

Creativity in Children: The Role of Child Abuse, Socio-Economic Status and Age

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ABSTRACT

Present study endeavored to investigate the role of child abuse, socio-economic status and age in creative development of children. A 2x3x3 factorial design with two groups (abused and non-abused), socio-economic status (High, Middle, Low) and three age group (Childs i.e., 6 – 10 Yrs., Preadolescents i.e., 11 – 14 Yrs. & Adolescents i.e., 15 – 18 Yrs.). A total of 90 children from Gorakhpur belonging to deferent strata of society participated as respondents. Child abuse checklist (Pandey, 2002) was used to determine various forms of abused and non-abused cases, and to determine the deferent forms of creativity in children, verbal and non-verbal tests of creative thinking (Mehdi, 1973) was also used.

Results revealed that the level of creativity varied across different group of children. Moreover, abused children were found inferior on verbal fluency, verbal flexibility, elaboration N (picture), elaboration V (title), originality N (picture), and originality V (title) than non-abused children. Low SES children achieved poor on verbal related fluency, flexibility, originality as well as non-verbal related elaboration N (picture), elaboration V (title), originality N (picture), and originality V (title) than middle and high SES. Furthermore, Childs scored very poor on various dimensions of verbal and non-verbal creativity than pre-adolescents and adolescents respectively. Results have been discussed in the light of individual and social factors.

Keywords: *Creativity, Children, Child Abuse, Socio-Economic Status, Age*

Creativity is the generation of imaginative new ideas (Newell and Shaw 1972), involving a radical newness innovation or solution to a problem, and a radical reformulation of problems. Other definitions propose that a creative solution can simply integrate existing knowledge in a different way. A third set of definitions proposes that a creative solution, either new or recombined, must have value (Higgins 1999). A novel idea is not a creative idea unless it is

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valuable or it implies positive evaluation. Also, according to dt Ogilvie (1998), imagination, which involves the generation of ideas not previously available as well as the generation of different ways of seeing events, is important to achieve creative actions. It involves not only a cognitive dimension (the generation of new ideas) but also motivation and emotion, and is closely linked to cultural context and personality factors (Boden, 1998). Sternberg and Lumbart (1996) suggest that creativity is a multidimensional construct which has ability to produce work that is novel, appropriate, valuable, innovative and adaptive solutions to the problems.

By combining above definitions, we can say that creativity involves the generation of new ideas or the recombination of known elements into something new, providing valuable solutions to a problem. It also involves motivation and emotion. It is a fundamental feature of human intelligence in general which is grounded in everyday capacities such as the association of ideas, reminding, perception, analogical thinking, searching a structured problem-space, and reflecting self-criticism.

Boden (1998) suggest that creativity is mainly three types i.e., combinational, exploratory and transformational. Combinational involves new combinations of familiar ideas, exploratory involves generation of new ideas by the exploration of structured concepts while transformational refers the transformation of some dimension of the structure, so that new structures can be generated. Innovation is complimentary activities of creativity; creative thinking in discipline manner can play a role in innovation. It is not possible to conceive innovation without creative ideas, as these are the starting point. (European Commission, 1998).Innovation results when creativity occurs within the right social and organizational culture. The right social and organizational culture provides creativity processes in children and the possibilities for the development of personal and group creativity skills. Creativity can be determined and influenced by different contextual factors (cultural factors, socio- economic status, environment, family size, urban and rural background and political issues), biological factors (age, gender and ordinal position), psychological factors (parenting, subjective wellbeing, emotions, motivation, quality of life, cognition, personality) and psycho-social factor as child abuse. These factors have favorably or adversely affected the level of creativity.

REVIEW OF STUDIES

Researches revealed that culture which has more opportunity to enhance quality more independence and support then the level of creativity enhances as compared to that culture which has implemented more regulation, rule and ethics (Schneider, 1937; Hasdenfus, Martindale and Birnbaum, 1983). Similarly, socio – economic status has direct impact on creativity. Studies evinced that the children from high socio-economic status seek more creativity than low socio economic status (Inhaler, 1977; Padgett and Jorgenson, 1982). Alphas de Candolle (1873) studied environmental condition and conclude that climate, temperature and pressure have directly influenced the persons capability like creativity, positive emotions etc. Contrary to this,

political issues like violence, wrong policy only exerts a transient depressing influence on the magnitude and nature of concurrent creative output, but additionally can have effects on creativity decade later (Winter, 1973; Simonton, 1976b, 1987a). Rural and Urban background has also been found predictor of creativity i.e., urban background tend to be more creative than rural background (Limbright and Yammamota, 1965). Researches also evinced that the children from small families, other conditions being equal, tend to be more creative than children from large families (Arieti, 1976; Berry, 1981).

As like contextual factors, biological factors like age, gender, ordinal position, and heredity and inheritance issue also determine creativity in the particular situation. Researchers investigated that creative output tends to be a curvilinear, inverted backward J- function of age means to say that creativity enhances with age than after static at some period and then decline takes place. Researchers identified age in terms of length of time rather than in terms of strict chronological age (Adams, 1946; Pressey & Combs, 1943).

Galton (1874) suggested that creative achievement may be related to first born child whereas Bliss (1970) suggested that later born are more likely to be creative. The importance of examining creativity in relation to gender is based primarily on socio cultural differences among boys and girls (Abra, 1991). Traditionally, girls in our society have been encouraged to conform, whereas boys are expected to be active and dominant risk-takers. Davis (1989) acknowledge that most boys are provided with toys that enhance their visual- spatial abilities such as trucks, Legos and models, while the games of girls are often highly structured requiring turn taking and rules. In addition, characteristics traits such as non assertiveness, group conformity and the need for modeling may further impact existent gender differences in creativity. Social expectations and conformity pressures may create “cultural blocks” to creativity. Furthermore, studies deals with creativity suggest that creativity is inherent in nature. Those children are more creative whose parents are ancestors are creative and assertive.

Beneath the contextual and biological issues, psychological issues are of important concern in case of creativity. Some of the psychological factors are identified – motivation, emotion, learning, thinking, parenting, quality of life and intelligence. Researches evinced that the intrinsically motivated states is conducive to creativity, whereas the extrinsically motivated states is detrimental (Amabile, 1983a). Similarly, positive emotions create wide scope thinking pattern and open to experience as compared to negative emotion which hamper the level of creativity. Contrary to this, developmental psychologists explained that creativity can also be learned through developmental phase. For instance, if child is able to evoke his inner beauty and interest in the outer world and strongly put effort into it then child become more creative. Creativity can also be determined by thinking pattern especially by divergent thinking (Guilford, 1968). Similarly, parental issues like parent’s attitude towards their children, parent’s behavior,

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expectations and family atmosphere have also important role for the development of creativity. Psychologist explains that parenting styles have been associated with academic success.

Abusive treatment through parent affects various forms of cognitive functioning (Pandey, 2004; Erikson et al., 1989). Child abuse is also psycho-social factor, which affect the cognitive system of children. It is a state of emotional, physical, economic and sexual maltreatment meted out to a person below the age of eighteen and is a globally prevalent phenomenon. However, in India, as in many other countries, there has been no understanding of the extent, magnitude and trends of the problem. The growing complexities of life and the dramatic changes brought about by socio-economic transitions in India have played a major role in increasing the vulnerability of children to various and newer forms of abuse. Child abuse has serious physical and psycho-social consequences which adversely affect the health, cognitive functioning and overall well-being of a child. According to World Health Organization (1999) reported that child abuse or maltreatment constitutes all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power.

A cursory glance at review of studies reveals that creativity develops with many factors. Development of creativity in relation to child abuse, socio economic status and age is rarely investigated issue in Indian context. Therefore, present study was planned with following objective.

Objective:

The main aim of present study was “to investigate the impact of child abuse, socio economic status and age on creative potential of children”.

Hypotheses:

On the basis of above objective the following hypotheses were made. It was hypothesized that-

1. Child abuse would influence the development of creative talent.
2. The level of creativity would also vary across different socio-economic status of children.
3. Age level of children would also exercise impact on creative potential of children
4. The interaction of child abuse, SES and Age would influence the creative potential of children.

METHOD

Design:

Present study followed a 2x3x3 factorial design with two groups (Abused and Non Abused), three level of socio – economic status [Low, Middle, High) and three age level (Child (6 to 10

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Yrs.), Pre- adolescence (11 to 14 Yrs.), and Adolescents (15 to 18 Yrs.)]. It is used to make comparison of creative potentials in children.

Sample:

A total of 90 children, age ranging from 6 to 18 years were randomly selected with the high, middle and low strata of society in deferent localities of Gorakhpur city. On the basis of median score for child abuse checklist (Median, 123, obtained on child abuse checklist) children were divided in to abused and non- abused groups. 45 cases were screened abused and 45 cases were identified as non- abused of children.

Measures:

A set of measuring tools were used in the present study.

- **Personal Data Sheet** – To find out the background information of each participant, personal data sheet was used.
- **Child Abuse Checklist:** This checklist was developed and standardized by Pandey (2002). It determines the level of child's physical, psychological, and sexual and abuse as a whole.
- **Test of Creative Thinking:** To determine the creative potentials in children the verbal and non - verbal test of creative thinking (Developed and standardized by B, Mehdi, 1973) was used. The level of verbal fluency. Flexibility and originality were assessed by verbal test of creative thinking and non - verbal test was used to determine, elaboration (pictorial and title). Originality (Pictorial & Title) and flexibility in children. Both tests are highly valuable and valid. The reliability ($r=.95$) and validity ($r=.39$) of nonverbal test are reported high similarly, verbal test of creative thinking is also found highly reliable (Total creativity .96) and valid (Total creativity=.95).

Procedure:

The study was conducted in two phases. In the first phase of the study children were contacted in school setting or work place in case of child labor than proper rapport was established, after getting their consents, they were given a booklet containing measures of background information, abuse checklist and verbal, non-verbal tests of creative thinking. Firstly, they were requested to fill up background information. As they completed this portion they were given child abuse checklist and were requested to answer on each items by putting correct (\checkmark) mark on any one of the three point scale printed in front of each items. As they completed the responses they were thanked for participation. Further, they were requested to participate in second session. In the next session of the study, children were given verbal and non- verbal tests of creative thinking one by one and were requested to complete the task within time. As they completed their responses on various measures data were collected and they were thanked for participation. Appropriate scoring of data was done according to defined rules given in manuals.

RESULTS

Data obtained from respondents were scored and analyzed in terms of Means, SDs and Analysis Of Variance (ANOVA). Results are displayed in table 1.

Table 2: Means, SDs and 'F'- Values of Verbal and Non Verbal Creativity as a function of Child Abuse, S.E.S. and Age

Dimensions of Creativity		GROUP		SES			AGE			F- Values
		Abused	Non-Abused	Low	Middle	High	Child	Pre-Adolescence	Adolescence	
Verbal Fluency (V)	M	18.20	31.23	19.5	25.78	28.74	20.48	25.53	28	A= 43.34** B = 7.62** C= 4.85** A x B= 3.19*
	S.D.	8.6	7.14	3.25	9.47	9.75	2.57	2.41	3.25	
Flexibility (V)	M	14.10	19.6	12.17	18.23	20.15	15.48	15.93	19.13	A= 13.18** B = 10.37** A x B= 4.22*
	S.D.	6.17	6.69	1.25	2.51	3.34	3.86	3.6	6.1	
Originality (V)	M	9.41	8.1	3.67	7.48	16.11	7.91	7.9	10.44	B = 19.36**
	S.D.	1.14	2.69	1.89	2.61	3.71	1.88	2.19	2.0	
Non-Verbal Elaboration (V)	M	20.74	26.24	18.43	22.82	29.21	16.69	23.8	29.98	A= 4.27* B = 5.57** C= 8.17**
	S.D.	2.21	2.07	6.6	3.99	7.6	4.1	4.8	5.59	
Elaboration (N)	M	30.32	37.12	23.07	33.31	44.79	24.96	32.8	43.41	A= 4.31* B = 14.96** C= 10.55**
	S.D.	6.42	8.4	7.0	6.9	10.64	6.3	2.7	10.11	
Originality (V)	M	13.60	20.78	11.9	18.01	21.66	13.97	17.37	20.24	A= 11.02** B = 7.04**
	S.D.	4.00	5.28	6.94	5.11	6.2	4.3	6.2	5.2	
Originality (N)	M	2.25	7.02	.37	7.06	6.45	3.69	3.9	6.29	A= 16.68** B = 15.55** C= 4.85** A x B= 3.19*
	S.D.	1.24	2.58	.66	2.5	2.2	2.6	1.5	2.9	
Flexibility (V)	M	7.38	7.71	6.97	8.47	7.26	6.45	7.37	8.87	C= 3.14* A x B= 7.31*
	S.D.	1.90	1.92	1.1	1.8	1.8	1.9	1.1	2.2	

N = 90, ** = P < .01, * = P < .05

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Data obtained on verbal and non-verbal tests of creative thinking were scored and treated statistically.

As is apparent from table, children scored differently on various dimensions of verbal and non-verbal creativity. On verbal fluency, significant main effect for group ($F(1, 72) = 43.34, P < .01$) revealed that abused children expressed low level of verbal fluency ($M = 18.2$) than that of non-abused children ($M = 31.23$). The main effect for socio economic status was found to be significant ($F(2, 72) = 7.62, P < 0.1$), which indicated that children belonging to low socio economic status achieved poor on verbal fluency ($M = 19.50$) than that of middle ($M = 25.78$) and high SES children ($M = 8.74$) respectively. The influence of age was also found to be significant ($F(2, 72) = 4.85, P < .01$) which revealed that children (6 to 10 years) scored poor on verbal fluency ($M = 20.48$) than that of pre-adolescents ($M = 25.53$) and adolescents children ($M = 28.09$). AxB interaction effect ($F(2, 72) = 3.19, P < .05$) was also found to be significant. It is apparent from interaction effect that verbal fluency is highly damaged in abused children of low socio-economic-status ($M = 9.6$) than middle ($M = 21.66$) and high SES Children ($M = 22.91$). However in non-abused group verbal fluency was found more in high SES group ($M = 34.57$) than middle SES ($M = 29.71$) and low SES children ($M = 29.4$).

On verbal flexibility domain, significant main effect for group ($F(1, 72) = 3.19, P < .01$) revealed that abused children scored poor on verbal flexibility ($M = 14.10$) than that of non-abused children ($M = 19.60$). The main effect for socio-economic status was found to be significant ($F(2, 72) = 10.37, P < .01$), which indicated that children belonging to low socio economic status, achieved far less on verbal flexibility ($M = 12.17$) than middle ($M = 18.23$) and high ($M = 20.15$) SES children. However, A x B interaction effect ($F(2, 72) = 4.22, P < .05$) was found significant. In case of non-abused group low SES children performed very poor ($M = 6.4$) than middle SES children ($M = 16.52$) and high SES children ($M = 19.38$). In case of abused group, children belonging to high SES found more verbal flexibility ($M = 20.92$) as compared to middle SES ($M = 19.93$) and Low SES group ($M = 17.93$).

On verbal originality, the main effect for socio economic status was found to be significant ($F(2, 72) = 19.36, P < .01$) which indicated that children belonging to low socio-economic status achieved far less on verbal originality ($M = 2.67$) than that of middle ($M = 7.48$) and high ($M = 16.11$) SES children.

On elaboration (N) (picture), significant main effect for group ($F(1, 72) = 4.27, P < .05$) indicated that abused children showed poor elaboration picture (N) ($M = 20.74$) than that of the non-abused children ($M = 26.24$). The main effect for socio economic status was also found to be significant ($F(2, 72) = 5.57 < .01$) which indicates that high S.E.S. children expressed high level of elaboration (N) ($M = 29.91$) than that of middle ($M = 22.82$) and low SES children ($M = 18.43$). Results further indicated that age was also found to be significant ($F(2, 72) = 8.17, p < .01$) which

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revealed that children scored poor on elaboration (V) ($M=16.69$) than that of pre-adolescents ($M=3.80$) and adolescents ($M=29.98$) counterparts respectively.

Similarly on Elaboration (v) (for title) significant main effect for group ($F(1,72) = 4.30, p<.05$) indicate that abused children had low level of elaboration (V) ($M=30.32$) than that of the non-abused children ($M=37.12$). Furthermore, socio economic status was also found to be significant ($F(2,72) = 14.97, p<.01$) which indicated that children belonging to low socio economic status, achieved poor on verbal flexibility ($M=23.07$) than that of middle ($M=33.31$) and high ($M=44.79$) SES children. Furthermore, significant main effect for age ($F(2,72) = 10.55, p<.01$), suggested that children were found inferior on elaboration (V) ($M=24.96$) than that of the pre-adolescent ($M=32.8$) and adolescent ($M=43.41$) counterparts subsequently.

Similarly, on originality (V) (for title) domain significant main effect for group ($F(1, 72) = 16.68, p<.01$) indicated that abused children showed low level of originality (V) ($M= 2.38$) than that of the non-abused children ($M=7.22$). Furthermore, the main effect for socio economic status was also found to be significant ($F(2, 72) = 15.53, p<.01$) which indicated that children belonging to low socio economic status expressed poor level of originality (v) ($M=.37$) than that of middle ($M = 7.06$) and high ($M= 6.45$).

On originality (N) (for picture) domain significant main effect for group ($F(1,72) = 11.02, p<.01$) indicated that abused children showed low level of originality (N) ($M = 13.60$) than that of the non-abused children. ($M=20.78$). The main effect for socio economic status was also found to be significant ($F(2,72) = 7.04, p<.01$) which indicates that low SES children achieved far less on originality for picture ($M=11.9$) than middle ($M=18.01$) and high ($M=21.66$) SES children. AxB interaction effect ($F= (2, 72) = 3.19, P<.05$) was also found to be significant. It is apparent from interaction effect that originality (N) is highly damaged in abused children of low socio-economic-status ($M= .50$) than high SES Children ($M= 5.91$) and middle SES children ($M= 7.00$). Similarly, in non-abused group low SES children was also inferior in originality (N) ($M=.28$) than middle SES ($M= 7.12$) and high SES children group ($M= 7.50$).

Furthermore on non-verbal flexibility significant main effect for age ($F(2,72) = 3.14, p<.05$) indicated that children (6-10 years) were found inferior on non-verbal flexibility ($M=6.45$) than their pre-adolescents ($M=7.37$) and adolescent ($m=8.87$) counterparts respectively. AxB interaction effect was found to be significant on non-verbal flexibility, which indicates that in abused group, creative ability is highly damaged in high SES children ($M= 5.57$) than middle SES ($M= 7.91$) and low SES children ($M= 8.87$) but the reverse pattern was found in cases of non-abused group, which indicate that low SES children is more inferior ($M= 5.07$) than Middle SES ($M= 9.01$) and High SES children ($M= 8.96$).

DISCUSSION

Findings of the present study have been interpreted and discussed in the light of many other empirical findings. Children's creative potential was assessed in relation to child abuse, socio economic status and age. ANOVA results revealed that abused children expressed very poor on verbal and non verbal creative ability.

Present findings have been supported by many earlier research findings (Lynch and Roberts ,1982; Erickson et al 1989; Pandey, 2004) Lynch and Roberts (1982) showed that abused children were found developmentally, educationally and socially below the norms. Pandey (2005) identified the damaging consequences of child abuse and rural environment on expression of creativity. Erickson et al (1989) also reported that abused children showed less confidence and low self esteem and a sharp decline in the intellectual functioning due to their attachment disturbance. Thus abusive treatments of the family ruins the cognitive development of children including their creative talents (Pandey, 2004)

Result also revealed that low S.E.S showed poor creative ability than middle and high S.E.S children. Poor economic condition, high stress etc. interrupts poor interaction with children. Researchers have made efforts to identify the situation in which abusive pattern develops and what stimuli trigger to actual abuse (Hurlock-1984, Hollowitze & Sternberg 1959). Pulski (1970) also found that high S.E.S. children expressed better creativity than low S.E.S. children since they were brought up under democratic practices. Birth order also has impact on creativity than those who were less bright (Albert & Elliot 1973). As national incidence study reports the children of low strata were significantly more victims of child abuse however children of different strata were also found abused in some or other forms. Moreover families with low socio economic status have poor social support system to assist /educate parent for childcare responsibilities (Sadlak and Broadhwest, 1996).

Creatively also varied across different age groups. Childs expressed low level of creative ability than pre-adolescents and adolescents. It means result revealed that creativity scores increases with developing age. Result supported the view that creativity develops with increasing age however variations in development of creativity are caused by numerous environmental socio-cultural factors. Children living in poor economic and emotionally oppressive environment in the family feel helpless and start seeking sympathy and support outside the family particularly girls run way from home with someone who exploit them for earning purposes and ultimately they become victim of abuse. Previous researches support the present findings (McCrae, Arenberg, & Costa, 1987; Ruth & Birren, 1985). Jaquish and Ripple (1980) investigated age-related differences in each of cognitive creative abilities. Beginning in preadolescence (ages 9–12), each of these abilities increases until middle adulthood (ages 40–60). Further, investigator reported that adolescents were significantly more fluent and flexible than pre-adolescents.

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Thus, results confirm the hypotheses. Findings suggest that abused group, low S.E.S. or low strata of society take hazardous role in the development of creativity. While non abused group of children and high S.E.S children have high creative potential. Although, creative development is orderly develop with age group in a predictable manner however, certain factors like poor home environment less stimulation, abusive treatment in the family, poor socio economic condition etc. create hazards in the proper development of creative potential of children.

CONCLUSION & RECOMMENDATION

Results proved the damaging impact of child abuse and low socio- economic status on creative talent of children. On the basis of present findings certain recommendations should be given.

- Good practices of protection should be shared to all the parent, family members, neighborhoods and villagers for which facilitate qualitative improvement of creative talent and other cognitive functioning of children.
- There is a need to enhance parenting skills, knowledge of the children's activity, cognitive performance and sensitive emotion, which will help them to handle situations of child abuse.
- Government and higher authority of local body should provide government facilities to low SES children. They should try to take intervention program in low strata of society to solve societal problems as well as other problems.

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Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Abra, J. (1991). Gender Differences in Creative Achievement: A Survey of Explanations. Genetic, Social, and General Psychology Monographs, 117, 235-284.
- Adams, C.W. (1946). The Age at Which Scientists Do their Best Work. Isis, 36, 166-169.
- Albert, R.S., & Elliot, R.C. (1973). Creative ability and the handling of personal and social conflicts among bright sixth graders. Social Behavior and Personality, 1, 169-181.
- Amabile, T.M. (1983). The Social Psychology of Creativity. New York: Springer-Verlag.
- Arieti, S. (1976). Creativity: The Magic Synthesis. New York
- Berry, C. (1981). The Nobel Scientists and the Origins of Scientific Achievement. British Journal of Sociology, 32, 381-391.
- Bliss, W.D. (1970). Birth order of Creative Writers. Journal of Individual Psychology, 26, 200-202.
- Boden, M.A. (1998). "Creativity and artificial intelligence", Artificial Intelligence, No. 103, pp. 347-356.

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- Davis, J. (1993). Drawing's Demise: U-shaped Development In graphic Symbolization. Unpublished manuscript, Harvard Project Zero, Harvard University, Cambridge, MA
- dt ogilvie (1998), "Creative action as a dynamic strategy: using imagination to improve strategic solutions in unstable environments", *Journal of Business Research*, No. 41, pp. 49-56.
- Erikso, M.F., Egeland, B., & Painta, R. (1989). The Effects of Maltreatment o the Development of Young Children (pp. 647-684). New York: Cambridge University Press.
- European Commission (1998), *Innovation Management Techniques in Operation*, European Commission, Luxembourg.
- Galton, F. (1974). English Men of Science: Their Nature and Nurture. London: Macmillan.
- Guilford, J.P. (1967). The Nature of Human Intelligence. New York: McGraw-Hill.
- Hasdenfus, N., Martindale, C., & Birbaum, D. (1983). Psychological Reality of Cross Media Artistic Style. *Journal of Experimental Psychology: Human Perception and Performance*, 9, 841-863.
- Hollowitz, D., & Stulberg, B. (1959). The vicious cycle of parent child relationship breakdown. *Social Case Work*. 40, 268-275.
- Hurlock, E.B. (1984). Child Development. Mc Graw- Hill series in Psychology.
- Inhaler, H. (1977). Scientists and Economic Growth . *Social Studies of Science*, 7, 514-526.
- Jacquish, G. A., & Ripple, R. E. (1980). Divergent thinking and self-esteem in preadolescents and adolescents. *Journal of Youth and Adolescence*, 9, 143-152.
- Lembright, M.L., & Yamamoto, K. (1965). Subculture and Creative Thinking: An Exploratory Comparison Between Amish and Urban American School Children. *Merrill- Palmer Quarterly*, 11, 49-64.
- Lynch, M.A. & Robert, J. (1982). Consequences of child abuse, London: Academic Press.
- Mccrae, R. R., Arenberg, D., & Costa, JR., P. T. (1987). Declines in divergent thinking with age: Cross sectional, longitudinal and cross sequential analysis. *Psychology & Aging*, 2, 130-137.
- Mehdi, B. (1973). Verbal Test of Creative Thinking. Agra: National Psychological Corporation.
- Newell, A. and Shaw, J.C. (1972), "The process of creative thinking", in A. Newell and H.A. Simon (eds), *Human Problem Solving*, Prentice Hall, Englewood Cliffs, NJ, pp. 144-174.
- Padgett, V., & Jorgenson, D.O. (1982). Superstition and Economic Threat : Germany, 1918-1940. *Personality and Social Psychology Bulletin*, 8, 736-741.
- Pandey, S. (2002). Development of Child Abuse Checklist. Unpublished Manuscript, Department of Psychology, DDU Gorakhpur University, Gorakhpur.
- Pandey, S. (2004). Impact of environmental setting and child abuse on Creative Potentials in Children. Paper presented in National Seminar on Psychological and Environmental Change. Dept. of Psychology, DSA., DDU Gorakhpur University, Gorakhpur.
- Pandey, S., (2005). Social Dynamics of Child Abuse and its Psychological Consequences in Eastern Districts of U.P, submitted UGC Major Research Project, Dept. of Psychology, DDU Gorakhpur University, Gorakhpur, India.
- Pressey, S.L., & Combos, A. (1943). Acceleration and Age of Productivity. *Educational Research Bulletin*, 22, 191-196.

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- Pulski, M.A.S. (1970). Play as a function of toy structure and family predisposition. *Child Development*, 41, 533-537.
- Ruth, J., & Birren, J. E. (1985). Creativity in adulthood and old age: Relations to intelligence, sex and mode of testing. *International Journal of Behavioral Development*, 8, 99-109.
- Schneider, J. (1937). The Culture Situation as a Condition for the Achievement of Fame. *American Sociological Review*, 2, 480-491.
- Sedlak, A.J., & Broadhurst, D.D. (1996). Executive Summary of the Third National Incidence Study of Child Abuse and Neglect. (DHHS Pub. No. ACF – 105-94-1840). Washington, D.C., Government parenting office.
- Simonton, D.K. (1992). Gender and Genius in Japan: Feminine eminence in masculine culture. *Sex and Gender*, 27, 101-119.
- Sternberg, R. J. (1999). *The Handbook of Creativity*. Cambridge University Press.
- Winter, D.G. (1973). *The Power Motive*. New York: Free Press.
- World Health Organization (1999): Report of the Consultation on Child Abuse Prevention; Geneva, http://www.who.int/violence_injury_prevention/violence/neglect/en/

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