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Study of Behavioral Problems in Preschool Children

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Abstract
Background: *Behavior problems among children are a deviation from the accepted pattern of behavior on the part of the children when they are exposed to an inconsistent social and cultural environment. But these are not to be equated with the presence of psychiatric illness in the child as these are only the symptoms or reactions to emotional and environmental stress. The study is carried out to evaluate behavioral problems in preschool children.*
Methodology: *This descriptive cross sectional study was carried out on 350 preschool children aged 3 to 6 years. In the field area 6 anganwadi schools, 6 english medium nursery schools and 5 marathi medium nursery schools were used and by simple random sampling 20 preschool children from each centre were selected.*
Results: *24% of children in our study had behavior problems. The prevalence is more among children in 3.1-4 yrs of age group (47.14%). The prevalence of behavior problems was higher among boys (63.1%).The prevalence of behavioral problems was higher in children belonging to Class II & Class III socio economic status (54.7%). The prevalence of behavior problem was higher in children belonging to a nuclear family (69.04%).*
Conclusion: *Symptoms like temper tantrums, fights & bites, destructive nature, management problems hyperkinesis and distractibility were more common in boys. On the other hand being over-sensitive, having fearful reactions and attention seeking was more common in girls in our study.*
Keywords: *Behavioral problems, Preschool children, Socioeconomic class.*

INTRODUCTION

A nation's most important and precious resource is its children who constitute its hope for continued achievement and productivity. There is no more crucial period of life than the age up to six years. It is during this period that the child is most malleable and it is then that many barriers to normal development are erected.[1]

All educators have stressed the importance of the home in the early education of the child. The quality and nature of the parental nurturance that a child receives will profoundly influence his future

development. But only few homes provide the right type of environment to the growing child. [2]

Many children are denied the opportunities for healthy all round development. In learning to adjust to the world in which the child is growing up, he develops certain kinds of behaviors which are annoying or embarrassing to the adults with whom he comes in contact.[3]

Adults frequently label such behaviors as problem and try to correct them. This usually makes the situation worse. What adults call problem behavior may be perfectly normal for the child at his age and level of development. Through ignorance of what is socially acceptable behavior, the child tries to express his natural impulses in ways that gives him satisfaction but which are not socially acceptable. So these behaviors make life difficult and unsatisfactory for parents as well as the child.[4]

Behavior problems among children are a deviation from the accepted pattern of behavior on the part of the children when they are exposed to an inconsistent social and cultural environment. But these are not to be equated with the presence of psychiatric illness in the child as these are only the symptoms or reactions to emotional and environmental stress.[5]

But if these behaviors are allowed to continue, they are likely to pose problems of adjustment to the child in his school age and adolescence. Research has shown that the emergence of early onset conduct problems in young children in related to a variety of health and behavior problems such as peer rejection, drug addiction, depression, juvenile delinquency, school drops in later years.[6,7]

A distinction is often made (WHO, 2013) between behavior problems of non-clinical nature from those which is part of full-fledged clinical diagnostic conditions like Opposition Defiant Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, etc. The etiology of behavior problems vary enormously. Environ-mental or familial factors are primarily implicated although certain behavioral outcomes maybe due to biological and genetic reasons.[8]

A developmental, socio-economic and cultural perspective is vital for identification or definition of behavioral abnormalities in children. Bed-wetting, avoidance of strangers or fear of darkness, for example, in a particular age is typical and beyond a developmental stage, they are viewed as problem behavior. More than being a passing age related phenomenon, persisting behavior problems are shown to have long term negative outcome for affected children, their family and society.[9]

Early childhood behavior problems appear to induce impulsive behaviors, predispose them in securing low IQ test scores, school failure, academic problems, substance abuse, delinquency and/abnormal behaviors even in their adulthood.[10]

Moderate to severe degrees of subclinical or clinical levels of problem behaviors ranging between 2-40 percent have been reported across ages, gender, locations, family, socio-economic classes and/or nations in preschool to high school children.[11]

Studies have used field surveys, referrals from psychiatric department, standardized screening instruments and/or parent interview techniques to report wide range of types of behavior problems like sleep disturbances, unsocial or socialized aggression-regression reactions, poor school grades and others.[12]

Further, problem behavior research has focused on home environment, social aspects, knowledge among teachers, single-dual parent families, children with special needs or about parent perception on its causes and management, discipline practices and others.[13]

Early childhood is the critical period in behavior formation. The recent investigations by psychologists, educationists, pediatricians and others stress the intranatal importance of early family experiences especially maternal care on the child's behavior, attitudes and his future mental health.

At no other period in his life the child more is responsive to positive environmental influences, which enhance and expand his development. Emphasis should be assigned to programmes of prevention and early intervention rather than late remediation. Finding out the prevalence of such conditions with their socio-economic distribution and prevalence of various types of disorders is the first step in preventing behavioral problems in pre-school children.

AIMS & OBJECTIVES

1. To study prevalence of behavioural problems in pre-school children in Karad based on age, sex, socio-economic conditions and family size.
2. To study prevalence of specific behaviour problems in children.

MATERIALS & METHODS

After the approval of institutional ethical committee and inform consent this descriptive cross sectional study was carried out on 350 preschool children aged 3 to 6 years. Children with organic neurological diseases and medical diseases are excluded.

For collecting data, in the field area 6 anganwadi schools, 6 english medium nursery schools and 5 marathi medium nursery schools were used and by simple random sampling 20 preschool children from each centre were selected.

Method of Collection of Data

This study deals with the design of the study which is described under the follows heads.

A. Variables of the study
B. Tools used for collection of data
C. Sample for the study
D. Procedure for collection of data
E. Scoring and consolidation of data

A. The main variable of the present study is 'Behaviour Problems' of preschool children. It is treated as the dependent variable. The following variables are

1. Gender
2. Socio-economic status
3. Maternal employment status

B. TOOLS USED FOR COLLECTION OF DATA

For collecting data, the following tools were used.

1. Child Behavior Inventory

The first part of the inventory is intended to collect information such as sex and age of preschoolers, the locality of the preschool and socio-economic status of parents of preschoolers. The second part is used to identify the problem behaviors of the pre-school children as rated by their mothers and teachers. Method adopted for weighing the various categories.

a) Parental Education

The level of education of parents is divided into seven categories which beings from the illiterate to post graduate level. The illiterate is awarded 1Score, Score of 2 to those who have education of primary standard , Middle school score 3, High school score of 4, 5score for pre -university, pre-degree, T.T.C. etc., Post graduates, graduates and diploma score of 6 given and professional or Honours given score of 7 .

b) Parental occupation

The different occupations are classified into six categories. They are the following:

(i) Unemployed (1 score)

Those who are having no work at all.

(ii) Unskilled (2 score)

Coolies, ordinary laborers, watchman, peons, etc. will form the unskilled

(iii) Semi skilled (3 score)

Farmers, small merchants, laboratory attenders, etc. will come under this category.

(iv) Skilled (4 score)

Mechanics, fitters, electricians, drivers, photographers, document writers, policemen, laboratory assistants

(v) Semiprofessionals (6score)

Chemists, druggists, qualified, nurses, teachers, managers, superintendents of offices, minor

businessmen, contractors, assistant educational officers, block development officers, officers of sub -district levels, public health workers etc

(vi) High professionals (10 sc ore)

Ministers, judges, bank executives, doctors, engineers, lawyers, university level teachers, heads of research organizations, heads of government departments, secretaries of government, business executives .

c) Parental Income

The Family income (Rs) is divided into six categories:

i. 19575-Score 12
ii. Rs. 9788 to Rs. 19574/- 10 Score
iii. Rs. 7323 to Rs. 9787/- 6 Score
iv. Rs. 4894 to7322/- 4 Score
v. Rs. 2936 to 4893/-3 Score
vi. Rs. 980 to 2935/ -2 Score
vii. Rs. < 979/ -1 Score.

Scoring scheme of the socio-economic status:

Sl. No.	Education level	Score	Occupation level	Score	Income level	Score
1.	Illiterate	1	Unemployed	1	< 979	1
2.	Primary school	2	Unskilled	2	Rs. 980-2935	2
3	Middle School	3	Semiskilled	3	Rs.2936-4893	3
4	High School	4	Skilled	4	Rs. 4894-7322	4
5	Intermediate/ Post High school diploma	5	Clerck,Shop owner, Farmer	5	Rs.7323-9787	6
6	Graduate/Post graduate	6	Semiprofession	6	Rs 9788-19574	10
7	Professional or Honours	7	Profession	10	Rs. >19575	12

E. Scoring and Consolidation of Data

As the study is to identify the behavior problems, data was collected by interviewer technique by using Preschool behavior check list (PBCL), devised by McGuire and Richman .The scale consists of 22 items, each scored 0, 1 and 2 giving a maximum possible score of 44.Children scoring 12or above were considered to have behavior problems. The responses were counted and percentage calculated. Data given by teachers/care takers was used for cross checking with the responses given by the mothers.

Scoring Procedure

The respondents (mothers and teachers of preschoolers) are to answer in a three point scale with any one of the responses like 'often' 'sometimes' and 'never'. The frequencies of the responses were counted and the respective percentage calculated for identification of behavior problems.

If the behavior problems never occurred in the child a score of 'zero' was given. If the problem occurred 'sometimes' a score of 'one' is assigned and a score of 'two' is assigned in cases where it occurred often.

Statistical Analysis

For analyzing data chi-square test was used to find the association between probable behavioral problem with socio demographic factor."P" value less than 0.05 is considered significant. The sample size required for the study was estimated based on the prevalence rate of 22% observed by Rai S. et al[4], with an allowable error of 20%. Calculated sample size is 350.

OBSERVATIONS AND RESULTS

The sex-wise distribution of children enrolled in our study is comparable as shown in Graph 1.The age and gender wise distribution showed that there were 165 (47.14%) children in 3.1-4 yrs of age group of that 95 were boys 70 were girls, while 113 (32.28%) in 4.1-5 yrs of age group 58 were boys and 55 girls, while only 72 (20.57%) children belonged to the 5.1-6 yrs age group of that 32 boys and 40 girls.Out of a sample size of 350 children in our study from rural Maharashtra, conducted at preschool level, 15.14% of the children with behavioral problems were boys while only 8.86% were girls. A total of 84 children had some behavioral problem (24%) as

shown in table 1 and figure 2.The age distribution shows that the percentage of children having behavioral problems was higher (12.86%) in the youngest age group of children i.e. 3.1-4 yrs. Thereafter, there was a gradual decrease in the prevalence in behavioral problems i.e. 7.43% in 4.1-5 yrs while only 3.71% in the 5.1-6 yrs of age group. While the prevalence of of girls with behavioral problems was also half of that in the boys in all the 3 age groups. The children enrolled in the study were from 6 English & 6Marathi medium schools while the rest were enrolled from 5 Anganwadis. 39.43% children belonged to English medium schools while 35.71% children went to Marathi medium schools & 24.86% children went to Anganwadis as shown in table 2,3,and 4.The prevalence of behavioral problems in children belonging to *English* medium pre-schools was 37/138 i.e. *26.81%* while in children belonging to *Marathi* medium pre-schools it was 33/128 i.e. *25.78%* while in children belonging to *Anganwadi* pre-schools it was 27/87 i.e. *31.03%* as shown in table 5 and figure 3.There was equitable distribution of boys & girls belonging to nuclear & joint families. The prevalence of behavior problem was noted to be higher in both the sexes in the children belonging to a nuclear family set-up. It was 67.92% in boys belonging to nuclear family while it was 75.86% in the girls belonging to a nuclear family set-up as shown in table 6 and 7.The distribution of children in Class I to Class VII as per Socio-economic status of the family was equitable amongst both the sexes. The prevalence of behavioral problems in both boys and girls was higher in the Class II & Class III which is proportionate to their higher prevalence in the 2 groups amongst the 350 children belonging to the study as shown in table 8 and 9.It was also noted that children who handled more modern gadgets like Smartphones and Videogames tend to have a higher chance of having behavioral problems. As this was not the main objective of our study, details of these were not obtained. Common behavioral problems due to overuse of gadgets were Fights & Bites, Restlessness and Temper Tantrums as shown in table 10.

Figure 1: Sex Wise Distribution

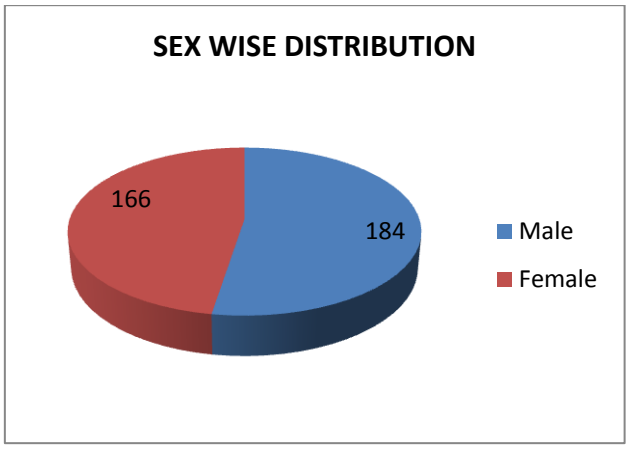

Figure 2: Age distribution in boys and girls with behavioral problem:

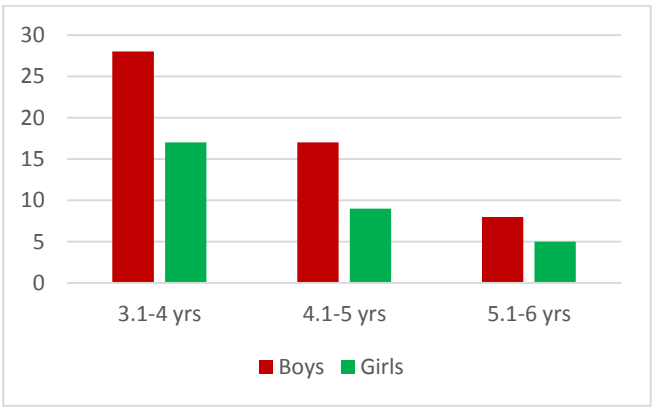

Figure 3: Preschool school distribution & behavior problem:

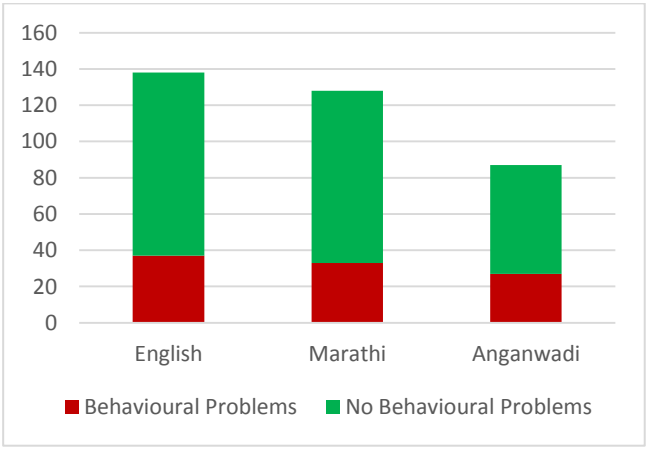

Table 1: Age distribution in boys and girls with behavioral problem:

Age:	Boys: (n/%)	Girls: (n/%)
3.1-4yrs	28 (33.3%)	17 (20.23%)
4.1-5yrs	17 (20.23%)	9 (10.71%)
5.1-6yrs	8 (9.52%)	5 (5.95%)
Total:	53 (63.1%)	31 (36.9%)

Table 2: English medium school age distribution:

Age	Boys	Girls	Total
3.1-4yrs	35	28	63
4.1-5yrs	24	23	47
5.1-6yrs	12	16	28
Total:			138

Chi-squared for trend = 1.215 (1 degree of freedom). The P value is 0.2703.

Table 3: Marathi medium preschool age distribution:

Age	Boys	Girls	Total
3.1-4yrs	36	24	60
4.1-5yrs	20	20	40
5.1-6yrs	11	14	25
Total:			125

Chi-squared for trend = 2.082 (1 degree of freedom). The P value is 0.1491.

Table 4: Anganwadi preschool distribution:

Age	Boys	Girls	Total
3.1-4yrs	24	18	42
4.1-5yrs	14	12	26
5.1-6yrs	9	10	19
Total:			87

Chi-squared for trend = 0.4860 (1 degree of freedom). The P value is 0.4857.

Table 5: Preschool school distribution & behavior problem:

School	3.1-4yrs		4.1-5yrs		5.1-6yrs	
	B	G	B	G	B	G
English	9	4	6	9	3	6
Marathi	10	5	8	4	3	3
Anganwadi	9	8	3	3	2	2

B: Boys/G: Girls

Table 6: Distribution amongst different types of families:

Type:	Boys:	Girls:
Nuclear	111	105
Joint	73	61
Total:	184	166

Fisher's Exact Test applied. The two-sided P value is 0.6510.

Table 7: Distribution of behavior problem amongst different types of families:

Type of family:	Boys with problem:	Girls with problem:
Nuclear	36 (67.92%)	22 (75.86%)
Joint	17 (32.07%)	7 (24.14%)
Total:	53	31

Fisher's Exact Test applied. The two-sided P value is 0.6160.

Table 8: Socio economic distribution according to sex:

Socio economic class:	Boys:	Girls:
Class I	4	3
Class II	111	96
Class III	49	43
Class IV	9	8
Class V	6	5
Class VI	4	6
Class VII	3	4
Total:	184	166

Table 9: Socio economic distribution according to behavior problems:

Socio economic class:	Boys:	Girls:
Class I	3	2
Class II	16	10
Class III	12	8
Class IV	7	4
Class V	6	4
Class VI	6	3
Class VII	2	0
Total:	53	31

Table 10: Distribution of different types of Behavioural Problems

Sr. No.	Behavioural problems	Frequency	Percentage
1	Shyness	6	7.14%
2	Stubborness	10	11.90%
3	Bed wetting	6	7.14%
4	Negativism	4	4.76%
5	Temper tantrums	12	14.28%
6	Habit disorders(nail bitting, Thumb sucking,Pica)	4	4.76%
7	With drawal	0	0%
8	Not liked by peers	2	2.38%
9	Restlessness	8	9.52%
10	Poor concentration	2	2.38%
11	Learning problems	4	4.76%
12	Specific fears	2	2.38%
13	Sweating	2	2.38%
14	Refusal to food	4	4.76%
15	Overreactivity	4	4.76%
16	Attention seeking	4	4.76%
17	Attention deficit	2	2.38%
18	Unhappy	0	0%
19	Teasing	0	0%
20	Destructive	2	2.38%
21	Difficulty in management	0	0%
22	Fights and bites	6	7.14%

DISCUSSION

The prevalance of behavioural problems amongst pre-school children conducted in our study was 24%. In a similar study conducted by Rai S et al (1992) in Delhi & Richman et al (1982) was 22% each. Jenkins et al reported 23% prevalence in children of 3 yrs age & 15% in children belonging to 4.5 yrs age group.[14]

Earls et al reported it to be 24% in children aged 3 yrs whereas Mcfarlaneet al[15] reported prevalence of 50% in the same age group. The difference in prevalence in the latter age group was attributed to the inclusion of children less than 3 years in the study too. A lower prevalence of behavioural problems has been noted in different studies too which had screened children above the age of 6 years.

The prevalence of behavioural problems was much higher in boys compared to girls. Similar reporting has been done in various other studies. In the present study, the differences in prevalance in both the sexes was marked in all the 3 age groups i.e. 3.1-4 yrs, 4.1-5 yrs & 5.1-6 yrs.

The higher prevalance of behavioural problems in children belonging to a nuclear family across all the 3 age groups is higher compared to joint family could be due to the fact that children in nuclear families get lesser time & care compared to those in the joint family set-up. Since the responsibility of rearing a child is shared by many elders in a joint family, such children could have less behavioural problems.

Singh et al[16] found that 74.8% of all emotionally distrubed children belonged to a nuclear family. Wardsworth et al also showed that family type had a highly significant association with the development of behaviour.[17]

The prevalence of behaviour problem in children belonging to a lower socioeconomic class was higher compared to the upper socioeconomic class. Singh et al found a similar higher prevalence amongst children belonging to the lower socioeconomic class (48.5%).[16]Verhulst et al found that enuresis was higher amongst children belonging to the lower socioeconomic class.[18]

Symptoms like temper tantrums, fights & bites, destructive nature, management problems hyperkinesis and distract ability were more common in boys. On the other hand being over-sensitive, having fearful reactions and attention seeking was more common in girls in our study. These results are similar to the findings of other studies conducted in both Indian children as well as abroad.[14,16,17,18]

Though the prevalence of behaviour problems was higher amongst the study population, none of the parents were aware that there was any help available for children with such problems like enuresis, temper tantrums & hyperactivity.

Common behvioural problems in our study due to overuse of gadgets were Fights & Bites, Restlessness and Temper Tantrums.

Perhaps the number one concern regarding the influence of technology among the general public is the potential for media to increase behavioral aggression and violent conduct. Children are often exposed to violent media, whether it is through television or video games (60% of TV programs

contained violence in 1997 and this number is unlikely to be lower now; 94% of games that are rated as appropriate for teenagers contain some violence).

Because young children develop beliefs about social norms and acceptable behavior based on the content of their experiences, any activity that promotes violence is likely to be a risk factor for violent behavior in adulthood and is worthy of careful scientific examination. Meta-analyses, combining data from hundreds of individual studies, confirm an association between exposure to violence in media and antisocial tendencies such as aggression.

CONCLUSIONS

Symptoms like temper tantrums, fights & bites, destructive nature, management problems hyperkinesis and distractability were more common in boys. On the other hand being over-sensitive, having fearful reactions and attention seeking was more common in girls in our study. Our study suggests that similar studies should be conducted on a larger scale in the community with more emphasis on individual behaviour problems. Such studies would increase the awareness amongst parents that if behaviour problems are given due care in the early years of life it would prevent future psychological abberations.

BIBLIOGRAPHY

1. McGurie J, Richman N. Screening for behaviour problems in nurseries. The validity and reliability of the Preschool behaviour checklist. Child Psychiatry 1986, 27; 7-32.
2. Bandura, A. *Social learning theory*. Englewood Cliffs NJ: Prentice – Hall 1977.
3. Behar, L.B. (1977). The Preschool Behaviour Questionnaire. *Journal of Abnormal Child Psychology*. 1977:5, 265-275.
4. Chamberlin, K.W. A follow up study of parent education in pediatric office practices. *American Journal of Public Health*. 1988:70, 1180-1185. 131
5. Coleman ER. Psychological problems of pre-school children in an urban area. *British Journal of Psychology*. 1977: 43, 623-630.
6. Dorman, Lynn, M. *The expression of agression in pre -school children*. Head Start Evaluation and Research Centre, Boston University 1967.
7. Feil, GR. Identification of critical factors in the assessment of preschool behaviour problems. *Education and Treatment of Children*, 1995 18, 261-71.
8. Anthony, L. G., Anthony, B. J., Glanville, D. N., Naiman, D. Q., Waanders, C., Shaffer, S. (2005). The relationships between parenting stress, parenting behavior and preschoolers' social competence and behavior problems in the classroom. *Infant and Child Development*, 14, 133–154.
9. Venkatesan, S. (2013). Preliminary try out and validation of problem behavior survey schedule for children with developmental disabilities. *Journal of Disability Management and Special Education*. 3(2), 9-22.
10. Andrew, J. (2005). Problem behaviors and associated risk factors in young children. *Australian Journal of Guidance & Counseling*. 15, 1–16.
11. Xiquan, M., Yao, Y., & Zhao, X. (2013). Prevalence of behavioral problems and related family functioning among middle school students in an eastern city of China. *Asia-Pacific Psychiatry*. 5, 1, E1-E8.
12. Ahmed, A., Khalique, N., Khan, Z., & Amir, A. (2007). Prevalence of psychosocial problems among school going male adolescents. *Indian Journal of Community Medicine*. 32(3),219-221.
13. Ganesha. &Venkatesan, S. (2012). Comparative profiles of problem behaviors in Richman, M., Stevenson, J., & Graham, P. J. (1982). *Preschool to school: A behavioral study*. London: Academic Press.

14. McFarlane JW, Allen L. A developmental study of behaviour problems of normal children between 21 months & 14 years. California. University of California Press, 1954. 210-214.
15. Singh MN, Dagar BM. Sociological aspects of behavioural problems in a community child guidance centre. Child Psychiatr Quart. 1982, 1: 44-49.
16. Wardsworth J. The influence of family type on children's behaviour. J Child Psychol Psychiatry. 1985. 25: 245-55.
17. Verhulst FC. The prevalance of nocturnal enuresis. J Child Psychol Psychiatry. 1985. 26: 989-993.
18. Children from single versus dual parent families. *Journal of Psychology*. 3(2), 89-98.