



Effect of Recreational Exercises on Emotional and Behaviour Problems among Juvenile Delinquents

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Abstract

Since earlier times, the population of juvenile delinquents has faced many challenges of deviant behaviour and emotional issues. Researchers and authorities have tried many feasible methods to correct these issues. Early theories of sports and recreation have provided that recreational exercise and physical activities help to correct emotional and behavioural problems. Current study aims to investigate the effect of recreational exercises on the juvenile delinquents' emotional and behavior problems. Fifty (50) juvenile boys, age ranging between 14-17 years were randomly selected as subjects from Government Juvenile Home (Boys), Mathura. They were divided randomly into two groups of 25 each, namely recreational exercises group and control group. Subjects' behavior was rated by their supervisors on 'Emotional and Behavior Problem scale (EBPS) developed by McCarney & Arthaud (2012) in pre and post intervention sessions. As intervention, subjects were administered with selected recreational exercises for a period of 12 weeks. Paired samples t-test was used to see the significance of difference between pre and post scores. In recreational exercises group mean scores on EBPS at pre-test (50.88 ± 9.93) were found higher than the mean scores at post-test (45.28 ± 8.40). t-test indicated statistically significant change in these scores ($t = 9, p < .001$). This study concludes that recreational exercises reduce emotional and behaviour problems and enhance well-being, mental focus, mood, attention, and stress tolerance among juvenile delinquents.

Key words: Juvenile delinquents, Recreational exercises, emotional and behaviour problems

Introduction

Juvenile delinquency or juvenile offence has been a domain of study for many years (Rutter and Giller 1983). The word 'juvenile delinquency' is most frequently used in modern era to signify the problem of juvenile agitation and offences. The term 'juvenile', is derived from a Latin word 'Juvenis', that means young and it refers to boys and girls who have not attained an age of majority (18 years). The term 'delinquency' is derived from Latin word 'delinquere', a combined form of 'de' (away from) and 'linquere' (to leave) (Glueck and Glueck 1950). It was, in earlier times, often referred to as the failure of an individual to perform a task or a duty. In other words, we can say that 'delinquency' is more a 'fault' than a 'crime'. (bprd.nic.in/writereaddata/linkimages).

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Young children behave according to the environment they live in (Mullineaux, Deater-Deckard et al. 2009). When environment of a young child is depressing, stressful or traumatic, he or she shows problematic behaviours that resemble his or her environment (Robins 1966). The studies suggest that all children go through some type of crisis in their life, but the high-risk crises are the ones that have the most influence on a child and can lead a child's life towards negative outcomes (Bagley and Ramsay 1986). In recent years, considerable time, thought, and attention have been given to the study of juvenile delinquency and to its probable causes and solutions. As a result of such investigations, it is widely agreed that delinquency is complicated and has many causes. Therefore, it does not appear that any single solution or one-sided approach to the problem of delinquency is enough to tackle (Anderson III 2014). Unfortunately, many of children are being raised in highly stressed families in this contemporary world. Consequently, child abuse and neglect is increasing dramatically (Kumpfer and Bayes 1995). Delinquent children generally show behaviours that are inappropriate for the society which they might commit habitually such as anti-social and harmful activities e.g. truancy, staying out late, stealing, robbery, wandering aimlessly or vagrancy, challenging attitude, bullying, smoking, drug addiction, drug trafficking, telling lie, teasing, forgery, suicide, sex offences and the like (Vadackumchery and Kattakayam 1995; Fry 2012; Black 2013). Youth violence, Delinquency, alcohol and drug abuse, forming or joining gangs, early sexual involvement, and other problematic behaviours could also be counted as for grave concern (Lerner and Galambos 1998; Thornberry, Lizotte et al. 2003).

Leisure and recreation by the involvement in physical activity has become an area of growing interest in present years. Researchers have begun to recognize the role of participation in sports and physical exercises and, consequently, there has been an increase in the number of studies related to this field (Fink, Trail et al. 2002). Specifically, participation in physical and outdoor leisure and recreational activities have been associated with increased happiness, lower levels of depressive symptoms and life satisfaction (Menec 2003), and improved health and social functioning (Drakou, Tzetzis et al. 2008). Furthermore, involvement in physical exercises may promote active lifestyle and associated health benefits (Davison and Lawson 2006). Participation in recreation exercises and regular physical activities has been associated to reduced depressive symptoms, decreased stress and anxiety, improved self-concept, self-esteem and self-acceptance, changes in anti-social behaviour, and enhanced psychological well-being. Recreational exercises and physical activities also improve self-efficacy and sense of competence. Physical exercises are not only helpful in combating obesity, but they have also been helpful in maintaining lower stress levels and a healthier self-image (Harrison and Narayan 2003), improved self esteem (Ransdell, Dratt et al. 2001) and overall physical health (World Health Organization, 2010)

It has been recognized that recreational exercises and physical activities are valuable tools in preventing children's deviant behaviour since the earliest days of the playgrounds and recreation movements (Parish-Plass and Lufi 1997). The basic prediction is that social results are influenced by recreational exercises, and that these exercises can be used as a control mechanism for children's deviant behaviour (Conrad 1975). This is evident in many of the early theories of sports and recreation activities. This attitude forms the early practical and theoretical basis for the link between recreational exercises and the problems of children (Law, King et al. 2006). Over the years, research studies have suggested that a positive influence could be exerted on children through physical activity and recreational exercises. Physical activity and recreational exercises have also been shown to facilitate the development of children and to play an important role in influencing behavioural problems and in preventing or reducing risk (Scully, Kremer et al. 1998; Law, King et al. 2006).

Recreation could be defined as being all those socially acceptable activities that a person selects to do in order to make their leisure time more interesting, more enjoyable, and more personally satisfying (McKay, Reid et al. 1996). It is the time when a man could, if he would, understand and master the forces inside and outside himself for a happy, orderly and peaceful living. It is an opportunity for the mind to look back with an inward eye on its long and arduous journey. These are the moments of deep insight, of subtle and fleeting glimpses, into the workings of the world; the moments of stepping aside from daily affairs to gain a sense of balance. Researchers studying leisure, parks and recreation have an important role to play in addressing active living and health issues (Henderson and Bialeschki 1993).

The main objective of a recreation program is to give the children a chance to exercise and recreate which would physically wholesome, mentally stimulating and socially sound. Recreational exercises may also have a favourable effect on development of mood, boredom and character. Particularly, in adolescents' lives, boredom is showed as an important factor because of its links to loneliness, hopelessness, depression, and distractibility. Boredom has also been associated to the use of alcohol among college and school students and to deviant behaviour at school. Children who participate in suitable recreational activities have been able to decrease the symptoms and remain themselves away from deviant behaviours (McKay, Reid et al. 1996; Witt and Crompton 1996). Apart from this, building healthy bodies and acquiring precious skills, participating of children in recreational exercises can protect them from emotional and social problems (Ross and Roberts 1999).

The current study takes a quantitative approach to identify the effectiveness of recreational exercises in reducing the symptoms of emotional and behavioural problems amongst the population of juvenile delinquents.

Methodology

The study was formulated as a true random group design, consisting of a pre and post-test. Fifty (50) subjects, age ranging 14 to 17 years were selected from Government Juvenile Home (Boys), Mathura. They were divided into two groups of 25 each through randomization with MS Excel. Group 'A' acted as recreational exercises group and Group 'B' acted as control group. Subjects of group 'A' were administered with recreational exercises and group 'B' was under control, not to perform any interventional activity, for a period of 12 weeks (five days a week) at juvenile Home. The subjects' behavior was rated by their supervisors on 'Emotional and Behavioral Problem scale (EBPS) before as well as after the administration of the intervention. Paired samples t-test was used to see the significance of difference between pre and post scores. The level of significance was set at 0.05.

Training program of recreational exercises:

The intervention program was delivered to the subjects in the following format.

Day	Recreational Games	1 to 4 weeks	5 to 8 weeks	9 to 12 weeks
Monday & Thursday	Musical chair & Blindman's buff	30 minute	40 minute	50 minute
Tuesday & Friday	Dodge ball & Burning balls	30 minute	40 minute	50 minute
Wednesday	Stole the meet & Lemon race	30 minute	40 minute	50 minute

Subjects of recreational exercises group were administered with selected recreational exercises. They performed above selected six recreational games as recreational exercises. Two games were played every day and each game was played for 15 minutes in the beginning. There was 5 minute rest between the games. Duration of games was increased after each four weeks for specific time as per the schedule.

Administration of EBP Scale:

EBP scale consists of 32 items which assess different dimensions of emotional and behavioural problems. The scale is used by an independent assessor who observes the subject and rates their behaviour. In our study, juvenile observation home supervisors were appointed as assessors who assessed and rated each subject individually. The assessment procedure for each child was done twice, once before the delivery of intervention and once after the intervention. The EBPS scores were recorded in SPSS software for statistical analysis.

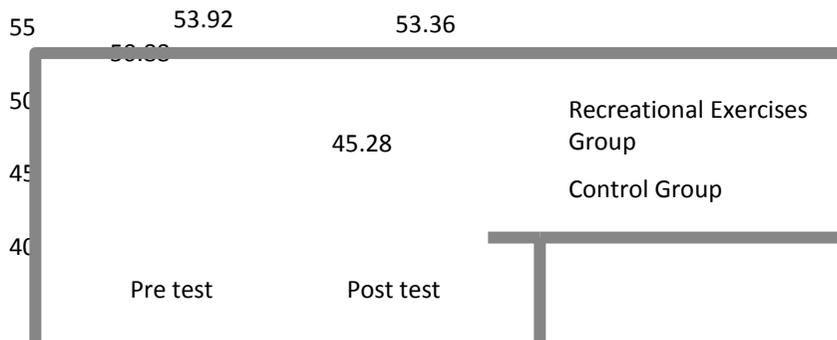
Results:

Comparison of means between pre and post test of both the groups

Group	Mean		Mean difference	Standard Deviation		t	(p)
	Pre	Post		Pre	Post		
Recreational Exercises	50.88	45.28	5.60	9.93	8.40	9.00	<.001
Control	53.92	53.36	.56	12.53	12.22	1.53	.139

Paired samples t-test was used to see the significance of difference between pre and post mean scores of recreational exercise group and control group. Results indicate that there is significant difference exists between the pre-test and post test scores in emotional and behavior problems. The mean values of control group in pre and post measurement do not show any statistically significant difference. Thus the experiment suggest that the reduction in the symptoms of emotional and behaviour problems has occurred specifically due to our intervention i.e. recreational exercise program.

Fig.1: Graphical representation of Mean of emotional and behavior problems of both the groups.



Discussion

The health benefits of recreation and physical activity for the general population are well established. For children and youth, the health benefits are equally important. While the level of benefit can depend on the kinds and amount of activities (in this case, we are referring primarily to physical activities), it is generally recognized that moderate bouts of activity throughout a child's day can be beneficial. The benefits for children lie in the fact that physical activities can help control childhood obesity, lower elevated blood pressure and improve children's overall health and growth (Ewing, Seefeldt et al. 1996)

In addition to building healthy bodies and acquiring valuable skills, children's involvement in cultural and recreational activities can protect them from emotional and social problems (Ross and Roberts 1999). Participation in recreation and regular physical activity has been linked to improved self-concept and self-esteem, reduced depressive symptoms, decreased stress and anxiety, improved self-acceptance, changes in anti-social behaviour, and enhanced psychological well-being. Exercise and physical activity also improve self-efficacy and sense of competence. Early play experiences with parents, for example, teach physical control, skill and social competence. A supportive coach or supervisor in a recreational setting can also provide children with similar benefits vis-a-vis skill development, competence and self-esteem (Ewing, Seefeldt et al. 1996) Recreation can also have a positive effect on boredom, mood, and character development. Boredom is viewed as an important factor, particularly in adolescents' lives, because of its links to depression, hopelessness, loneliness, and distractibility. Boredom has also been linked to alcohol use among college and high school students, to smoking among high school students, to deviant behaviour at school, and to over-eating. Youth who participate in appropriate recreational activities have a decrease in leisure boredom and subsequently and a decrease in deviant behaviours (McKay et al, 1996; Reid, 1994; Witt, 1996). While participation in recreational activities was excellent, only marginal spillover effects on school performance or behaviour in the home were observed. It was generally felt, however, that the children had improved their overall level of skill development and had an improved level of self-esteem (Offord et al, 1992).

The Ottawa study and others have established a clear and statistically significant link between participation in recreational activities and changes in antisocial behaviours. Police charges against juveniles and security violations were seen to decrease considerably, as did the number of fire-related telephone calls (Jones and Offord 1989; Offord, Hanna et al. 1992; Ewing, Seefeldt et al. 1996).

Conclusion

The obtained data suggested that recreational exercises help in reducing inappropriate behavior and depression and increase the feelings of satisfaction, self-confidence, well-being and self-control among juvenile delinquents. Recreational Exercises work on the brain and therefore on the mind and emotional levels of the child, helping to re-establish harmony. On the basis of statistical analysis of data it was concluded that 12 weeks of recreational exercises caused significant reduction in emotional and behavior problems among juvenile delinquents.

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