average boys, self achievement value does not show any relation with identification of the models.
- (22) Peer identification fails to correlate with the achievement value of any group of boys or girls.
- (23) Father identification in comparison to father achievement value is more strongly correlated with self achievement value of talented, average and below average boys.
- (24) Neither father identification nor father achievement value contributes to self achievement value of talented, average and below average girls to any significant extent.
- (25) Peer achievement value rather than peer identification is more strongly correlated with self achievement value of both boys and girls with superior talent.
- (26) Neither peer identification nor peer achievement value is significantly correlated with self achievement value of both boys and girls with average and below average talent.

- (27) Teacher identification as well as teacher achievement value is of greater significance for self achievement value of talented and average boys.
- (28) Teacher identification as well as teacher achievement value is of no significance for self achievement value of talented and average girls. Teacher achievement value rather than teacher identification plays a far significant role in self achievement value of below average girls.
- (29) Both identification and achievement value of models are more strongly associated with self achievement value of boys than of girls.
- (30) Parental, teacher and peer identification fails to correlate significantly with academic achievement of both boys and girls.
- (31) Except the correlation between peer achievement value and academic achievement of talented girls, all other correlations of parental, teacher and peer achievement value with academic achievement of both boys and girls are not significant.
- (32) Academic achievement of both boys and girls correlates positively and significantly with motivation, self-achievement value and academic achievement orientation of the subjects. The correlations tend to be increasingly higher among subjects with relatively less talent. The correlations are higher among girls than among boys.

- (33) Academic achievement of both boys and girls neither depends upon identification nor upon achievement value of the models but it depends upon motivation, academic achievement orientation and self achievement value of subjects.
- (34) Except teacher achievement value in case of below average girls, identification as well as achievement value of the models does not seem to contribute to the motivation of girls.
- (35) Except mother identification and teacher achievement value in case of talented boys, identification as well as achievement value of the models does not seem to contribute to the motivation of boys.
- (36) Both boys and girls tend to identify with adult identifying models.
- (37) Identification and achievement value of the models are closely related in all groups of boys and girls.
- (38) Non-conformity orientation is negatively and significantly correlated with academic achievement and self achievement value of average and below average girls as well as below average boys. It is not significantly correlated with academic achievement, self achievement value and motivation of talented and average boys as well as talented girls. Non-conformity is also negatively and significantly correlated with motivation of boys with below average talent.

- (39) Peer-affiliation orientation is significantly correlated with academic achievement, self achievement value and motivation of below average girls but it is not significantly correlated in case of below average boys and average girls. It is negatively and significantly correlated with academic achievement of talented boys and girls and with motivation of talented girls. It is also positively and significantly correlated with self achievement value of average boys.
- (40) Independence orientation is significantly correlated with academic achievement, self achievement value and motivation of below average girls but it is not significantly correlated in case of below average boys as well as talented boys. Independence orientation is significantly correlated with academic achievement of talented and average girls. It also correlates significantly with self achievement value of average boys and girls. Its correlation with motivation is significant and positive in case of average boys.
- (41) Excepting a few stray correlations, the correlations of parental, teacher and peer identification as well as achievement value of models with academic achievement of both urban and rural subjects are not significant.
- (42) Mother, teacher and peer identification does not seem to be associated with self achievement value of both urban and rural subjects. Father identification is significantly correlated with self achievement value of urban talented and below average subjects as well as rural average subjects.

- (43) Mother achievement value is significantly correlated with self achievement value of talented and below average subjects of urban residence, and talented and average subjects of rural residence. Except the correlation of father achievement value with self achievement value of rural average subjects, all other correlations of father achievement are insignificant.
- (44) Teacher achievement value is significantly correlated with self achievement value of talented and average subjects of rural residence. Peer achievement value is significantly correlated with self achievement value of only talented subjects of urban and rural residence.
- (45) Independence orientation seems to be positively associated with achievement as well as self achievement value of both urban and rural subjects.
- (46) Peer affiliation orientation fails to correlate significantly with self achievement value of both urban and rural subjects. It is negatively and significantly correlated with academic achievement of talented subjects of urban and rural residence but it is not significantly correlated with academic achievement of average and below average subjects, of urban and rural residence.
- (47) Non-conformity is negatively and significantly correlated with academic achievement and self achievement value of rural average and urban below average subjects and it is positively and significantly correlated with academic achievement of talented subjects of urban residence.

- (48) Academic achievement of both urban and rural subjects correlates positively and significantly with motivation, academic achievement orientation and self achievement value of the subjects, the correlations tend to be increasingly higher among subjects with relatively less talent. The correlations are higher among rural subjects than among urban subjects.
- (49) Academic achievement of talented, average and below average subjects does not seem to be closely associated with parental, teacher and peer identification but it is closely associated with motivation, academic achievement orientation, independence orientation and self achievement value of the subjects.
- (50) Teacher achievement value contributes significantly to academic achievement of talented and below average subjects but the achievement value of parents and peers does not influence academic achievement of talented, average and below average subjects.
- (51) Academic achievement of talented subjects is negatively and significantly correlated with peer affiliation orientation but its correlations with peer identification and peer achievement value are insignificant. In case of average subjects academic achievement has no relation with peer affiliation, peer identification and peer achievement value. In case of below average subjects academic achievement is positively and significantly correlated with peer affiliation but it is not significantly correlated with peer identification and peer achievement value. In general academic achievement does not depend upon peer influence.

- (52) Non-conformity orientation is negatively and significantly correlated with academic achievement as well as self achievement value of average and below average subjects but its correlations in case of talented subjects are insignificant. This shows that average and below average subjects with high achievement value as well as academic achievement possess a strong tendency to conform whereas the talented subjects are neither inclined to conform nor to become rebellious.
- (53) Self achievement value of talented and average subjects is positively and significantly correlated with parental identification, neither teacher identification nor peer identification play any part in self achievement value of subjects.
- (54) The self achievement value of talented and average subjects seems to be closely associated with achievement value of models.
- (55) Neither identification nor achievement value of the models is significantly correlated with self achievement value of below average subjects.

5.7. Implications and Suggestions

The present investigation, it should be recalled, is mainly concerned with studying identification patterns, motivation and school achievement of talented, average and below average subjects. The findings reported in Chapter four have certain obvious implications. First the problem of identification of the gifted or the talented is of immense significance for any institution which aims at developing and utilizing the talent of young persons. Some of the earlier

researches have relied too heavily on the use of standardized intelligence tests and by adopting varying cut-off points in terms of IQ individuals have been designated as talented above these points. Later researches have made use of such criteria as teachers' ratings and some standards of excellence in other fields in addition to intelligence tests. The term talent is now used in a much wider sense than even before to include all kinds of outstanding performance and accomplishments as well as creative tendencies. There is thus a need for developing sound criteria for the detection of talented individuals.

The second important question is to study in what specific respects these talented individuals differ significantly from relatively less talented individuals. In the present investigation differences among talented, average and below average subjects in respect of motivation, achievement value, identification and behaviour orientations were studied. It turned out that subjects with varying degrees of talent differ systematically in respect of these variables. Comparison of the subjects with superior, average and below average talent revealed certain important facts concerning the degree to which they identify themselves with parents, teachers and peers. The subjects also differed from one another in the extent to which they attributed

achievement values to these models. These findings could be meaningfully utilized by making efforts to increase identification with relevant models and also to increase value attribution to these models. The educational implications of these findings are clear enough. In an effort to know to what extent academic achievement of the subjects is related to identification and achievement values of the models as well as to self achievement value and motivation, correlations were computed separately for the main groups as well as sub-groups. The results indicated that academic achievement of the subjects neither depends upon identification nor upon achievement value of the models but it depends to a greater extent upon self achievement value, motivation and academic achievement orientation. Thus the notion that academic achievement is intimately related to both achievement value and identification of the models is not supported. It is suggested here that the factors responsible for this lack of relationship should be isolated and remedial measures should be taken so as to bring identification and achievement value of adult models closer to subjects' academic achievement as well as their own achievement value. This again reflects the need for systematic developmental programmes in an educational setting. One of the most striking findings of this investigation is that the correlations of subjects' own achievement value with academic achievement is very high in case of subjects with lesser degree of talent than

in case of subjects with superior talent. Although academic achievement varies as a function of the degree of talent it correlates more strongly with self achievement value in case of less talented subjects than in case of more talented subjects. This suggests that there is a need for making education more attractive and sufficiently challenging for more highly talented subjects so that they can find ample of opportunities to exercise their talent. Another important finding is regarding the degree of correlation between academic achievement and self achievement value in case of boys as well as girls. The correlations are higher among girls than among boys. This also suggests the need for enabling both boys and girls to work together for various accomplishments. Peer group was found to be least effective in influencing academic achievement and self-achievement value. The notion that less talented subjects are relatively more susceptible to peer influence is also not supported in this investigation. In order, therefore, to make peer stimulus value more effective, the students may be encouraged for group work in a school setting. Another important fact is pertaining to non-conformity behaviour among the subjects. It was found that non-conformity which is a measure of rebellious attitudes against existing practices is negatively and significantly correlated with academic achievement as well as self-achievement value in case of average girls and below average

boys and girls. It is also widely accepted that strong conformity to the existing practices may make the subjects non-creative. This is not desirable for any institution which aims at developing creative potential among the subjects. It is, therefore, recommended that measures should be adopted so that the subjects tend to think creatively instead of blindly accepting the age-old traditions. It is not desirable on the part of trainers to instill into the minds of young persons the habits of uncritical acceptance of the existing practices. Another important issue is concerning the motivation of the learners. In order to make the role of a teacher more effective in motivating the learners efforts should be made to match the instructional practices with motivations which the learners bring to the school. Since motivation is a function of values, stimulation, personality structure, dissonance and anxiety, among other things and since these factors could be partly influenced by the teacher, the possibility of motivating the learners through ingenuous efforts of the teachers is greatly increased.

Finally the overall findings of the present investigation make it obvious that there is a need not only for detecting the talented subjects by using sound criteria but also for studying the talented subjects more systematically so that adequate methods of training could be adopted.
