

ORIGINAL ARTICLE

HOUSEHOLD CHAOS, MENTAL HEALTH AND SOCIAL ADAPTIVE FUNCTIONING OF ADOLESCENTS

Sadia Rehman, Saadia Aziz

Department of Applied Psychology, National University of Modern Languages, Islamabad, Pakistan

Background: Management of disturbances becomes hard due to level of chaos that promptly affect the mental health and social adaptive functioning of an adolescent. Mental health plays an important role in the cognitive functioning of an individual. Social adaptive functioning is linked with academic performance and personal working of an individual. The immense and enduring effects of these variables among adolescents may cause the psychological and physical impairment. Objective of this study was to observe the relationship among household chaos, mental health and social adaptive functioning. **Method:** Correlational study method was used to assess the relationship among all the variables. Convenient sampling technique was used to collect the data. Confusion hubbub and order scale, mental health inventory and child and adolescents social adaptive functioning scale were used to measure the study variables. **Results:** Correlational analysis showed significant negative correlation of household with mental health and social adaptive functioning. Regression analysis showed that household chaos significantly predicts mental health and social adaptive functioning of adolescents. Significant differences were also observed between boys and girls in perceived household chaos. **Conclusion:** Adolescents who have high level of chaos at home suffer from mental health issues and lack of social adaptive functions. Findings have implications for parents, health professionals and academicians. Reducing chaos at home can lead to improvement in well being and enhance social adaptive functioning of adolescents.

Keywords: Household Chaos, Mental Health, Social Adaptive Functioning, Adolescents

Pak J Physiol 2021;17(4):72-4

INTRODUCTION

Household chaos is generally characterized as an arrangement of uncontrolled movement, absence of structure, irregularity in normal routine and elevated level of surrounding stimulation.¹ Chaotic home situations generally related with an unfriendly environment result in the development of child which continue in youth and adulthood. Household chaos is usually associated with the factors like academic achievement, behavioural issues, socioeconomic condition, cognitive abilities, and emotional functioning.² In early adolescence, individuals suffer from poverty, socioemotional issues, helplessness, distress and critical cognitive development.³ Evans recognized the household chaos as crowded, loud, confused, poor settings for child development.^{4,5} Mental health includes our social, emotional and psychological wellbeing. It influences how we think, feel, and act. Mental health and wellbeing is always characterized to be without any mental disorder. Studies have explored that adolescents are more sensitive towards the traumatic events and health issues. The intensity of adolescents' response towards the stressful events depends on their mental health and the skills they adopt. Wellbeing is a key aspect of mental health which is characterized in terms of good or bad.⁶ The term adaptive functioning illustrates the self-sufficient character of an individual for the real life situations.⁷ It describes the skills such as social, academic,

communication, and daily living skills. Social functioning is a set of self-sufficient behaviour of a person that is comprised of social skills, social behaviour and social cognitions.⁸ Household chaos is a risk factor for executive functioning and influences the adaptive functioning of adolescents.⁹ Individuals with chaotic home environments exhibit low academic achievement and less adaptive behavior.¹⁰ Chaos in a home environment provides a poor condition for learning for a student.¹¹ Household chaos affects psychological wellbeing.¹² The theory of chaos explains that psychological wellbeing gets affected by the harmful risk factors of chaos in adolescents.¹³ On the other hand, psychological distress shows a significant positive correlation with household chaos.

Chaos is a factor that leads to lower wellbeing and causes more distress. Chaos at home disturbs the social adapting function of an individual. Poor performance of children at school is related to the disturbances at home.¹⁴ Homes that are disordered, render chaotic environment and do not offer a conducive environment for learning through regularities, schedules, organized and rich surroundings always restrict the healthy development of adolescent.^{15,16} The World Health Organization (WHO) defines adolescent age as between 10 and 19 years. The period of puberty is divided into three periods which are the start 10-13 years, middle 14-17 years, and 18-21 years for late adults.¹⁷ Adolescent is a very sensitive

period in which mostly individuals are under psychological, emotional, and social pressures. It was hypothesized that chaos has significant negative correlation with mental health and social adaptive functioning of adolescents. Another hypothesis formulated on the basis of assumption that gender may differ with regards to study variables. The present work attempts to study the relationship between household chaos, mental health and social adaptive functioning among adolescents.

METHODOLOGY

It was a cross-sectional study conducted at National university of Modern Languages, Islamabad from March to August 2020 after approval from Board of Advanced Studies and Research. Convenience sampling technique was used to collect the data. Sample of the study consisted of 200 adolescents aged 10 to 19 years. Inclusion criteria was adolescent in above mentioned age group and being a student, as one scale CASAFS was used specifically for students.

Participants were 81 males and 119 females. Sample was taken from Rawalpindi/Islamabad, Sargodha and Faisalabad. Participants recruited in the study belonged to different socioeconomic status. Urdu translated version of all instruments was used. To measure the household chaos, Confusion, Hubbub and Order Scale (CHAOS) with 15 items was used. This scale has acceptable alpha reliability of 0.79, and 0.83, and predictive validity^{18,19}. To assess the level of social adaptive functioning, Child and Adolescent Social Adaptive Functioning Scale (CASAFS) that consisted of 28 items was used. This instrument shows adequate levels of internal consistency ranging from 0.67 to 0.81.

Mental Health Inventory (MHI) with 38 items was used to measure the psychological wellbeing and psychological distress. For Mental Health Scale, the estimates of internal consistency were high²⁰, alpha reliability being 0.95.

After taking formal permission from parents and teachers, and with the consent of participants, questionnaires were handed over to them. Data was collected in person by providing the questionnaires to the participants along with a demographic sheet and consent form in Urdu.

Table-4: Gender-wise differences in household chaos, mental health and social adaptive functioning (n=200)

Scales	Boys (n=81)	Girls (n=119)	t	p	95% CI		Cohen's d
	Mean±SD	Mean±SD			LL	UL	
CHAOS	10.02±2.71	11.86±3.85	-3.71	0.001	-2.81	-0.864	0.552
MHI	142.7±15.0	134.6±14.6	3.83	0.928	3.97	12.3	0.551
CASAFS	70.49±8.62	67.84±8.62	2.13	0.460	0.195	5.09	0.307

DISCUSSION

The aim of this study was to find out the relationship between study variables and to investigate the effect of household chaos on mental health and social adaptive functioning. There was significant negative correlation

RESULTS

Results indicate the descriptive statistics, psychometric properties with alpha coefficients of reliability and Pearson's correlation coefficient among all the study variables. Table-1 shows demographic details of the variables. Out of 200 participants 81 (40.5%) were boys and 119 (59.5%) were girls. The average age of participants was 16.6±2.32 years.

Table-2 depicts the correlation among all the variables which is negative but significant ($p<0.05$). Psychometric properties show the alpha reliability of all the variables ranges between 0.72 to 0.75 (Table-3).

Student's t-test revealed that significant differences were observed in ender groups between all study variables (Table-4)

Table-1: Demographic characteristics (n=200)

Variables	Frequency	Percentage
Age		
10-14 Years	55	27.5
15-19 Years	145	72.5
Gender		
Boys	81	40.5
Girls	119	59.5
Socio Economic Status		
Lower class	74	37.0
Middle class	89	44.5
Upper class	37	18.5

Table-2: Psychometric properties and correlation coefficient between CHAOS, MHI and CASAFS

Scales	CHAOS	MHI	CASAFS
CHAOS	-	-0.158*	-0.341**
MHI	-	-	0.103
CASAFS	-	-	-
Alpha	0.75	0.72	0.74
Mean	11.12	137.9	8.96
SD	3.54	15.29	8.69
Skewness	1.28	-0.255	-0.268
Kurtosis	-0.401	6.76	1.04

* $p<0.05$, ** $p<0.01$

Table-3: Linear regression analysis predicting mental health and social adaptive functioning with chaos

Variables	Mental health			Social adaptive functioning		
	B	SE B	β	B	SE B	β
Household chaos	145.5	3.53	-0.158*	77.4	1.93	-0.314**
R ²	0.20			0.90		
F for change in R ²	5.09			21.6		

* $p<0.05$, ** $p<0.01$

of household chaos with mental health and social adaptive functioning. Previous findings also highlighted that household chaos has negative relationship with mental health.²¹ Earlier findings on chaos at home and its relationship with cognitive ability and socioemotional

adjustment of school children indicated that home chaos had an impact on behavioural problems, study skills and on adjustment factor. The children with chaotic home environment had low academic achievement.²² A recent study also demonstrated the negative effect of household chaos on child executive functioning.²³ These findings indicate that high level of household chaos is related to lower level of mental health and poor social adaptive functioning. Regression analysis showed that 20% of variance in mental health and 90% of variance in social adaptive functioning was explained by household chaos. Gender-wise difference revealed significant differences in perceived household chaos. Mean scores indicated that girls perceived higher level of home chaos. No significant gender-wise difference was found in mental health and social adaptive functioning of adolescents.

The present study provides awareness regarding household effects on mental health and social adaptive functioning of adolescents. It gives insight about the factors of chaos at home which disturb the mental health (psychological wellbeing and psychological distress) and social adaptive functioning (school performance, peer relationship, family relationship and home duties/self-care).

CONCLUSION

Chaos at home affects the mental health and social adaptive functioning of adolescents. Efforts should be made to control the level of chaos at home to improve the wellbeing and academic achievement of adolescents.

LIMITATIONS

This study was conducted with a small sample of 200 from only three cities. The present study relied on self-report measures; future studies may use behavioural indices to measure chaos and social adaptive functioning to enhance the authenticity of findings.

REFERENCES

1. Bronfenbrenner U, Evans GW. Developmental science in the 21st century: Emerging questions, theoretical models, research designs and empirical findings. *Soc Dev* 2000;9(1):115–25.
2. Marsh S, Dobson R, Maddison R. The relationship between household chaos and child, parent, and family outcomes: a systematic scoping review. *BMC Public Health* 2020;20(1):513.
3. Garrett-Peters PT, Mokrova I, Vernon-Feagans L, Willoughby M, Pan Y. The role of household chaos in understanding relations between early poverty and children's academic achievement. *Early Child Res Q* 2016;37:16–25.
4. Evans GW. Child development and the physical environment. *Ann Rev Psychol* 2006;57:423–51.
5. Rutter M. Proceeding from observed correlation to causal inference: the use of natural experiments. *Perspect Psychol Sci* 2007;2(4):377–95.
6. Galderisi S, Heinz A, Kastrup M, Beezhold J, Sartorius N. Toward a new definition of mental health. *World Psychiatry* 2015;14(2):231–3.
7. Beauchamp MH, Anderson V. SOCIAL: an integrative framework for the development of social skills. *Psychol Bull* 2010;136(1):39–64.
8. Duan S, Lee M, Wolf J, Naples AJ, McPartland JC. Higher Depressive Symptoms Predict Lower Social Adaptive Functioning in Children and Adolescents with ASD. *J Clin Child Adolesc Psychol* 2020:1–8.
9. Briant A, Holmes CJ, Deater-Deckard K, King-Casas B, Kim-Spoon J. Household chaos as a context for intergenerational transmission of executive functioning. *J Adolesc* 2017;58:40–8.
10. Evans GW. Child development and the physical environment. *Ann Rev Psychol* 2006;57(1):423–51.
11. Johnson AD, Martin A, Brooks-Gunn J, Petrill SA. Order in the house: associations among household chaos, the home literacy environment, maternal reading ability, and children's early reading. *Merrill Palmer Q (Wayne State Univ Press)* 2008;54(4):445–72.
12. Deater-Deckard K, Chen N, Wang Z, Bell MA. Socioeconomic risk moderates the link between household chaos and maternal executive function. *J Fam Psychol* 2012; 26(3):391–9.
13. González M, Casas F, Coenders G. A complexity approach to psychological well-being in adolescence: Major strengths and methodological issues. *Soc Indic Res* 2007;80(2):267–95.
14. Evans GW, Hygge S, Bullinger M. Chronic noise and psychological stress. *Psychol Sci* 1995;6(6):333–8.
15. Wachs TD, Desai S. Parent report measures of toddler temperament and attachment: Their relation to each other and to the social microenvironment. *Infant Behav Dev* 1993;16:391–6.
16. Smith EP, Prinz RJ, Dumas JE, Laughlin, J. Latent models of family processes in African American families: Relationships, to child competence, achievement, and problem behavior. *J Marriage Fam* 2001;63(4):967–80.
17. The WHO, UNFPA, UNICEF Study Group on Programming for Adolescent Health (WHO Technical Report Series, No. 886). Geneva, World Health Organization, 1999.
18. Matheny AP, Wachs TD, Ludwig JL, Phillips K. Bringing order out of chaos: Psychometric characteristics of the confusion, hubbub, and order scale. *J Appl Dev Psychol* 1995;16(3):429–44.
19. Dumas JE, Nissley J, Nordstrom A, Smith EP, Prinz RJ, Levine DW. Home chaos: sociodemographic, parenting, interactional, and child correlates. *J Clin Child Adolesc Psychol* 2005;34(1):93–104.
20. Veit CT, Ware JE. The mental health inventory (MHI-38). Canberra, Australia: Department of Health and Aging. 1993. Available from: <https://eprovide.mapi-trust.org/instruments/mental-health-inventory>
21. Tucker CJ, Sharp EH, Van Gundy KT, Rebellon C. Household chaos, hostile parenting and adolescent's well-being two years later. *J Child Fam Stud* 2018;27(11):3701–8.
22. Shamama-tus-sabah S, Gilani N, Wachs TD. Relation of home chaos to cognitive performance and behavioural adjustment of Pakistani primary school children. *Int J Behav Dev* 2016;35(6):507–16.
23. Andrews K, Atkinson L, Harris M, Gonzalez A. Examining the effects of household chaos on child executive functions: A meta-analysis. *Psychol Bull* 2021;147(1):16–32.

Address for Correspondence:

Sadia Rehman, Department of Applied Psychology, NUML, Islamabad, Pakistan. **Cell:** +92-342-1881778

Email: sadiarehman196@gmail.com

Received: 24 Apr 2021

Reviewed: 22 Dec 2021

Accepted: 26 Dec 2021

Contribution of Authors:

SR: Data collection, statistical analysis and report writing

SA: Conception, research design and supervision

Conflict of interest: None declared

Funding: None