Role of Authoritarian Parenting Style and Impulsivity on Substance Abuse

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Abstract

Psychological construct of parenting style has been accepted as the main factor of children's psychological problems. Authoritarian parenting has often been understood as a strict and demanding style of rearing a child with minimal expression and response. Respondents were substance abusers and non-abusers drawn using a multi-stage random sampling technique. The study examined the effect of authoritarian parenting styles and impulsivity; attentional and motor impulsivity, among substance abusers and non-abusers who were sharing the same demographic variables; evaluated using the Drug Abuse Screening Test (DAST, 1982), Parental Authority Questionnaire (Buri, 1991) and the Barratt Impulsiveness Scale (BIS-11; Patton et al., 1995). The results revealed that substance abusers scored higher on authoritarian parenting, motor impulsivity and attentional impulsivity; and positive relation was found between the dependent variables. Results explain the importance of parenting style for moulding the personality of children.

Keywords: authoritarian, parenting, impulsivity, attention, motor impulsivity.

Introduction

Substance abuse or use of psychoactive substances has had a long history dating back to the ancient world. In the modern world, new substances of abuse emerged along with the advancement in technology and thus the manner of utilization. Predisposing factor of substance abuse can be identified broadly as environmental and genetic factors (Vetulani, 2001). The understanding of substance abuse and the reason as to why one is connected to it is a bottom up approach involving subsequent studies.

Baumrind's (1971) general styles of parenting such as Authoritative, Authoritarian and Permissive, extended by Maccoby & Martin (1983) including neglectful parenting style is one of the most widely endorsed classifications. One of them which is commonly known as

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'asian parenting' or authoritarian style as in Baumrind's parenting, is a style of rearing where parents ruled with an iron fist and children have none or minimal chance for expression and response. Strict and demanding rules are laid out, which children have to abide to absolutely and generally with no chance for negotiating. This traditional style seems like a good and indisputable rearing style due to its rigidity and firmness. However, authoritarian style of parenting compared to an authoritative style had a higher chance of developing delinquent behaviour (Terry, 2004; Bronte-Tinkew et al, 2006; Diggs et al, 2015) and specifically, anticipates adolescent tobacco use (Cox, 2001). Non-authoritative styles such as authoritarian, neglectful and permissive styles also imposed higher chances of substance use (Bronte-Tinkew et al, 2006; Benchaya et al, 2019; Gatune, 2020). Negative parenting practices such as poor monitoring, low warmth, negligence, rejection and parental substance use strongly predicted substance use and other delinquent behaviours (Rai, 2008; Holth, 2014; Vermeulen-Smit et al, 2015; Martinez-Loredo et al, 2016; Brewer, 2017). Some studies linked parenting style, substance use and impulsivity with the latter functioning as a mediator (Malakar & Mullick, 2018; Ran et al, 2021).

In addition to parenting style, one prominent element in substance use or abuse is impulsivity, which often gets linked to blundered decision makings. The two subsets of this - impulsivity, unlimitedly motor and attentional impulsivity, are focused within the present study. Motor impulsivity is often explained as behaviours involving action without forethought (Patton et al, 1995; Stanford et al, 2009). Dickman's (1993) understanding of dysfunctional impulsivity can be regarded as synonymous to motor impulsivity. Attentional impulsivity on the other hand refers to contemplation and the ability to draw focus on current task (Patton et al, 1995). The role of impulsivity on substance abuse is multifaceted and a number of impulsivity measures impact in diverse ways. The negative impact of motor impulsivity and inattention often leads to maladaptive behaviour and behaviours detrimental to well-being. Attentional and motor impulsivity directly influence substance use specifically among methamphetamine users (Cservenka & Ray, 2017) and other substance of abuse (Mitchell & Potenza, 2014) and forms of addictivity (Meule et al, 2017). Delay discounting often used as a measure for impulsivity emerged as a core disability among substance users and obesity (Mole et al, 2014).

Parenting styles and impulsivity seem to be connected albeit the cause-effect relationship determination is arduous. Neuropsychological studies often reveal the intrinsic nature of impulsivity collaborating with genetical studies (Bezdjian et al, 2011; Pavlov et al, 2012). Impulsivity may also play a mediating role in parenting style effects to different behaviours such as self-harm (Ran et al, 2021). Abuse of psychoactive substance is a problem involving deficit in withholding and inhibiting immediate reward-related activity. Attention capacity and motor impulsivity is often accompanied with substance use and abuse (de Wit, 2008; Winstanley, 2010; Cservenka & Ray, 2017). Attentional impulsivity and motor impulsivity is also connected to other forms of addiction such as 'food addiction' (Meule et al, 2017). The involvement of impulsivity traits in substance abuse and other forms of addiction cannot be undermined.

Objectives

The present study investigates the role of authoritarian parenting style, attention and motor impulsivity among substance abusers by outlining the following problem:

(i) To examine perceived authoritarian parenting among substance abusers and non substance abusers.

(ii) To examine the impact of attention and motor impulsivities of substance abusers and substance non-abusers.

(iii) To examine whether significant relationship exists between attention and motor impulsivity among substance users.

Hypotheses

To meet the objectives of the study, the following hypotheses were formulated:

(i) There will be significant difference between substance abusers and substance non-abusers on authoritarian parenting style

(ii) There will be significant difference between substance abusers and substance non-abusers about their motor impulsivity.

(iii) There will be significant difference between substance abusers and substance non-abusers on attentional impulsivity.

(iv) There will be significant positive correlation between attentional impulsivity and motor impulsivity

Methodology

Samples:

200 Mizo Male adolescents were screened out from the target population using a multi-stage random sampling procedure, consisting of male adolescent substance abuser and substance non-abuser. Their age ranged from 13-19 years and most of them consist of school going students and adolescents from observation homes from different district capitals of Mizoram.

Tools:

1) Drug Abuse Screening Test (Skinner, 1982)

The DAST-10 was originally designed by H.A Skinner to provide a brief, self-report instrument for population screening, clinical case finding and treatment evaluation research. The DAST yields a quantitative index of the degree of consequences related to drug abuse. The DAST-10 is a 10-item self-report instrument that has been condensed from the 28-item DAST.

2) Parental Authority Questionnaire (PAQ; Buri, 1991)

Buri (1991) developed a self report measure asking an adult to respond to how their parents acted towards them. The PAQ has three subscales: ***authoritarian, authoritative and permissiveness***. The measure consists of 30 items, 10 for each of the different subscales in a five point 5-point Likert format ranging from strongly agree -1 to Strongly disagree-5. The PAQ is scored by summing the individual items to comprise the subscale scores. Scores on each subscale range from 10 to 50. 23, 27 and 30. The scale consisted of two sets, each for the perception of father and mother with the similar items.

3) Barratt Impulsiveness Scale (BIS-11; Patton et al., 1995)

BIS-11 is a questionnaire designed to assess the personality/ behavioural construct of impulsiveness and the most widely cited instrument for the assessment of impulsiveness. The BIS-11 factor structure which includes 30 items that are scored to yield six first-order factors (*attention, motor, self-control, cognitive complexity, perseverance, and cognitive instability impulsiveness*) and three second-order factors (*attentional, motor, and non-planning impulsiveness*). The BIS uses a 4-point Likert type scale ranging from Rarely/Never - 1 to Almost Always - 5.

Design

A control group design was utilized to meet the objectives of the study with substance abusers as the treatment group and substance non-abusers as the control group. The two independent groups were matched with 100 respondents within each group who are assigned randomly using a simple random technique.

Procedure

Socio-demographic profile was constructed for the study to include more information and variables. 400 copies of the compiled psychological scale along with consent forms were produced. Necessary permission from the authorities and guardians was taken before conduction of the tests with clear instructions about the purpose of the study and instructions as per manual of the tests. The administration of the tests strictly observed the manuals and ethics of research as per APA norms. The test was conducted in individual condition and queries were clarified with careful scrutiny before the respondents left the room.

Results

The data was screened for missing values and outliers, the psychometric adequacy of the scales were checked and the scale is deemed a reliable measure of the construct within the selected population; attention subscale (α=.83), motor impulsivity subscale (α=.89) and authoritarian (α=.82).

Hypothesis 1

In the first hypothesis we can reject the null hypothesis and the alternate hypothesis is fairly admissible suggested by the statistics. The independent t-test result showed that there is significant difference between substance abusers and substance non-abusers on perceived authoritarian parenting [$t(198)$= -8.6; p<.01]. The effect size of the mean difference was large (Cohen's d= 1.04). Therefore a large number of the sample from substance abuser group perceived their parents as being authoritarian and the impact of that perception is a strong one.

Hypothesis 2

The result of the second hypothesis was similar to Hypothesis 1. The statement that there will be difference between substance non-abusers and substance abusers on motor impulsivity is acceptable [$t(198)$= -12.4; p<.01]. The effect size of the mean difference was large (Cohen's d=1.30) and we can say that substance abusers have greater motor impulsivity i.e action without forethought (Patton et al, 1995). The difference observed between the two groups is a landslide.

Hypothesis 3

The third hypothesis can also be accepted as the independent t test result showed significant difference between substance non-abusers and substance abusers [$t(198)$= -12.1; p<.01) on attentional impulsivity. The calculated effect size of the mean difference is equal to 1.30. The difference between substance non-abusers and substance abusers about their attentional impulsivity is a large one. Therefore it is sufficient to say that substance abusers have greater (mean =13.6) difficulty in maintaining their attention.

Hypothesis 4

In the fourth hypothesis, the result came from the substance abuser faction only. The statistics showed that both attention and motor impulsivity are related, though not strong enough considering they are part of the bigger factor. There was a positive correlation between attentional impulsivity and motor impulsivity (r=.53; r^2=.28). Attentional impulsivity and motor impulsivity both accounted for about 28% of communal variation among substance abuser.

Table showing the mean, sd, reliability coefficients, homogeneity and t-test on attention, motor impulsivity and authoritarian parenting scores of substance abusers and substance non-abusers

	Substance non-abusers		Substance abusers		Cronbach's alpha	Levene's test		Independent t-test			
	Mean	sd	Mean	sd		F	Sig	df	t	Cohen's *d*	Pearson *r*
Attentional impulsivity	9.2	2.7	13.6	2.3	0.83	0.78	0.37	198	-12.1**	1.3	.53**
Motor impulsivity	12.6	2.7	17.4	2.7	0.89	0.003	0.96	198	-12.4**	1.3	
Authoritarian parenting	23.8	3.8	28.3	3.5	0.82	0.41	0.52	198	-8.6**	1.04	-

* significant at .05 level ** significant at .01 level

Conclusion

Impulsivity has been strongly associated with substance abuse and these substances change performance in measures of impulsivity (de Wit, 2008). The present study shows that substance abusers compared to non-abusers clearly had difficulty in maintaining their attention and had composure problem. In addition to that, substance abusers are likely to act instantly and without forethought compared to non-abusers. Although identification of the relationship between attentional impulsivity and motor impulsivity among substance abuser is uncomplicated, determining the cause-effect relationship is arduous. Cservenka & Ray (2017) found that among methamphetamine users attentional and motor impulsivity was high although it doesn't justify whether they are the antecedents. The same association was observed among abusers of other substance who are impulsive (Mitchell & Potenza, 2014). Impulsivity seems to be the outcome or the antecedent among substance users (Moeller et al, 2001; de Wit, 2008; Mitchell & Potenza, 2014; Cservenka & Ray, 2017) and may induce the behaviour of substance use or any other forms of problem addiction (Yan et al, 2016; Meule et al, 2017). Among ADHD patients, those who were dependent on cocaine are absolutely more likely to take actions at an instant and without delaying them. (Crunelle et al., 2013). Although the above referred studies highlight the prominence of impulsivity in substance abuse, these studies may be overlooking the direction of the cause-effect relationship. Therefore it is unclear as to how impulsivity exactly influences substance abuse as the impact is diverse and substance abuse may also increase impulsivity.

Authoritarian rearing style had deep negative impact among the respondents where parents imposed strict rules with minimal chance of response. Most of the substance abusers in the present study perceived their parents as strict and demanding and the child has none or minimum chance for responding in their relationship. The difference between the two groups was large enough to conclude that the perception of substance abusers about their parents rearing style as being authoritarian is immense by a landslide. Predating studies showed authoritarian parenting to have good prospects in developing delinquent behaviour, and substance abuse in specific (Terry, 2004; Gatune, 2020). Authoritarian parenting still resulted better compared to the neglectful style regarding lifetime usage and dose of usage (Montgomery et al., 2008). Non-authoritative parenting styles have higher chance of developing substance abuse (Clausen, 1996; Bronte-Tinkew et al, 2006; Benchaya et al, 2019) while authoritative style seem to have better consequence (Becoña et al, 2015). In contradiction to the present study and several other studies, parenting may not be a prominent factor in substance abuse (Berge et al, 2016).

Limitations

There are many limitations to this study such as incapability to include more respondents, incompetent design and the non inclusion of socio-demographic variables. The predictability of the variables to substance use was not included within the design. It is advisable that later studies include regression model for predicting the impact of risk factors. The inadequacy of the study regarding socio-demographic variables must be remitted by future studies as they are efficient in substance abuse studies.

Suggestion

The study was directed towards understanding dissimilarities between substance abuser and substance non-abuser in general. The result of the study shows the importance of parenting and nurturing of adolescents, personality traits such as motor impulsivity and attentional impulsivity. Therefore it is vital to formulate interventions that would stress more on parent-child relationship and developing intervention strategies that focus on inhibition training for adolescents who developed impulsive traits.

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