

## PSYCHO-SOCIAL CORRELATES OF GIFTEDNESS AMONG DEPRIVED MINORITY CHILDREN

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*This study examines some social-psychological correlates, i.e., achievement motivation, creativity, intelligence, and scholastic achievement of deprived gifted Muslim minority children. The subjects (N=200) forming four subgroups, (1) culturally deprived-economically high, (2) culturally high-economically low, (3) culturally advantaged-economically high, and (4) culturally advantaged-economically low, were administered tests measuring the factors mentioned above. Findings revealed that the culturally disadvantaged-economically high group scored higher than its advantaged counterparts. However, the culturally advantaged-economically high group scored better than its deprived counterpart. The interrelationships among different scores of two groups obtained by correlation coefficient showed different trends. The results were interpreted in terms of impact of environmental settings and economic conditions on individuals' social psychological growth.*

There is an immense body of literature on gifted children which sprawls across the broad fields of education and psychology. However, the literature is inconclusive as regards a concrete definition of giftedness. Two questions namely "who are gifted" and "what causes giftedness" remained to be answered yet as the meaning of giftedness has been shifting according to the interest and perception of people. The modern concept of gifted has expanded from an emphasis on intellectual ability or I.Q. to become a widely inconclusive heterogeneous category (Terman, 1925). This development further strains the viability of any attempt to characterise the gifted child. The gifted and talented are those who are identified as professionally qualified persons and who by virtue of their outstanding abilities show high performance. Children capable of high performance include those with demonstrated achievement and/ or potential ability in any of the following areas, single or in combination: a general intellectual ability, specific academic aptitude, creative or productive thinking, leadership ability, visual and performing arts and psychomotor

ability. Social qualities are also very important factors of giftedness. Getzels and Jackson (1962) talked of giftedness as a matter of excellence in a wider range of areas. Guilford (1967) also talked of giftedness as multifaceted rather than monolithic quality. It was further attempted to distinguish intelligence from creativity (Getzels & Jackson, 1962). Non-interactive areas of giftedness were also included such as social or leadership qualities.

There is a strong controversy regarding intellectual superiority due to racial differences. The champion of this move is Jensen (1972) who claimed that whites are intellectually superior to blacks. This is, according to him, because of genetic characteristics. This view point of Jensen sparked a lot of controversy and the environmentalists refuted this and attributed low intelligence to lower socio-economic status. Those ethnic minorities who have lower I.Q. are usually most economically deprived class. The variations (low socio-economic status) can be seen from the representatives of different socio-cultural levels. A recent report in Britain showed that Asians are low in intelligence and are poor achievers as compared to their white counterparts. However, this could be attributed to the socio-economic conditions and family background of subjects drawn from Asian population (Swan Committee Report, 1985).

The environmentalists and behaviour scientists have shown a strong resentment to racial roles in giftedness. They argued that environmental enrichment is a major factor which leads to giftedness. A poor society and an unstimulating environment endowed with poor culture will produce unmotivated, non-competitive and less intelligent persons. On the other hand, the rich, competitive and affluent culture will make its members self confident, highly motivated and endowed with higher mental ability. The environments today are more varied and unstable than before and thus chances of their influence on growth of human ability are quite important to consider.

The environments vary from one another as the socio-economic constraints and cultural heritage make one environment different from another. Bronfenbrenner (1974) realized the role of different layers of ecology/environment on human development and behaviour. His views were supported by subsequent findings of

Cox and Morgan (1985), Husain and Jehan, (1982) and Husain, (1987). The description of ecology by Bronfenbrenner (1974) has been taken differently by different authors. However, the factor either termed as 'poverty of culture' or 'low socio-economic conditions' or 'social disadvantages' describe the very nature of poor and unstimulating environments.

The deprivation and disadvantages may not occur all of a sudden and may follow a process of transference. In other words, they may be transferred from one generation to the other. This unending period of deprivation may be described as prolonged deprivation. The deprivation is thus a relative term which is perceived differently by different societies. However, deprivation is usually described as poverty of culture, low socio-economic conditions, social disadvantages, etc. The term deprivation is not new for psychologists. Stouffer's (1949) concept of relative deprivation was analysed further (Davis, 1959), but this could be explained in terms of broader social phenomena as interlocking sets of postulates (Gurr, 1970; Runiciman, 1966). Runiciman had primarily conceived relative deprivation as dependent variable. This arose out of his concern to examine the relationship between people's social-psychological needs and sense of deprivation. According to him, a person is deprived of any valued object only when he feels need of it. He proposed relative deprivation as a sense of deprivation which can vary within peoples' perception of the value and importance of the object in terms of magnitude and degree.

The impact of environmental conditions and deprivation is also attributed to behavioural change and development. This has been noticed on a number of factors such as cognitive abilities, personality dimensions, achievement motivation, etc. Quite a good number of researches have shown that the favourable environmental conditions enhance such growth, whereas, poor and unstimulating environment adversely affect the same. Thus the effect of environmental conditions enhance such growth. The effect of environmental conditions will be seen correspondingly on the characteristics of gifted children from two ecological settings. Although similar in one quality in life, i.e., giftedness, the two groups may not be the same on various social and psychological characteristics. The facts explored so far reveal that the

environmental conditions will show their respective effect on behaviour characteristics.

The factors under study, i.e., scholastic achievement, creativity, and need achievement, have also been subjected to empirical investigations. Many researches have shown that the deprived and disadvantaged children have shown poor need for achievement than their privileged counterparts (Atkinson, 1964; McClelland, 1961; Stein & Baily, 1973). However, the findings of Husain (1987) Husain and Jehan (1982) have shown that moderate environment promoted achievement motivation as compared to poor and rich environments. As regards creative potential, a number of studies have shown that creativity is linearly related with socio-economic conditions (Raina, 1968; Straus & Straus, 1968). The scholastic achievement has also been found bearing high correlations with socio-economic conditions and school environment (Swan Committee Report, 1985).

In the present study, an attempt has been made to compare the achievement motivation, scholastic achievement, and creative potential of two groups of gifted minority children from two ecological settings, i.e., advantaged and disadvantaged.

## METHOD

### Sample

The sample of the present study comprised two hundred subjects (100 boys and 100 girls) from two environmental conditions, i.e., rich and poor. Both the groups comprised gifted children selected on the basis of their performance on measures of intelligence, creativity, and Teacher's Check List and their performance in the last school examination. The subjects were in the age group of 13-19 years and were studying in classes IX-X. These children were taken from bigger group of 600 children who were found above *P-75* on each of the criterion measurement

mentioned earlier. The samples were taken from two areas having distinctly two different characteristics. One of the areas had population being economically downtrodden and educationally backward. This was largely inhabited by Muslim community. Their lives mainly depended upon petty business, pavement dwelling and small trade, etc. Another area had privileged and educationally high people, government servants, and professionals. The two groups were further split into two sub-groups on the basis of economic conditions. They were: 1) culturally disadvantaged-economically high, 2) culturally disadvantaged-economically low, 3) culturally advantaged-economically high, and 4) culturally advantaged-economically low.

## **Instruments**

The following tests were used in order to select the gifted children.

1. Raven's Progressive Matrices (1960) were used to measure the intelligence of the subjects.
2. Wallach and Kogan's Battery of Verbal Creativity Instrument adapted in English (available from the author) were used to measure the creative potential of the subjects. This test yielded three types of scores termed as follows: number (N); uniqueness (U); composite creativity (C).
3. A Teacher's Check List specially developed for this study to elicit the teacher's rating about the subjects.

After selecting of two groups of gifted children they were administered Roa's Achievement Motivation Scale (available from the author) for the measurement of achievement motivation. The marks obtained in the last school examination were considered as the scholastic achievement of the subjects. Scores obtained on Wallach and Kogan Creativity Instruments and Raven's Progressive Matrices by the subjects earlier were considered as their creativity and intelligence scores, respectively.

## RESULTS

The scores of creativity, achievement motivation, and scholastic achievement were analysed in two ways. Firstly, a two-way analysis of variance, i.e., environmental conditions and economic status was performed on the achievement scores of the subjects. *T*-test was conducted to compare the two groups of poor and rich children on intelligence and creativity. Secondly, correlations were computed between intelligence, creativity, achievement motivation and income of the advantaged and disadvantaged groups. Table 1 shows a highly significant main effect of economic status and a highly significant interaction of environment and economic conditions.

Table 1

*Analysis of variance on achievement scores as a function of environment and economic conditions of the subjects*

Source of Variance	SS	df	M	F	p
A Environment	1.44	1	1.44	.725	n.s.
B Economic Conditions	655.360	1	655.36	329.74	.0001
A x B	23.04	1	23.04	11.59	.001
Error	190.80	96	1.987		
Total	870.64	99	8.794		

Table 2

*Comparison between two groups of gifted children on creativity scores*

Groups	N	M	Stderr	t	df	p
Advantaged	100	9.98				
			0.39	5.04	198	0.0001
Disadvantaged	100	7.78				

The results given in table 2 show that the two groups of gifted children differ significantly from one another in their creativity scores. The advantaged children scored higher than their disadvantaged counterparts.

Table 3

*Comparison of two groups of gifted children on Scholastic Achievement*

Groups	<i>N</i>	<i>M</i>	<i>Stderr</i>	<i>t</i>	<i>df</i>	<i>p</i>
Advantaged	99	54.69				
			1.09	7.83	179	0.0001
Disadvantaged	100	46.12				

The comparison of advantaged and disadvantaged gifted children as shown in table 3 indicates significant difference between the two groups on scholastic achievement as the advantaged group has been found scholastically high as compared to the disadvantaged children.

Table 4

*Comparison of two groups of gifted children on Need Achievement*

Groups	<i>N</i>	<i>M</i>	<i>Stderr</i>	<i>t</i>	<i>df</i>	<i>p</i>
Advantaged	99	10.13				
			0.36	4.87	197	0.0001
Disadvantaged	100	8.36				

Table 4 shows that two groups obtained significantly different scores on *n*-achievement. The advantaged group has been found

significantly high on *n*-achievement as compared to the disadvantaged ones.

Table 5

*Interrelationship among scholastic achievement, creativity, income, and need for achievement of the advantaged children*

	1	2	3	4	5
1. I. Q.	-				
2. Schol. Ach.	0.266**	-			
3. Creativity	0.065	0.287**	-		
4. Income	0.35***	-0.113	-0.103	-	
5. Need Ach.	0.246**	0.367***	0.212*	0.509***	-

\*Significant at 0.05 level \*\*Significant at 0.01 level \*\*\* Significant at 0.001 level

The correlation coefficient for advantaged children shown in table 5 indicate a very highly significant correlation between intelligence and income, between *n*-achievement and scholastic achievement, and between *n*-achievement and income. There is high correlation between intelligence and scholastic achievement, between creativity and scholastic achievement, and between intelligence and achievement. There is also a significant correlation between *n*-achievement and creativity. However, the correlation between income and scholastic achievement, and between income and creativity are negative.

Table 6

*Interrelationship among I.Q. scholastic achievement, creativity, income, and n-achievement factors of disadvantaged gifted children*

	1	2	3	4	5
1. I. Q.	-				
2. Schol. Ach.	0.480***	-			
3. Creativity	0.565***	0.390***	-		
4. Income	0.470***	-0.148	0.276**	-	
5. Need Ach.	0.235**	0.368***	0.229*	0.005	-

\*Significant at 0.05 level \*\*Significant at 0.01 level \*\*\* Significant at 0.001 level



Table 6 shows significant correlation between I.Q. and scholastic achievement as well as creativity and *n*-achievement. This table also depicts scholastic achievement bearing similar trend of relationship with creativity. Thus, creativity also showed positive correlation with income and need achievement. However, this table shows a negative and non-significant relationship between income and achievement motivation. Income has also been found non-significantly correlated with scholastic achievement.

## DISCUSSION

The aim of the present study was to compare the achievement motivation of two groups, i.e., advantaged and disadvantaged, alongwith their subgroups split on the basis of the socio-cultural and economic conditions. Apart from this the subjects belonging to two different environmental conditions were also compared on various factors such as creativity and scholastic achievement.

The results of the present study showed that environment and economic conditions have their different roles in the development of factors under study. However, the overall comparison with analysis of variance could show significant influence of economic conditions on achievement motivation. Furthermore, the analysis with the help of *t*-ratio and correlation coefficient showed different trends of results for advantaged and disadvantaged groups.

The results obtained by computing coefficient of correlation have shown somewhat different results in the case of two groups. The I.Q. of the subjects from advantaged group was found significantly correlated with all the factors, i.e., scholastic achievement, income, and need achievement, but not with creativity. The scholastic achievement also showed positive relationship with creativity and need achievement but low relationship with income. Need achievement was found to have positive correlations with creativity and income. However, creativity and income showed a negative but insignificant relationship.

The deprived gifted group showed a different trend of results. There is a high positive correlation between I.Q. and scholastic achievement, creativity and need achievement. I.Q. was found unrelated to income. The scholastic achievement scores were also positively related with creativity and need achievement but unrelated with income. Moreover, creativity showed positive and significant relationship with income and need achievement. This group showed an insignificant negative relationship between need achievement and income.

Perusal of results as shown in tables 1 through 6 brings the facts to the light that ecological settings have significant impact on the factors under study. This confirms quite a good number of earlier findings. As regards achievement motivation, it has been found that the privileged gifted children showed higher scores. This is in conformity with the findings of McClelland (1961) who claimed economic factors as determinants of achievement motivation. Our results are also extending support to the findings of Atkinson (1964), Pettigrew (1964), and Katz (1970) and Gokulnathan and Mehta (1972) who had shown that low economic strata, poor environment and minority status negatively influence the development of achievement motivation. Our results also confirm the view points of Husain and Jehan (1982) Stein and Baily (1973) McClelland (1961) and Husain (1987) that environmental conditions and socialization processes determine the individual behaviours. However, this further supported the view point of Bronfenbrenner (1979) and Barker and Schoggen (1973) who had strongly pleaded the importance of environment-behaviour-interaction. Our results, too, have shown the effect of environment on the development of achievement motivation as despite the fact that our subjects were gifted children, yet they differed on achievement motivation due to the fact that they belonged to two types of environment. With regard to I.Q. also the present findings showed that the advantaged gifted group had significantly higher I.Q. than the disadvantaged one. This supports the environmentalists' contentions who attributed low intelligence to lower socio-economic strata and vice-versa. However, the view point of Jensen (1972) that there is racial superiority in intellectual ability is contradicted here. These differences in results may be attributed to deprivation and disadvantages which a group has experienced.

The results have also shown the superiority of advantaged gifted over their disadvantaged counterparts. This is in conformity with the findings of (Raina, 1968; Straus & Straus, 1968; Torrance & Cowan, 1968) who believed that free home environments are favourable for promoting creativity among children. Thus the findings of this study are compatible with what one finds in the literature regarding environmental influence on creativity showing that free and assertive environment accelerates creativity growth whereas culture with strict sanctions, norms and taboos inhibits the development of creative potential.

The two groups of gifted have also shown significant difference on scholastic achievement. It is commonly believed that scholastic achievement is highly correlated with socio-economic strata and environmental conditions. In the present study, the disadvantaged group has shown poorer performance as compared to the advantaged ones. Our findings indicate that the disadvantaged group children had significantly lower scholastic achievement. He also found that differences in scholastic achievement between socially advantaged and disadvantaged group increase with the increase in degree of social disadvantages. The present study is also in conformity with earlier studies which showed some relationship between cultural deprivation and academic achievement. For, example, the Swan Committee Report (1985) had revealed that the Asian children are low in intelligence and poor achievers as compared to white counterparts. This could be attributed to socio-economic conditions. The present findings are also on similar line as our disadvantaged subjects who were also socio-economically low, and showed poor achievement.

As shown in tables 5 and 6, the two groups have also revealed different trends of intercorrelation among various factors. The advantaged group has shown creativity unrelated with both intelligence and income. The disadvantaged group on the other hand, showed high correlation between creativity and intelligence as well as income. The trend of relationship between *n*-achievement and income is also different in two groups. The advantaged group has shown linear relationship with achievement motivation whereas no relationship was found in the case of disadvantaged group.

The correlations may be interpreted as both intelligence and creativity develop as independent entity for advantaged groups. The two abilities seemed to be developing unilaterally as unified cognitive ability in case of disadvantaged group. Like intelligence and creativity the relationship between  $n$ -achievement and income are also different in the case of two groups. The achievement motivation-income interrelationship is high for advantaged group and low for disadvantaged group as the socio-economic status and deprivation are the motivating factors for the deprived gifted.

These results do not support fully the earlier findings that intelligence and creativity are independent of each other. This shows that environment plays important role in the growth of two abilities. The present study has revealed a number of facts regarding environmental conditions, giftedness, and their social-psychological correlates. Although two groups consisted of the selected sample, i.e., gifted, they were found to be different on the factors such as creativity, scholastic achievement, and achievement motivation. The two groups also showed different trends of interrelationships among different factors under study. This study supports the connotations that ecological settings significantly influence the development of different social- psychological dimensions of any group.

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