

EFFECTIVENESS OF RECIPROCAL PEER TUTORING AND MULTISYSTEMIC THERAPIES ON ADOLESCENTS OFFENDING BEHAVIOUR

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Abstract: Effectiveness of Reciprocal Peer Tutoring and Multisystemic Therapies on Adolescents Offending Behaviour. This study examined the impact of reciprocal peer tutoring and multisystemic therapy on reducing offending behaviour in out-of-school adolescents at motor parks in Ogun State, Nigeria. Focusing on peer influence and self-control as moderating variables, the research employed a multistage sampling technique to select participants from three motor parks across different senatorial districts. The study adopted a pre-test-post-test control group quasi-experimental design, with a 3x3x3 factorial matrix involving two experimental groups and one control group. A multistage sampling technique was employed to select 89 out-of-school adolescents from three major motor parks. The treatment lasted eight weeks. The findings revealed a significant main effect of the treatments on reduction of offending behaviour. The moderators, peer influence and self-control also significantly influenced the effectiveness of the treatment.

Keywords: Offending behaviour, Out-of-School adolescents, Reciprocal peer tutoring and multisystemic therapies

Abstrak: Efektivitas Bimbingan Sebaya dan Terapi Multisistemik Terhadap Perilaku Pelanggaran Hukum pada Remaja Putus Sekolah. Studi ini meneliti dampak bimbingan sebaya dan terapi multisistemik dalam mengurangi perilaku pelanggaran hukum pada remaja putus sekolah di tempat parkir kendaraan bermotor di Negara Bagian Ogun, Nigeria. Berfokus pada pengaruh sebaya dan pengendalian diri sebagai variabel moderasi, penelitian ini menggunakan teknik pengambilan sampel multistage untuk memilih partisipan dari tiga tempat parkir kendaraan bermotor di berbagai distrik senatorial. Studi ini mengadopsi desain kuasi-eksperimental kelompok kontrol pra-tes-pasca-tes, dengan matriks faktorial 3x3x3 yang melibatkan dua kelompok eksperimen dan satu kelompok kontrol. Teknik pengambilan sampel multistage digunakan untuk memilih

89 remaja putus sekolah dari tiga tempat parkir kendaraan bermotor utama. Terapi berlangsung selama delapan minggu. Temuan tersebut mengungkapkan terdapat pengaruh signifikan terapi. Pengaruh teman sebaya dan pengendalian diri juga signifikan memengaruhi efektivitas terapi.

Keywords: Perilaku Pelanggaran Hukum, Remaja Putus Sekolah, Bimbingan Sebaya, Terapi Multisistemik

INTRODUCTION

Adolescence is a critical developmental stage, with many of them not in school or vocational training centre, especially in third-world countries. UNESCO (2016) reports that 263 million (23 % of who are adolescents) youths globally are out of school, emphasising the need for quality education and manpower development. This statistics posse grave danger to developing countries (especially Nigeria) where its consequences could spiral into dearth of manpower, insecurity and other criminal activities. Sub-Saharan Africa has the highest rate of out-of-school adolescents estimated at 37%; and Nigeria, accounted for 54.2% of these statistics (Alabi, 2022). In another report, UNICEF (2018) estimated about 10.5 million children aged between 5 to 14 years to be out of school in Nigeria. Often, the question of out-of-school children is associated with offending behaviour, among other factors, as a good number of these adolescents are into behaviours that bring

them into conflict with the criminal justice system.

Offending behaviour, from normative and situational perspectives, is harmful and anti-normative, requiring understanding for effective interventions (Humphrey and Cordella, 2013). Although while extant literature is replete on what constitutes an offending behaviour, there has not been an omnibus definition of what an offending behaviour is. In effect, there has not been a main definition of what an offending behaviour is. The explanation and definition of the concept of offending behaviour is mainly tied to criminality and juvenile delinquency. It is therefore, defined as any behaviour especially by adolescents who constitutes a nuisance in the society. Dennen (1980) defines offending behaviour as any behaviour that involves coercion and perceived as malevolence by the society or significant others. Such behaviour may include various verbal and physical actions

harmful to individuals and society (Equal Opportunity Tasmania, 2016; Jay, 2009). Jay (2009) contends that such behaviour could cause severe damages to individuals or communities. These, Jay notes may inflict psychological trauma and social unrest. Although there are no official records in Nigeria on offending behaviour especially among adolescents generally, information and anecdotal records especially in magazines, newspapers and televisions show a deluge of offending behaviour among adolescents. Nevertheless, the prevalence of gang involvement among adolescents who are out of school is a growing global concern. The term out-of-school adolescents refer to those not attending school often associated with offending behaviour in Nigeria. This behaviour is characterised by non-conformity to societal norms, and it is seen as a coping mechanism within their subculture, as explained by Cohen (2007) and Bandura (1977).

Given the preponderance of the challenge of offending behaviour and the need to have it treated, this study, focuses on two interventions, Reciprocal Peer Tutoring (RPT) and Multisystemic Therapy (MST). These psychological interventions were utilised in the study because of their efficacious effectiveness in helping to

address other behavioural problems among adolescents. The RPT involves students aiding each other in learning, with roles as tutors and tutees alternating. To make the concept clearer, it is instructive to first explain what peer tutoring is. Peer tutoring, according to Uroko (2010) and Nazzal (2002), enhances cognition and social skills, particularly in at-risk groups. Centre for Learning Disability (2012) defines it as a flexible, peer-mediated strategy that involves students serving as academic tutors and tutees. This means, higher performing students are paired with average ones to help review critical or problem areas in their studies. Similar to this, Kapil and Malini (2018) define as a teaching strategy that uses students as tutors. Thus, because it involves two group of students, 'tutors' and 'tutees', it is then reciprocal. Reciprocal peer tutoring is a collaborative technique of instruction where students of the same class and age bracket alternate between the role of student (tutees) and teachers (tutors) and may follow a structural format to help team members make academic progress (Ojo, 2019). It is therefore, a learning strategy, which could enhance cognitive development through interactive tutoring sessions.

According to Uroko (2010) and Nazzal (2002), RPT enhances cognition and social

skills, particularly in at-risk groups. It could as well improve academic abilities and self-esteem of out-of-school adolescents. In the context of the current study, the RPT is used among out-of-school adolescents' offending behaviour in motor parks in Ogun State.

The study also utilised multisystemic therapy (MST) as the second psychological intervention on offending behaviour of out-of-school adolescents in Ogun State Motor parks. Multisystemic Therapy is an intervention for youth with severe antisocial behaviour which involves community-based group sessions (Henggeler, Schoenwald, Borduin, Rowland and Cunningham). Henggeler, et al (2009) describe MST as a community-based approach that addresses the complex nature of antisocial behaviour by involving intensive group sessions and community involvement. This makes its utilisation in this study very apt and useful. According to Henggeler, et al (2009), MST is found to be efficacious in the reduction of anti-social behaviour and could as well improve family relationships. The National Institute of Clinical Excellence's (2013) guidelines, among other things, recommend the use of MST for the treatment of conduct disorder and related problems in adolescents. This recommendation underscores the efficacy of MST on adolescents, provided

that the intervention is well-implemented and used appropriately. van der Stouwe, Asscher, Stams, Dekovic, and van der Laan (2014) also report that MST is particularly effective in treating sex offenders.

The study also examines moderating effectiveness of peer influence and self-control on out-of-school adolescents' offending behaviour. Research on peer influence on adolescents is common. However, there is little or no of such works on adolescents' offending behaviour. Adolescents tend to associate with similar-behaving peers, influencing each other's behaviours and attitudes (Brechtwald & Prinstein, 2019; de Guzman, 2016). Peer influence significantly impacts offending behaviour, with studies showing its effect on various adolescent life aspects (Padilla et al., 2009). Reynolds' (2011) study show that the presence of peers alone does not lead to a significant increase in risk-taking behaviour. Reynolds' work supports the notion that older adolescents, however, tend to engage in more risk-taking behaviours when encouraged by their peers, but they may not necessarily do so when alone or in the presence of their peers who do not encourage them.

The study explores the effectiveness of self-control and offending behaviour in out-of-

school adolescents. Gottfredson and Hirschi (1990) argue that low self-control is a key consequence of such behaviour. This is supported by Schreck, Wright and Miller (2017) who suggest it alters lifestyle and reactions to criminal events. However, Yu-Sheng (2009) notes that low self-control is directly linked to criminal behaviour by emphasizing the need for tailored remediation programs for out-of-school adolescents. On this, Gottfredson and Hirschi (1990) attribute the development of low self-control to socialization, training and tutelage particularly among out-of-school adolescents often exposed to negative influences that could lead to offending behaviour.

Rooting from the above, it is sufficed to pontificate that the psychological interventions could be made to yield the desired behavioural outcomes from out-of-school adolescents especially those in motor parks who are often used for nefarious and criminal activities. Therefore, it is imperative to explore alternative strategies to address this issue. It is as a result of this that this study investigates the theraphic effectiveness of Reciprocal Peer Tutoring (RPT) and Multisystemic Therapy (MST) in the reduction of offending behaviour among out-of-school adolescent in motor parks in Ogun State. In going about this, four hypotheses are

tested at 0.05 margin of error as follows; there is no significant main effect of the treatments (reciprocal peer tutoring and multisystemic therapies) on offending behaviour of out-of-school adolescents in motor parks, Ogun State; there is no significant interactive effect of treatment and peer influence on offending behaviour of out-of-school adolescents in motor parks, Ogun State; There is no significant interactive effect of treatment and self-control on offending behaviour of out-of-school adolescents in motor parks, Ogun State; There is no significant two-way interaction effect of peer influence and self-control on offending behaviour of out-of-school adolescents in motor parks, Ogun State.

RESEARCH METHODS

The study employed a quasi-experimental research design. A pre-test-post-test control group experimental design with a 3x3x3 factorial matrix was used. Participants were divided into two experimental groups (reciprocal peer tutoring and multisystemic therapy) and a control group, with peer influence and self-control as variables varied at three levels.

Population, Sample and Sampling Technique. This study focused on out-of-school adolescents from motor parks located in three Senatorial Districts within Ogun

State, Nigeria. Utilising a multistage sampling technique, the research ultimately included 89 participants from an initial pool of 99 individuals. The sampling began by considering the three senatorial districts of Ogun State: Ogun East, Ogun Central, and Ogun West. Ogun State has twenty local governments. From each district, one local government area was purposefully selected based on its high population and likelihood of having a significant number of out-of-school adolescents. The local governments were Abeokuta North, Ado-Odo Ota, and Sagamu, which were randomly assigned to treatments and control groups. The third stage of sampling involved identifying specific cluster areas within the selected local governments where out-of-school adolescents were located in the three motor parks. The researchers thereafter, selected cluster areas where out-of-school adolescents were commonly found in each of the selected local governments. The cluster areas selected were Lafenwa, Sango, and Isale Oko motor parks. The participants were screened using the modified Criminal Sentiments Scale. The number of participants selected from each park was as follows: Lafenwa ($n = 34$), Sango ($n = 32$), and Isale Oko ($n = 33$). However, only 89 participants completed the study, with 29 from Lafenwa, 30 from Sango, and

30 from Isale Oko motor parks. The participants comprised 53 male (59.55%) and 36 female (40.45%) adolescents.

The study utilised four validated instruments (Modified Criminal Sentiments Scale, Offending Behaviour Scale, Peer Influence Scale and Self-Control Scale). The instruments were respectively translated into Yoruba language as follows: *Ìṣàtúnṣe Ìgbéléwòn Ìwà tí Kò Bá Òfin Mu, Òṣùwòn Ìwà Àìtọ́, Òṣùwòn ipa awon elegbe mi and Òṣùwòn Ikora eni niijanu*). The Criminal Sentiments Scale-Modified (CSS-M) by Simourd (1991) was used to screen the out-of-school adolescents for offending behaviour. It was a self-report instrument that measures antisocial attitudes, values, and beliefs directly related to criminal activity. Higher scores on the CSS-M are indicative of greater offending and criminality. Although the original scale has 16 items, but one item (item 13) was deleted following pilot-testing because it had very low index. Hence, 15 items were used which covered the tolerance for law Violations (10 items) and identification with criminal others (5 items). The scale has four rating-options, strongly agree (4), agree (3), disagree (2) and strongly disagree (1). Samples of the items are: Sometimes a person like me has to break the law to get ahead in life (*Lẹ̀ẹ̀kòòkan, èniyàn*

bí èmìgbòdò rú òfinláti lè luàlùyonilé ayé); I believe that most successful people broke the law to get ahead in life (Mo gbàgbò pé àwontótiṣé àṣeyorí rú òfin láti lu àlùyo nílé ayé). The participants' responses were summed up and a score of 25 and above qualified a participant to take part in the study. Scholars such as Wormith and Andrews (1995); Simourd and van de Ven (1999) have found the scale to be useful in screening adolescents for offending and criminality. The scale had a reliability of Cronbach $\alpha = .76$ on the TLV sub-scale and $\alpha = .57$ on the ICO sub-scale. The researchers conducted a pilot study to test the reliability and usability of all the instruments by administering Yoruba language versions to 20 out-of-school adolescents in Obafemi Owode Local Government, Ogun State. Following the pilot-testing, 15 items were found useful with overall Cronbach $\alpha = .73$; which indicate a strong reliability of the scale for the study.

In order to measure the participants' offending behaviour, the Offending Behaviour Scale (ÒṣùwòṅÌwà Àìtò) was utilised. This scale was an adapted version of the Crime and Violence Scale (CVS) developed and validated by Conrad, Riley, Conrad, Chan and Dennis (2010). The CVS is a useful tool for measuring criminality, and

it consists of 31 dichotomous items that are divided into four conceptually distinct subscales, namely the General Conflict Tactic Scale (GCTS), Property Crime Scale (PCS), Interpersonal Crime Scale (ICS), and Drug Crime Scale (DCS). However, after conducting a pilot testing of the scale, only 24 items were retained due to their high reliability. The GCTS, for instance, includes eight items, and its item reads: "During the past 12 months, have you done the following things?" The response format for the scale is a four-Likert scale, where SA=4, A=3, D=2, and SD=1. Sample items from the CVS are: "I always insulted, swore, or cursed others (Mo máa n tábùkù, búratàbí ṣépè fúnḗlòmíràn); I purposely damage property that do not belong to me (Mo máa n mòómò bá ohunìní tí kì í ṣetèmijé); I can use a weapon or force to get money from a person (Mo lè lo ohunijà tàbí iwà ipá látigbaowó (jáwó gbà) lówó ènìyàn); I could take alcohol or cigarettes to any length (Mo lè mu ọ́tí àtisigá láì bojú wẹ̀yìn)", among others. The Yoruba version of the scale used in the study had a reliability of Cronbach $\alpha = 0.79$, which shows an acceptable reliability coefficient.

Peer Influence Scale. The Peer Influence Scale also known as "ÒṣùwòṅIpà àwòn eḗgbé mi", was developed by Haruna, Tambawal and Salawu (2020) with the aim of

measuring the general influence of peers on adolescents. The scale was adapted for use in this study to assess the level of peer influence among the participants. Originally, the scale contained 20 items, but after a pilot testing was conducted, 13 items were selected as they were found to be highly reliable and suitable for the study. The items in the scale were in a four-Likert format with responses ranging from strongly agree (4) to strongly disagree (1). To determine the level of peer influence, the researchers summed up the choices made by the participants. Some of the items in the scale include: "I get along well with my friends" (Mo ní ibásepò tó dánmóránpèlú ẹlẹgbé mi); "My friends help me in sharing things" (Àwọnòrẹ mi máa ń ràn mí lówó láti máa pínkan). For the purpose of this study, the participants' scores on peer influence were categorized as low (18-35), moderate (36-53), and high (54-72). The pilot testing of the scale revealed that it was reliable for use in this study, with a Cronbach Alpha of 0.71. Therefore, the PIS is a valuable tool for assessing the level of peer influence among adolescents and can provide insight into how peer relationships may impact their behaviours and decision-making.

Self-Control Scale. In this study, the self-control scale (òsùwòn ikóra eni nîjànù) used

to evaluate the level of self-control of participants was adapted from the Brief Self-Control Scale created by Tangney, Baumeister and Boone (2004). The scale, which consists of 13 items, measures five domains of self-control, including; task performance, psychological adjustment, impulse behaviours, interpersonal relationships, and moral emotions. Respondents were required to rate their responses on a four-Likert scale, ranging from strongly agree (4) to strongly disagree (1). For instance, some of the items on the scale include "I am good at resisting temptation" and "I have a hard time breaking bad habits."

The participants' scores were categorized as low, moderate, and high, with an average score of 13-26, 27-39, and 40-52, respectively. Tangney, et al (2004) reported high correlation coefficients between their brief self-control scale and longer self-control measures. Additionally, the internal consistency of the scale was found to be high in two different studies, with Cronbach's alpha values of 0.83 and 0.85, respectively. The pilot testing of the 13-item self-control scale in this study yielded an acceptable Cronbach's alpha value of 0.70, indicating that the scale is reliable. This self-control scale adapted from Tangney, et al (2004)

Brief Self-Control Scale provides a useful tool for measuring self-control across multiple domains and has demonstrated strong psychometric properties in previous studies.

In the process of conducting the study, a well-defined procedure was followed to ensure its success. To begin with, ethical approval was obtained from the Ethical Committee of the University of Ibadan. Approval letter to conduct the study was also obtained from the Department of Counselling and Human Development Studies, University of Ibadan, Nigeria. This was submitted to the Ministry of Transportation of Ogun State for consideration and approval to carry out the research.

In the experimental phase, the procedure involved pre-session activities (pre-test measures), general activities (six-week interventions for the two treatment groups), the Control group that was met twice (pre and post-test measures were not treated, while the

the post-test measures were again conducted on the two treatment groups (Reciprocal Peer Tutoring and Multisystemic).

RESULTS AND DISCUSSION

RESULTS

There is no significant main effect of the treatments (reciprocal peer tutoring and multisystemic therapies) on offending behaviour of out-of-school adolescents in motor parks, Ogun State.

In order to analyse the data collected from the participants in the three groups, the researchers employed the method of Analysis of Covariance (ANCOVA) which was originally proposed by Fisher in 1951. The ANCOVA was utilised to observe any significant mean differences among the groups, and this was further analysed using Scheffle Post Hoc Analysis and Bonferroni Pairwise Comparison Analysis.

Table 1: Summary of 3x3x3 Analysis of Covariance (ANCOVA) of treatments on offending behaviour

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Squared	Eta
Corrected Model	27610.436 ^a	19	1453.181	79.228	.000	.956	
Intercept	1336.082	1	1336.082	72.843	.000	.514	
Prescore	1355.864	1	1355.864	73.922	.000	.517	

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Squared	Eta
Treatment	9055.771	2	4527.886	246.861	.000	.877	
Peer Influence	1098.738	2	549.369	29.952	.000	.465	
Self Control	319.371	2	159.685	8.706	.000	.202	
Treatment*Peer Influence	636.008	3	212.003	11.558	.000	.334	
Treatment * Self Control	316.829	3	105.610	5.758	.001	.200	
Peer Influence * Self Control	592.451	3	197.484	10.767	.000	.319	
Group * Peer Influence * Self Control	135.181	2	67.590	3.685	.053	.097	
Error	1265.587	69	18.342				
Total	204718.000	89					
Corrected Total	28876.022	88					

The ANCOVA results from table 1 shows a significant effect of treatments (reciprocal peer tutoring and multisystemic therapies) on reducing offending behaviour among out-of-school adolescents in motor parks in Ogun State ($F_{2, 69} = 246.861, p < 0.000,$

$\eta^2 = 0.877$). Consequently, the hypothesis one was rejected, indicating that the participants receiving RPT and MST differed significantly from the control group, with an 87.7% effect size in treatment impact.

Table 2: Significant Differences in the Treatment Groups

Treatment	N	Subset for alpha = 0.05		
		1	2	3
Multisystemic Therapy	30	33.0667		
Reciprocal Peer Tutoring	29	36.8621		
Control Group	30	63.1667		
Sig.		1.000	1.000	.000

Table 2 shows a post-hoc analysis using the Scheffe method revealed no significant difference between RPT and MST in reducing offending behaviour (RPT mean = 36.86, MST mean = 33.07). However, both RPT and MST were significantly more effective than the control group (mean =

63.17), demonstrating their effectiveness in reducing offending behaviour among the participants. Hypothesis 2: There is no significant interaction effect of treatment and peer influence on offending behaviour of out-of-school adolescents in motor parks in Ogun State

Table 3: Pairwise Comparison showing interactive effect of treatment and peer influence on offending behaviour

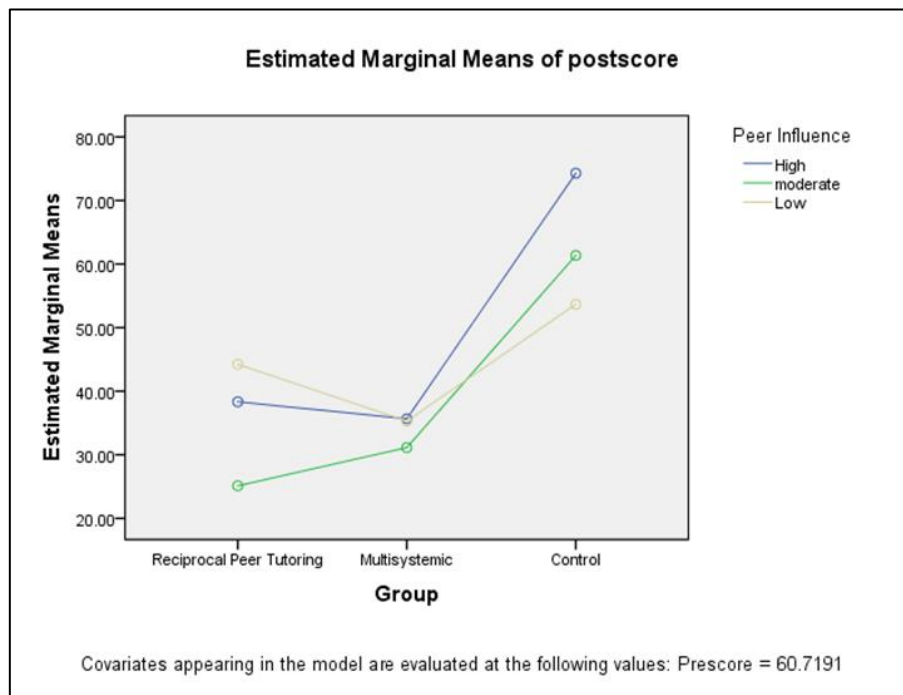
Treatment	Peer Influence	Mean	Std. Error
Reciprocal Peer Tutoring	High	37.98	1.736
	Moderate	24.79	1.833
	Low	44.37	1.378
Multisystemic Therapy	High	35.70	1.423
	Moderate	31.15	1.733
	Low	35.69	1.315
Control group	High	73.94	1.810
	Moderate	61.28	1.436
	Low	54.17	2.162

The result from table 1 and table 3 shows there is a significant two-way interaction effect between treatment and peer influence on offending behaviour among out-of-school adolescents in motor parks in Ogun State ($F_{2, 69} = 11.558, p < .01, \text{partial } \eta^2 = .334$), leading to the rejection of the null hypothesis. This interaction accounted for a 33.4% change in offending behaviour. The analysis reveals that both treatment groups (reciprocal peer tutoring and multisystemic therapy) responded differently to varying

levels of peer influence. Adolescents with moderate peer influence shows the most significant reduction in offending behaviour (RPT moderate PI mean = 24.79, MST moderate PI mean = 31.15), compared to those with high or low peer influence. These finding suggests that treatment effectiveness in reducing offending behaviour is influenced by the level of peer influence, with moderate levels being most beneficial. This has important implications for designing and implementing

interventions targeting youth offending behaviour. The Figure 1 provides a graphical presentation of the interaction between treatment and peer influence. This further confirms the results in table 1 above.

Figure 1: Interaction between treatment and peer influence



The results presented in Figure 1 indicates that out-of-school adolescents with moderate levels of peer influence (PI) had the lowest rates of offending behaviour for both treatment groups (reciprocal peer tutoring and multisystemic therapy), and this difference was statistically significant.

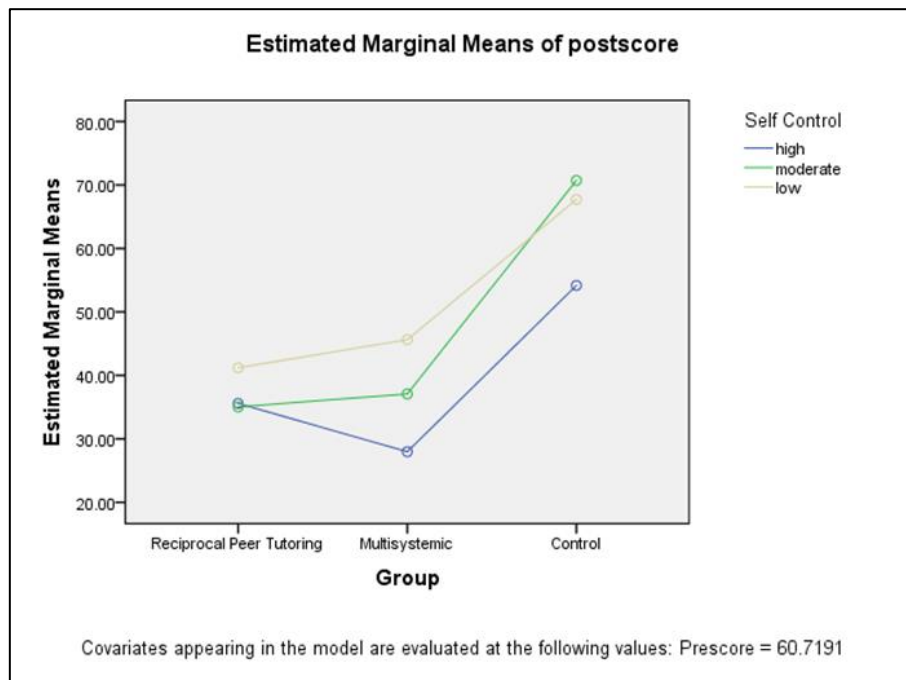
Hypothesis 3: There is no significant interaction effect of treatment and self-control on offending behaviour of out-of-school adolescents in motor parks in Ogun State.

Table 4: Pairwise Comparison showing interactive effect of treatment and self-control on offending behaviour

Treatment	Self-Control	Mean	Std. Error
Reciprocal Peer Tutoring	High	35.58	1.238
	Moderate	35.04	1.536
	Low	41.20	1.508
Multisystemic Therapy	High	27.97	1.151
	Moderate	37.08	1.517
	Low	45.63	2.124
Control group	High	54.17	2.162
	Moderate	70.72	1.587
	Low	67.73	1.773

The results from Table 1 and Table 4 shows a significant interaction effect between treatment and self-control on offending behaviour among out-of-school adolescents in motor parks in Ogun State ($F_{3, 69} = 5.758, p < .01, \text{partial } \eta^2 = .200$). This leads to the rejection of the null hypothesis, demonstrating that self-control significantly moderates the effectiveness of the treatment. Specifically, multisystemic therapy showed the most benefit for participants with high self-control (mean = 27.97), accounting for a 20.0% change in

offending behaviour. Figure 4.2 supports these findings, showing that high and moderate self-control participants experienced a notable reduction in offending behaviour post-treatment in both reciprocal peer tutoring and multisystemic therapy groups. These results highlight the importance of considering self-control levels in designing interventions to reduce offending behaviour among this demographic. Figure 2 provides a graphical representation of the interaction between treatment and self-control.

Figure 2: Interaction between treatment and self-control

Hypothesis 4: There is no significant two-way interaction effect of peer influence and self-control on offending behaviour of out-

of-school adolescents in motor parks in Ogun State

Table 5: Pairwise Comparison showing interactive effect of peer influence and self-control on offending behaviour

Peer Influence	Self-Control	Mean	Std. Error
High	High	35.56	1.445
	Moderate	54.56	1.533
	Low	50.51	1.386
Moderate	High	21.17	2.074
	Moderate	43.61	1.262
	Low	44.32	1.301
Low	High	31.63	1.747
	Moderate	45.45	1.816
	Low	47.37	1.622

The results from Table 1 and Table 5 demonstrate a significant interaction effect between peer influence and self-control on offending behaviour among out-of-school adolescents in motor parks in Ogun State ($F_{3, 69} = 10.767, p < .01, \text{partial } \eta^2 = .319$), leading to the rejection of the null hypothesis. This interaction explains about 31.90% of the variance in offending behaviour. The result revealed that adolescents with moderate peer influence

and high self-control showed the most significant reduction in offending behaviour (mean = 21.17). Additionally, those with low peer influence and high self-control also exhibited a notable decrease in offending behaviour (mean = 31.63). These results emphasize the importance of balancing peer influence and self-control in effective treatment outcomes. Figure 3 provides a visual representation of this result.

Figure 3: Interaction between peer influence and self-control

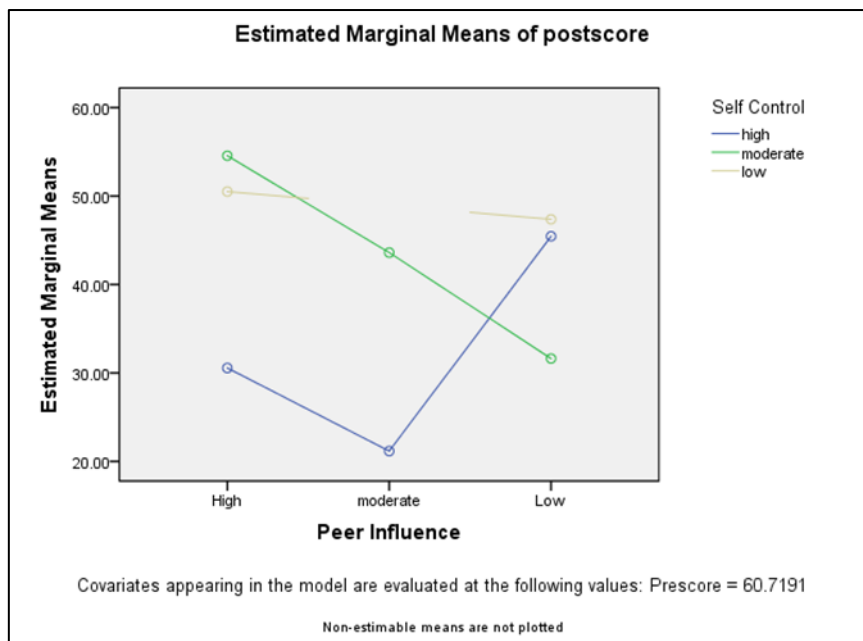


Figure 3 is a visual presentation which corroborates the findings that the most substantial reduction in offending behaviour occurs in participants with moderate peer influence and high self-

control. This indicates the necessity of focusing on these factors in interventions targeting offending behaviour among this demographic.

Discussion

This study was conducted to examine the effect of psychological interventions on offending behaviour of out-of-school adolescents in motor parks, Ogun State. The study produced some noteworthy findings. Hypothesis one was rejected based on the significant effect of treatments on the offending behaviour of the participants. Specifically, the two psychological interventions, reciprocal peer tutoring and multisystemic therapy had a significant effect, with no difference found between the participants after the treatments. The two psychotherapies, therefore, significantly reduced the degree of offending behaviour of the out-of-school adolescents in motor parks in Ogun State. This finding aligns with the ones reported in previous studies (Bowman-Perrott, Burke, Zhang and Samar Zaini, 2014; Hill, 2010). Similarly, Bandura's social learning theory, the interplay of the roles of tutee and tutor helps adolescents to unlearn undesirable behaviours faster. Furthermore, peer tutoring helps to foster positive social competences among group members, thereby making the participants pursue the common goal of reducing their offending behaviours.

Similarly, multisystemic therapy was found to be significantly effective in reducing the level of offending behaviour of the participants. This result corroborates previous studies where multisystemic therapy was used, such as Tan and Fajardo (2017) and van der Stouweetal.. (2014). Scholars, including Ogden and Halliday-Boykins (2004) and Leschied and Cunningham (2012), generally show that at post-treatment, youth randomised to MST demonstrated a greater decrease in both internalising and externalizing behaviour problems. The strength of this therapy might be responsible for its constant effectiveness in series of studies. The MST is noted for high treatment fidelity and the usage of different facilitators that represent various systems that influence offending behaviour in the study might also have contributed to its effectiveness.

The study revealed that there was a significant interaction effect of treatment and peer influence on the offending behaviour of the participants, therefore hypothesis two was rejected. Interestingly, the participants with moderate peer influence showed the most reduction in the level of offending behaviour following exposure to the treatment. The study also reveals that the participants with high peer

influence benefited better from the psychological interventions than those with low peer influence. This finding supports previous related studies on the negative behaviour of adolescents, such as the research carried out by de Guzman (2007) and Brechwald and Prinstein (2011), which found that peer influence is a significant factor that determines the extent of benefits that adolescent participants would derive from a programme. Similarly, Chein, et al. (2011) suggest that moderate peer influence is good for the overall psychological well-being of adolescents, while the extremes of high or low levels of peer influence could be detrimental to their well-being. One possible explanation for these findings is that adolescents are primarily influenced by their peers in such a way that their attitudes, beliefs, and behaviours are conditioned by what is perceived to be acceptable by others (Vishala, 2008).

This study showed a significant interaction effect of treatment and self-control influence on the offending behaviour of out-of-school adolescents in motor parks. The findings of this study support previous related researches on the importance of considering the level of self-control in designing effective interventions for delinquent behaviour. For instance, Evans

et al. (1997) reported that self-control interacted well with treatments involving family members and those residing in a disorderly neighborhood, suggesting that adolescents with high self-control are more likely to benefit from psychological treatment. Similarly, research has shown that low self-control is a risk factor for a range of negative behaviours, including risky and aggressive driving behaviour (Ellwanger, 2006). Therefore, interventions that focus on reducing delinquent behaviour should take into account the self-control or self-regulation capacity of the participants (Meldrum, Miller and Flexon, 2013). One possible explanation for the findings of this study is that participants with high self-control might be more motivated to participate fully in the treatment, listen to feedback, and engage in activities that promote positive change. On the other hand, individuals with low self-control may struggle to adhere to the requirements of the treatment or to make consistent progress towards their goals. These findings highlight the importance of assessing and addressing self-control in designing interventions to reduce delinquent behaviour among out-of-school adolescents in motor parks.

Also, this study revealed there is a significant relationship between peer influence and self-control influence on the offending behaviour of out-of-school adolescents in motor parks. Specifically, the study found that participants with moderate peer influence and high self-control had the lowest levels of offending behaviour. Conversely, those with high peer influence and low self-control were more likely to engage in offending behaviour. This result is consistent with previous studies conducted in related areas. For instance, Meldrum, Miller, and Flexon (2013) investigated the role of self-control in the susceptibility to peer influence among adolescents. Their study found that adolescents with higher levels of impulsivity were more vulnerable to delinquent peer influence. Similarly, Vitulano, Fiteand Rathert (2010) found that the influence of peers and impulsivity had a significant impact on adolescents' behaviour. In addition, Mobarake et al. (2014) confirmed that self-control plays a moderating role in the relationship between peer affiliation and adolescent antisocial behaviour. One possible explanation for the study's results is that adolescents with moderate peer influence and high self-control are better able to manage the

influence of peers and have less impulsivity towards offending behaviour. They are more likely to choose their friends carefully and avoid those who may have a negative impact on them.

CONCLUSION AND SUGGESTIONS

Conclusion

This study investigated the effectiveness of reciprocal peer tutoring and multisystem therapy in reducing offending behaviour among out-of-school adolescents in Ogun State, Nigeria. The results found a significant main effect of the treatments in reducing offending behaviour. Both peer influence and self-control were found to significantly influence the effectiveness of these interventions. These findings suggest that reciprocal peer tutoring and multisystemic therapy are effective interventions for addressing offending behaviour in this demographic, with peer influence and self-control playing crucial roles in their success. The study has implications for counselling psychology theory, practice, and policy-making, which emphasises the need for psychological interventions to address offending behaviour in Nigeria. Future research should involve larger, more diverse samples and qualitative component such as FGD to enhance the generalisability and

effectiveness of interventions targeting offending behaviour among out-of-school adolescents in motor parks. The burden on correctional systems and the loss of productive manpower underscores the urgency of interventions addressing underlying factors, such as education and vocational training, to integrate these adolescents productively into society.

Suggestion

It is crucial to recognise that Nigeria is currently lacking the necessary mechanisms to effectively tackle the issue of offending behaviours among out-of-school adolescents. This is evident in the escalating rate at which such behaviours are occurring. Although punitive and penal methods by the criminal justice system have always been employed, they remain not yielding appropriate behavioural compliance.

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