

# Mental health as correlates of substance abuse among street children

## Abstract

India is home to millions of deprived children live on the streets as a result of the loss of their loved ones, the breakdown of their families, or simply because they no longer could endure the abuses inflicted upon them by parents, relatives, and employers. Children of and on the streets face harsh environment and conditions which affects their psychological well-being and mental health. Continual exposure to the punitive conditions tends to indulge in substance abuse to get pleasure and satisfaction. There are to date, little researches available linking mental health with the substance abuse among the street children. Therefore, the present study intended to examine the extent of mental health and substance abuse and possible relationship between both the variables. The participants of age 15-18 years were randomly taken from various slums and shelter homes located in Delhi/NCR. Mental Health Inventory administered to assess the mental health and Drug Abuse Screening Test was used to assess the drugs dependency among them. The finding of the research indicated that females had poor mental health and males were involved in drugs abuse. Direct relations were obtained between mental health and drugs abuse among street children.

**Keywords:** mental health, street children, substance abuse, psychopathology

Volume 1 Issue 2 - 2015

**Sonali Sardana**

Clinical Psychologist, Tech Mahindra, India

**Correspondence:** Sonali Sardana, Clinical Psychologist, Let's Talk- HR Support (North Location), Tech Mahindra, Noida Special Economic Zone, India,  
Email [Sonali.sardana@techmahindra.com](mailto:Sonali.sardana@techmahindra.com)

**Received:** June 03, 2015 | **Published:** July 14, 2015

**Abbreviations:** SED, standard error of difference; PTSD, post-traumatic stress disorder; CD, conduct disorder; MDE, major depressive episode; STI, sexually transmitted infection

## Introduction

In a country like India with its multicultural, multi-ethnic and multi-religious population, the problems of socially marginalized and economically backward groups are immense. Within such groups the most vulnerable section is street children. There is no universal definition of street children although they constitutes marginalized group in our societies. They do not have what society considers appropriate relationships with major institutions of childhood such as family, education and health. One-half of the world's population lives in the Asia-Pacific region and 30 % of the people in this region live in poverty. Of those who live in poverty, children and young people comprise 40 %.<sup>1</sup> An overall assessment, which include a measure of the person's physical health, social and psychological functioning that conclude quality of life.

But continuous exposures of harsh environments and their nature of lifestyles make poor mental health and they tend to indulge in substance abuse activities as coping mechanism. Moreover, street life presents numerous dangers and stresses in the form of physical and sexual assaults and other types of victimization.<sup>2</sup> Drug abuse is a common way of coping with these stressors<sup>3</sup> and addiction is a major problem.<sup>4</sup>

For many homeless youth, having these types of early experiences likely leaves them more vulnerable to negative experiences associated with social stigma on the streets, given research showing that stigmatization has a greater impact upon the self-esteem of persons who have been abused in childhood.<sup>5,6</sup> Thus, in situations such as those mentioned above, children are left alone or abandoned,<sup>7</sup> or children do the "abandoning" by leaving home for the streets.<sup>8</sup> On

the streets, the child searches for possible ways to survive either by working or engaging in illegal activities.

Street youth face many dangers and sources of stress in their lives on the street. To support themselves, they engage in activities such as trying to find work, seeking money from family or friends, panhandling, prostitution, survival sex (sex for food, shelter etc.), drug-dealing, and theft.<sup>9-11</sup> The difficulty of surviving on the streets is highlighted by the large number of homeless youth who regularly lack shelter and go hungry.<sup>12</sup> There is a high incidence of mental disorders among homeless youth, such as depression, post-traumatic stress disorder, and suicidal behaviour.<sup>2,13,14</sup> Mortality rates for homeless youth have been found to be 12 to 40 times those of the general population,<sup>15</sup> and suicide is the leading cause of death.<sup>16</sup>

For the sake of survival, street children perform variety of jobs; they collect plastic, aluminium, paper, and anything else they may be able to resell; they serve as paperboys, shoe-shiners, dishwasher, or porters for hotels and local businesses; they play music, juggle, or simply beg. Their lifestyle and poor quality of life exposes them to the many severe risks that derive from their frequent involvement in drug trafficking, organ trade, prostitution and slavery especially in metropolitan cities in India. Whether they are involved in such activities or not but all these factors affects their mental health and make them vulnerable to adopt or consumes alcohol and other drugs to mitigate their anxiety. A study of runaways and non-runaways seeking treatment in a Hollywood outpatient clinic indicates drug abuse was four times more likely among runaways.<sup>17</sup>

Keeping in view the dearth of available literature concerning the mental health and substance abuse among children on streets, the present study was undertaken to examine the extent of mental health and substance abuse and possible relationship among two variables. The following hypotheses were formulated in the light of available literature:

- There would be difference between male and female adolescent son the level of mental health.
- There would be a significant difference between male and female street children with regards to their level of substance abuse.
- Mental health would be correlated with substance abuse among the two groups of street children.
- Mental health would be predictor of substance abuse among two groups of street children.

## Method

### Sample

One hundred (120) street children were randomly taken from the different slums located in Delhi/NCR. Fifty (60) males and (60) females' adolescent street children were included in the sample. Age range for the adolescents was 15 to 18 years old.

### Measures

For the assessment of psychological distress MHI-5 is a short version of the Mental Health Inventory developed by Veit & Ware<sup>18</sup> was used. The scale comprised of five questions on six point Likert type. Internal consistency reliability coefficients range from 0.80 to 0.96.

Drug Abuse Screening Test (Adolescent Version) developed by Skinner<sup>19</sup> was used to assess the extent of substance abuse. The scale

comprises 20 items and the responses of the respondent were rate on "Yes/No". The 20 item DAST correlates almost perfectly  $r=0.99$  with the original 28 item scale. The internal consistency reliability of the scale is also extremely high 0.95.

## Results

The result given in Table 1 shows that the mean scores 22.16 for males and 15.86 for females, which indicates that females were have poor mental health. The difference in the mean scores of the two groups were also found statistically significant as the standard error of difference between the two sample means (SED) was found 1.15 and 't' value was found 5.47.

The result given in table 2 shows that the mean scores 16.3 for males and 6.23 for females, children on streets which indicated that male were highly vulnerable to involve in drugs abuse. The difference in the mean scores of the two groups were also found statistically significant as the standard error of difference between the two sample means (SED) was found 0.76 and 't' value was found 13.15. Results of the above table revealing that mental health as a strong predictor of drug abuse among the street children as the standardized regression value (0.48) was found to be statistically significant beyond 0.001 level. The standardized regression value ( $\beta$ ) was similar to the overall correlation coefficient between the two variables. In other words degree of substance abuse can be predicted on the basis of mental health. From the results it was obvious that the predicted value in the form of  $\Delta R^2 = 0.217$  indicating that mental health predicting 21.7% involvement of street children in the substance abuse.

**Table 1** Mean, S.D of mental health scores and t-value for the difference between the two groups of street children

	Group	N	Mean	Std. deviation	SED	t-value	p
Mental Health	Male	60	22.16	3.64	1.15	5.47	0.001
	Female	60	15.86	5.14			

**Table 2** Mean, S.D of drugs abusescores and t-value for the difference between the two groups of street children

	Group	N	Mean	Std. deviation	SED	t-value	p
DAST	Male	30	16.3	1.66	0.76	13.15	0.001
	Female	30	6.23	3.85			

Results of the above table revealing that mental health as a strong predictor of drug abuse among the male street children as the standardized regression value (0.75) was found to be statistically significant beyond 0.001 level. The standardized regression value ( $\beta$ ) was similar to the overall correlation coefficient between the

two variables among male street children. In other words degree of substance abuse can be predicted on the basis of mental health. From the results it was obvious that the predicted value in the form of  $\Delta R^2 = 0.545$  indicating that mental health predicting 54.5% involvement of male street children in the substance abuse.

**Table 3** Result of simple linear regression analysis predicting the scores of drug abuse on the basis of mental health scores (N = 120)

$\beta$	$R^2$	Std. error of estimation	Adjusted $R^2$	F - value	Significance level
0.48	0.230	0.13	0.217	17.35	0.001

**Table 4** Result of simple linear regression analysis predicting the scores of drug abuse on the basis of mental health scores among male street children (n=60)

$\beta$	$R^2$	Std. error of estimation	Adjusted $R^2$	F - value	Significance level
0.75	0.561	0.016	0.545	35.71	0.001

**Table 5** Result of simple linear regression analysis predicting the scores of drug abuse on the basis of mental health scores among female street children (n=60)

$\beta$	$R^2$	Std. error of estimation	Adjusted $R^2$	F - value	Significance level
0.31	0.097	0.032	0.065	3.02	0.093

## Discussion

About three billion current urban residents dwell in slums or places categorized by one or more of these inadequacies: poor structural housing conditions, insecurity of tenure, undersupplied safe drinking water and sanitation, and severe overcrowding. All these factors have direct significances on the physical and psychological wellbeing of the children in slums and working on streets. From the results table 1 it appeared that issues of mental health were appeared among children on streets living in slums in general. Children on streets were involved in various laborious livelihoods to survive and to support their parents. Most of the children were involved in rag picking, dish washing, collecting plastics bags, shoe polishing and most importantly all these activities affects their psychological welling and mental health. The harsh physical and social conditions of urban slum life lead to chronic stress in children on street. National Academy of Sciences (2003) revealed that community-based studies of mental health in developing countries show that depression affects many urban adults, with poor urban residents suffering most. Zima et al.<sup>20</sup> suggested with regards to mental health and well-being that homeless families embody two generations at risk for mental problems and limited access to care. Earlier researches reported number of consequences of homelessness for children includes deficits in reading and language abilities, hyperactivity, aggression, depression and anxiety. Fox et al.<sup>21</sup> reported that almost two-thirds of the homeless children in their study had evidence of developmental delay and more than one-third exhibited emotional and behavioural problems.

From the results table 2 it appeared that substance abuse is the major concern among the street children in general. Male children on streets were reported that high on extent of substance abuse as compare to females. Sometimes especially children on streets were indulging in substance and drug abuse as coping mechanism from stressors present in harsh environment. Harold<sup>22</sup> reported that street children in India indulge in substance use at any time in their life and the minimum age at starting substance use in the study was 5 years. Street children are abusing wide range of substances, from inhalant to solid cigarettes and some of the children are employed in preparation of "charas" cigarettes in India.<sup>23,24</sup> This situation brought the street children in various health and social effects. UN-ODCCP<sup>25</sup> suggested that as a result, over half of the 18 year- old street girls reported Sexually Transmitted Infection (STI) and, and 20% of them admitted due to early pregnancy.

From the result of regression analyses it appeared that mental health as strong predictor of substance abuse among the children on streets. Mental health issues like anxiety, depression, sense of hopelessness, insecurity and other psychological distress make them vulnerable and tend to indulge in substance abuse to combat physiological and psychological strain. The intensity of the relationship was also so strong which indicated that street children have mental health issues higher will be the extent of substance abuse. It may be said that mental health issues will be related to substance abuse or it may call comorbidity was found between the mental health and substance related disorder. Johnson et al.<sup>26</sup> reported that nearly all of the adolescents (93%) who met criteria for a substance disorder met criteria for at least one other

mental disorder. Of these, 43% of the adolescents who met criteria for one of the substance disorders also met criteria for one other disorder; 50% met criteria for two or more other disorders. The comorbidity of substance use disorders with major depressive episode (MDE), conduct disorder (CD), and post-traumatic stress disorder (PTSD).<sup>27</sup> Taking into account only those who met criteria for a substance abuse disorder, 34.4% also met criteria for MDE. Nearly 90% of those who met the criteria for substance abuse also met the criteria for CD with no significant difference between males and females. Forty percent of all those meeting substance abuse criteria also met criteria for PTSD. Female substance abusers (52.6%) were nearly twice as likely as male substance abusers (26.2%) to meet PTSD criteria.<sup>26</sup> Nearly half (48.1%) of the adolescents met 12- month criteria for one of the three major substance disorders included in our study. Of those who met criteria for a substance abuse disorder, more than 90% met criteria for another mental disorder.

Considerable evidence links increased mental health related mortality associated with substance use disorders and suicide.<sup>28</sup> Kessler et al.<sup>29</sup> found that women had a higher prevalence of most affective disorders and non-affective psychosis and men had higher rates of substance use disorders and antisocial personality disorder. Figures of between 50 per cent and 80 per cent have been quoted for homeless mothers presenting with depression, anxiety and substance abuse.<sup>20,30-32</sup>

## Conclusion

There is no satisfactory substitute to 'street children', who are working on the streets. It's very difficult to identify and trace the actual number of street children and their problems because of their life styles and diversified cultures of India. From the present study it may be concluded the mental health issues were common among the street children in general and substance abuse related issues were also found significant among the street children. In both the groups of street children males were having significant poor mental health and indulge in substance related issues as compare to their counterpart females. From the regression analyses it can be concluded that mental health issues were strong predictor of substance related problem in general and high among male street children as well.

## Acknowledgements

None.

## Conflict of interest

The author declares no conflict of interest.

## References

- West A. At the margins: Street children in Asia and the Pacific. Asian Development Bank, Regional and Sustainable Development Department, Asia, 2003.
- Whitbeck LB, Hoyt DR, Bao WN. Depressive symptoms and co-occurring depressive symptoms, substance abuse, and conduct problems among runaway and homeless adolescents. *Child Dev.* 2000;71(3):721-732.

3. Adlaf EM, Zdanowicz YM, Smart RG. Alcohol and Other Drug Use Among Street-Involved Youth in Toronto. *Addictions Research & Theory*. 1996;4(1):11–24.
4. Greene JM, Ringwalt CL. Youth and familial substance use's association with suicide attempts among runaway and homeless youth. *Subst Use Misuse*. 1996;31(8):1041–1058.
5. Coffey P, Leitenberg H, Henning K, et al. Mediators of the long-term impact of child sexual abuse: perceived stigma, betrayal, powerlessness, and self-blame. *Child Abuse Negl*. 1996;20(5):447–455.
6. Crocker J, Major B. Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review*. 1989;96(4):608–630.
7. UNICEF. A world fit for us. UNICEF, New York, USA, 2007.
8. De Benitez ST. State of the World's Street Children: Violence. *Street children Series*. Consortium of Street Children (UK). 2007.
9. Greene JM, Ennett ST, Ringwalt CL. Prevalence and correlates of survival sex among runaway and homeless youth. *Am J Public Health*. 1999;89(9):1406–1409.
10. Hagan J, McCarthy B. Mean Streets: Youth Crime and Homelessness. Cambridge: Cambridge University Press; 1997.
11. Antoniadis M, Tarasuk V. A survey of food problems experienced by Toronto street youth. *Can J Public Health*. 1998;89(6):371–375.
12. Kipke MD, Unger JB, O'Connor S, et al. Street youth, their peer group affiliation and differences according to residential status, subsistence patterns, and use of services. *Adolescence*. 1997;32(127):655–669.
13. Kidd SA. The Walls Were Closing in, and We Were Trapped: A Qualitative Analysis of Street Youth Suicide. *Youth & Society*. 2004;36(1):30–55.
14. Yoder KA. Comparing suicide attempters, suicide ideators, and nonsuicidal homeless and runaway adolescents. *Suicide Life Threat Behav*. 1999;29(1):25–36.
15. Shaw M, Dorling D. Mortality among street youth in the UK. *The Lancet*. 1998;352(9129):743.
16. Roy E, Haley N, Leclerc P, et al. Mortality in a cohort of street youth in Montreal. *JAMA*. 2004;292(5):569–574.
17. Yates GL, MacKenzie R, Pennbridge J, et al. A Risk Profile comparison of runaway and non-runaway youth. *Am J Public Health*. 1988;78:820–821.
18. Veit CT, Ware JE Jr. The structure of psychological distress and well-being in general populations. *J Consult Clin Psychol*. 1983;51(5):730–742.
19. Skinner HA. The drug abuse screening test. *Addict Behav*. 1982;7(4):363–371.
20. Zima B, Wells K, Benjamin B, et al. Mental health problems among homeless mothers: relationship to service use and child mental health problems. *Arch Gen Psychiatry*. 1996;53:332–338.
21. Fox SJ, Barnett RJ, Davies M, et al. Psychopathology and developmental delay in homeless children. *J Am Acad Child Adolesc Psychiatry*. 1990;29(5):732–735.
22. Harold E. Concepts of Chemical Dependency. 5th ed. Brooks/Cole-Thomson Learning, California, USA, 2002.
23. Pagare D, Meena GS, Singh MM, et al. Risk factors of substance use among street children from Delhi. *Indian Pediatr*. 2004;41(3):221–225.
24. Rao J. The History of Child Right in India. UNICEF, India, 2007.
25. UN-ODCCP. Rapid situation assessment of street children in Cairo and Alexandria. UN-ODCCP, Cairo, Egypt, 2001.
26. Johnson KD, Whitbeck LB, Hoyt DR. Substance Abuse Disorders Among Homeless and Runaway Adolescents. *J Drug Issues*. 2005;35(4):799–816.
27. Johnston LD, O'Malley PM, Bachman JG. Monitoring the future national results on adolescent drug use: Overview of key findings, 2001. Ann Arbor: Institute for Social Research, The University of Michigan, Michigan, USA, 2001.
28. Lorant V. Inegalites socio-economiques de la mortalitedans les communes belges. *Revue d'épidémiologie et de santé publique*. 2000;48(3):239–247.
29. Kessler RC, McGonagle KA, Zhao S, et al. Lifetime and 12 month prevalence of DSM-III-R psychiatric disorders in the United States. *Arch Gen Psychiatry*. 1994;51(1):8–19.
30. Bassuk EL, Rosenberg L. Why does family homelessness occur? A case-control Study. *Am J Public Health*. 1988;78(7):783–788.
31. Bassuk EL, Rubin L, Lauriat AS. Characteristics of sheltered homeless families. *Am J Public Health*. 1986;76(9):1097–1101.
32. Parker RM, Rescorla LA, Finkelstein JA, et al. A survey of the health of homeless children in Philadelphia shelters. *Am J Dis Child*. 1991;145(5):520–526.