Original Research Article

Effect of social skills training on juveniles' psychological problems in a detention center in Ghana

ABSTRACT

Background. In this world it is important to train children to acquire useful skills such that they would take care of themselves tomorrow and show good behaviors. The world can only be a peaceful and developed place if children are trained to acquire social skills that are useful. Therefore, to determine whether social skills training would change juvenile misbehavior this study was conducted.
Methods. This study was a quasi-experimental design. The sample was drawn from a population of 97 juveniles in detention at a Senior Correctional Centre (formally known as Borstal Institute) in Accra, Ghana. The sample was 50 juveniles in a Correctional Centre.. The outcome measure was Brief Symptom Inventory (BSI). Test scores on delinquent behavior were compared across the two groups; (1) 25 juveniles who underwent social skills training (SST) and (2) 25 matched control group of juveniles who did not undergo SST. Participants in the training group underwent a one-month SST. The training sessions lasted for 60 minutes and they met three times a week for four weeks. Data collection was from May 2017 to August 2017.
Results. The results of the experimental group showed that 8 subscales somatization *(df* = 48; *t* = 2.39*; p* < .025), obsessive-compulsion (*df* = 48; t = 4.32*; p* < .001), depression (*df* = 48; t = 4.13; *p* <.001), anxiety (*df* = 48; t = 3.80; *p* < *.001),* hostility (*df* = 48; t = 3.74; *p* <. 001), phobic anxiety (*df* = 48; *t* = 3.80; *p* < .001), paranoid ideation (*df* = 48; *t = 2.46; p* < .021), and Psychoticism (df = 48; *t = 2.28; p* < .032) to have statistically significant differences.
Conclusion. This study found that out of the 9 subscales used only 1 scale was not statistically significant for the experimental group. This study provided evidence indicating juveniles who underwent social skills training (SST) had improvement in their social skills as compared to their colleagues who did not have such training.

Keywords: Brief Symptom Inventory, delinquency, Ghana, Juvenile, misbehavior, psychological problems, social skills training

1. Introduction

In this world it is important to train children to acquire useful skills such that they would take care of themselves tomorrow and show good behaviors. The world can only be a peaceful and developed place if children are trained to acquire social skills that are useful.

Effective social relations are necessary for emotional and behavioural modification, and successful working in social setting (1,2). This success can be especially challenging for adolescents to establish and maintain competent social connections because of the many developmental changes that occur.

Juvenile misbehavior is a problem in contemporary society. In Ghana, according to the Department of Social Welfare annual performance report, 276 juvenile delinquency cases were handled in the year 2016 (3). The Ghana prison service annual report in 2016 also indicated an average daily lock-up of 115 juvenile lawbreakers (3). Ghana's population is reported to be very youthful with two in every five people being less than 15 years (4). This is really a challenging issue especially because Ghana has limited prospects for youth development.

Juvenile misbehavior has been an issue, which has been discussed at all levels of human development. Juvenile misbehavior is taking part in an illegal behaviour by minor (5,6). Most legal systems prescribe specific procedures for dealing with juveniles, such as juvenile detention centers, and courts. For the purpose of this study, Juvenile misbehavior is defined as acts of a kind which having been committed by persons (boys) between the ages of 16 and 18 years, having resulted in their appearing before court and successive committal to a Senior Correctional Centre (SCC), for a statutory period of 3 months to three years.

The population of people in prison have higher rates of problems in multiple domains including, social (7), Social skills are defined as a set of behaviours that allow individuals to initiate and maintain positive social contacts, peer acceptance, and allow for effective surviving (8). A social skills shortfall can take the form of noncompliance with school rules, physical or verbal aggression, or defiance of authority figures (9).

1.1 Related Literature

According to Arthur (10) even though there exist a excess of literature on juvenile delinquency and how it can be prevented in the world, there is a dearth of research with respect to Ghana.

The objective of this study is to determine if differences exists in the level of social skills possessed by juveniles in detention who have had social skills training (SST) and those who did not have the training. Therefore, this study reports the findings of level of social skills possessed by juveniles in detention centres who have had social skills training (SST) and those who did not get the training.

2. MATERIALS AND METHODS

2.1 Design and Sample

This study was a quasi-experimental design with an experiment and a control group. The sample was drawn from a population of 97 juveniles in detention at a Senior Correctional Centre (formally known as Borstal Institute) in Accra, Ghana. The center admits Juveniles and young offenders (14-18) who have passed through the Juvenile Courts in Ghana and sentenced for detention, normally between 3 months to 3 years.

2.2 Inclusion and Exclusion criteria

All juveniles in the junior correction center (formally called Borstal Institute) in Accra, Ghana were included in this study.

2.3 Ethical approval and informed consent

Approval was granted by the Directorate of Ghana Prison Service (GPS/2017/005_UG). Participants were assured of confidentiality, anonymity, and security of the data that would be collected. Verbal informed consent was obtained from the participants before the start of the study and a debriefing was conducted after completing the study.

2.4 Outcome measure

The outcome measure was Brief Symptom Inventory (BSI) developed by Derogatis (11). It consists of a 53-item questionnaire on a 5-point Likert scale ranging from 0 (not at all) to 4 (extremely).

2.5 Procedure

This study consisted of data collection and social skills training. Participants completed Brief Symptom Instrument (BSI) as baseline and demographic variables which took approximately 60 minutes. Before the training both the experimental and control groups were administered the questionnaire. The experimental group had one-month training, thereafter both the groups had a post test, but by then the control had no social skills training. However, after collecting the data for both groups, a training schedule just like the experimental group was conducted for the control group.

Specific social skills were targeted and the detailed manual developed based on the Liberman and Tracy Social skills Modules (12). Participants in the experimental group underwent a one-month SST. The training sessions lasted for 60 minutes per session and they met three times a week on Mondays, Wednesdays and Fridays. During the training sessions, with assistance of their teachers who served as research assistants, each participant had the opportunity to ask questions, contribute and discuss the issues that were raised. The teachers were given training as research assistants to carry out the training. A number of skills building processes were used to enhance the learning process. Some of the skills building processes were brainstorming, discussion, questioning, small group discussion and presentations. Data collection was from May 2017 to August 2017.

2.6 Data analysis

After all the necessary data was collected the matched t-test was used to compare the means of the ratings of juveniles and to determine statistically significant differences between the groups before and after the SST. A significant level at $p < .05$ was used in determining the level of significance. All data were analysed using SPSS.

3. RESULTS

3.1 Demographic data

There were 50 male juveniles who took part in the study because the Senior Correctional Centre does not admit females. Participants age ranged between 15 – 20 years with a mean age of 16.6 years (SD = 1.49). Participants educational level were from Junior High School (JHS) 1 to Junior High School (JHS) 3 (M =13.5). Thirteen (13) participants were from JHS 1, 20 participants form JHS 2, and 17 participants from JHS 3. There were 48 Ghanaians and 2 Togolese. The Ghanaians tribes were made up of 15 Ewes, 22 Asantes, 2 Dagombas, 3 Frafras, 2 Fantes, 4 Hausas and 2 Gas (Table 1).

Table 1: Demographics of the Experimental and Control groups

	Experimental Group N = 25 (*SD*)	**Control group N = 25 (*SD*)**
Age	15.9 (1.23)	17.3 (1.57)
Gender		
Male	25	25
Female	0	0
Nationality		
Ghanaians	27	21
Togolese	1	1
Educational Level		
JHS 1	8	5
JHS 2	8	12
JHS 3	9	8

3.2 Results from BSI scores

Results from the analysis of the scores showed out of the 9 scales used for the experimental group 8 subscales were statistically significant whiles 1 subscales was not statistically significant at $p < .05$ level of significance (Table 2). The 8 subscales that showed statistical differences were somatization *(df* = 48; *t* = 2.39*; p* < .025), obsessive-compulsion (*df* = 48; t = 4.32*; p* <.000), depression (*df* = 48; t = 4.13; *p* <. 001), anxiety (*df* = 48; t = 3.80; *p* <.001), hostility (*df* = 48; t = 3.74; *p* < .001), phobic anxiety (*df* = 48; *t* =3.80; *p* < .001), paranoid ideation (*df* = 48; *t = 2.46; p* < .021), and Psychoticism (df = 48; *t = 2.28; p* < .032). Only interpersonal sensitivity did not show statistical significance (*df* = 48; *t* = 1.13; *p* > .272), These results reflected how close the means were for the pre-test and post-test (Table 2).

On the other hand, the scores from the control group from pre-test and post-test showed out of the 9 subscales, 3 were statistically significant whiles 6 were not statistically significant. There were statistically significant differences at the *p* < .01 level in phobic anxiety (*df* = 48; *t* = -3.45; *p* < .000), paranoid ideation

(*df* = 48; t = -2.35; *p* <.001) psychoticism (*df* = 48; t = 1.6; *p* <.012). However there were not statistically significant (p < .05) somatization (df = 48; t = 3.22; *p* > .62), obsession-compulsive *(df* = 48; *t = -2.67; p* >.127, interpersonal Sensitivity *(df* = 48; *t = 1.23*; *p* >.289), depression (*df* = 48; t = 3.22; *p* >.145), anxiety *(df* = 48; *t* = 1.22; *p* >.144) and hostility *(df* = 48; t = 1.39, *p* > .210) (Table 2).

Table 2: Summary of matched paired samples t-test, means and standard deviation

	Scales	Comparison	Experimental Group N = 25				Control Group N = 25			
			Mean	**SD**	***t***	***p***	**Mean**	**SD**	***t***	***p***
1.	Somatisation	Pre-test	1.89	(.86)	2.39	.025*	1.82	(.83)	3.22	.062
		Post Test	1.31	(.74)			1.79	(.94)		
		Score difference	.58				.03			
2.	Obsession Compulsion	Pre-test	2.11	(.80)	4.32	.000*	2.32	(.85)	2.67	.127
		Post Test	1.35	(.68)			2.32	(.79)		
		Score difference	.76				-00			
3.	Interpersonal sensitivity	Pre-test	1.66	(.62)	1.13	.272	1.59	(.55)	1.23	.289
		Post Test	1.43	(.78)			1.58	(.61)		
		Score difference	.23				.01			
4.	Depression	Pre-test	2.27	(.81)	4.13	.000*	2.34	(.87)	3.22	.145
		Post Test	1.34	(.81)			2.26	(.83)		
		Score difference	.93				.08			
5.	Anxiety	Pre-test	1.94	(.70)	3.80	.001*	1.88	(.73)	1.22	.114
		Post Test	1.24	(.77)			1.86	(.79)		
		Score difference	.70				.02			
6.	Hostility	Pre-test	2.14	(.96)	3.74	.001*	2.17	(.93)	1.39	.210
		Post Test	1.28	(.77)			1.98	(.66)		
		Score difference	.86				.19			
7.	Phobic Anxiety	Pre-test	1.40	(.62)	1.75	.094	1.39	(.79)	-3.45	.000*
		Post Test	1.03	(.82)			1.41	(.82)		
		Score difference	.37				-.02			
8.	Paranoid Ideation	Pre-test	2.06	(.61)	2.46	.021*	2.10	(.70)	-2.35	.001*
		Post Test	1.59	(.82)			2.22	(.53)		
		Score difference	.47				-.12			
9.	Psychoticism	Pre-test	1.88	(.70)	2.28	.032*	1.91	(.76)	1.66	.012*
		Post Test	1.35	(.85)			1.89	(.80)		
		Score difference	.53				.02			

** p < .05*

N = sample number; SD = standard deviation; t = refers statistic

4. DISCUSSION

The objective of this study was to determine if a difference exists in the level of social skills possessed by the juveniles in detention who have had Social Skills Training (SST) and those who did not get the training.

The findings from this study was that out of the 9 subscales used only 1 scales was not statistically significant for the experimental group. This means that the use of the social skills training had an overall impact on improving the symptoms of somatization, obsession-compulsion, depression, anxiety, hostility,

and psychoticism of juveniles. This is consistent with a by (13) who reported that when the level of self-esteem was assessed among Korean young offenders and a control group, the results showed that young offenders self-reported significantly lower self-esteem on the Rosenberg Self-esteem scale than the control group. This improvement in the symptoms could be because it offers them an opportunity to discuss social issues which is worrying them.

Also, related findings revealed that the young offender self-reported showed increase in the problems of aggression and depression as compared to the controls. Implication of this study suggests that behavioural and emotional disorders could be prevalent amongst young offenders and impair their reformation. Also in a longitudinal study, 97 delinquent boys were assessed at the time of admission and three months later (14). Findings of that study showed that many boys required psychiatric help on admission, especially for depression and anxiety. The results further showed that great proportion of these health needs remained unmet. This may be the case because most often depression and anxiety plays an important role in social skills. That study therefore advocated an improvement in psychological and psychiatric care for delinquent boys. It concluded that the fact remains that mental health problems among young offenders are a source of worry and a great concern for many. Also it has been observed that mental health problems exhibited among young offenders are five times more than among non-delinquents (15). Despite these grave concerns the issue receives virtually no attention from appropriate authorities. This study has also confirmed the research in a longitudinal study, where 97 delinquent boys were assessed at the time of admission and three months later (14). Findings of that study showed that many boys required psychiatric help on admission, especially for depression and anxiety. That study further showed that a greater proportion of those health needs remained unmet. That study therefore advocated an improvement in psychological and psychiatric care for delinquent boys. Despite these grave concerns the issue receives virtually no attention from appropriate authorities.

This study has not been confirmed by a related study by Hopko et al. (14) in São Paulo Medical School. In that study, some mental problems were associated with young offenders especially anger, depression and low self-esteem. However, Dias et al. (16) study, had gone to confirm the reduction in mental health symptoms of anxiety and anger after an intervention programme. However, the study by Dias et al. (16) had confirmed a study by Bickel and Campbell (15) who conducted an investigation into the incidence of mental health problems among young offenders as compared to controls (12-18 years) in Tasmania, Australia using Adolescent Psychopathy Scale. That study showed that 40% scored positively for mood disorder, 36% for Post-Traumatic Stress Disorder (PTSD) and 32% for anxiety disorder excluding PTSD. They suggested that young offenders exhibit mental health problems five times more than non-delinquents in the community (15).

The other 2 scales Interpersonal Sensitivity and Phobic Anxiety had no statistically significant effect on the pre-test and post-test. The Interpersonal Sensitivity and Phobic Anxiety which was not impacted by the training could be due to the isolation and confinement of the juveniles at the Senior Correctional Centre.

However, the control group showed only 3 scales of Phobic Anxiety, Paranoid Ideation and Psychoticism to be statistically significant for the pre-test and post-test. However, the rest of the 6 scales were not statistically significant. Phobic anxiety was not statistically significant in the experimental group but was statistically significant in the control group. This phenomenon may be explained that probably those who had the training were under pressure to learn since they knew they would be asked to respond to questionnaires at the end of the training. A previous study by Stipelman (17) attempting to test the merit of performance inhibition hypothesis examined the verbal content component of social skills in a group of socially anxious individuals by using a task that did not require performance in front of others. That study did not detect statistically significant differences between the socially anxious subjects and controls in verbal content, although global ratings of skill still differentiated the two groups. Stipelman (17) concluded that effective communication involves not just verbal content; method of delivery and nonverbal behaviors most likely played a large role in successful social communication.

Furthermore, taking into consideration the level of statistically significance in this study it means that in general that social skill training (SST) have a positive effect on the behaviour of juveniles who had the training.

A study by Spence and Marzillier (18) found that behaviour problems included lack of appropriate eye contact, excessive fiddling and head movements, and lack of an appropriate number of acknowledgements and question-type feedback responses per minute.

This study is consistent with series of multivariate research projects in which Quay (19) has shown that there is a similarity to these dimensions of behaviour in juveniles to categories defined by researchers of child psychopathology. It has also been reported that supportive relationships might provide additional social reinforcement and stress-buffering social support, both of which would be expected to reduce depressive symptoms (20).

LIMITATIONS

The limitations of this study are the use of self-report data. The sample size was also small because there were few juveniles at the center during the period of this study. The findings of this study might not generalize beyond the sample since this study only involve boys. There could also be a problem of confounding since those who had the training may interact with their colleagues before the post-test.

Despite these limitation to the best of the researcher's knowledge, this is the first study evaluating juveniles in detention center using in Ghana using Brief symptom inventory (BSI).

CONCLUSIONS

In conclusion, this study provided evidence indicating juveniles who underwent social skills training (SST) had improvement in their social skills as compared to their colleagues who did not have such training. This study suggests that some of the subscales on the Brief Symptom Inventory (BSI), can be used to measure the social skills competence of juveniles.

I recommend that there should be a follow-up assessment after six months to find out how the skills they acquired during the training is having impact on the lives.

SST should not be considered as the single intervention for juveniles with social skills deficits but rather as an integral part of a comprehensive intervention programme for this population. Although SST is an effective, evidence-based strategy in teaching social competence, much improvement in research methodology will benefit the field.

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