

RELATIONSHIP BETWEEN BEHAVIORAL FUNCTIONING AND SUBSTANCE USE PATTERNS AMONG STREET BOYS IN A KENYAN REHABILITATION CENTRE

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ABSTRACT

Purpose of Study: This study assessed behavioral functioning patterns and examined their relationship with substance use patterns among street boys at Joseph Kang'ethe Rehabilitation Centre, Kibera.

Methodology: The study adopted an explanatory sequential mixed-methods design, applying census sampling to enrol all 80 street boys' resident at the centre for the quantitative phase, followed by purposive sampling of participants for interviews. Behavioral functioning was measured using the Strengths and Difficulties Questionnaire (SDQ), covering emotional symptoms, conduct problems, hyperactivity, peer relationship difficulties, and prosocial behavior, while substance involvement was assessed using the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST).

Result: Slightly over half of participants (52.0%) fell within the normal behavioral functioning range, 34.7% scored within a borderline range warranting monitoring, and 13.3% scored within a clinical or abnormal range. A statistically significant relationship was established between substance use and behavioral functioning ($\chi^2=307.694$, $p=0.027$). Qualitative narratives showed boys who had discontinued substance use described improved self-control, emotional stability, and cooperation with peers, while those still struggling described guilt, agitation, and difficulty regulating their emotions.

Conclusion: The study concludes that behavioral functioning and substance use are closely interlinked among rehabilitating street boys, and that reductions in substance use correspond with measurable behavioral gains.

Recommendation: It recommends routine behavioral screening using standardized tools, individualized behavioral intervention plans, and continued integration of counseling, mentorship, and spiritual support within rehabilitation programming.

Keywords: *Behavioral functioning, Substance use, Strengths and Difficulties Questionnaire, Street Children, Rehabilitation centre, Urban slum*

INTRODUCTION

Behavioral functioning describes the observable ways in which individuals regulate emotion, relate to others, and adapt to the demands of daily life, spanning domains such as emotional stability, conduct, activity regulation, peer relationships, and prosocial orientation (Tucker et al., 2021). Among children and youth recovering from adversity, behavioral functioning is not a peripheral outcome but a central marker of rehabilitation progress, since gains in emotional regulation and social conduct often precede and sustain reductions in risk behavior (Armoon et al., 2021). For street-connected boys in particular, behavioral functioning captures how effectively a child adjusts from the improvisational, often violent routines of street survival to the structured expectations of an institutional setting, making it a critical, though frequently under-measured, dimension of recovery.

Evidence from outside Africa illustrates how closely behavioral functioning and substance involvement are entangled. Tucker et al. (2021), using latent class analysis of a national US sample of adults aged 30 to 80, found that individuals with polysubstance involvement consistently reported poorer psychological, physical, and social functioning than lighter users or abstainers. In a systematic review and meta-analysis spanning 48 studies, Armoon et al. (2021) reported pooled rates of suicidal ideation of 35% and suicide attempts of 20% among people with substance use disorders, with depression and abuse history emerging as shared correlates of both behavioral disturbance and substance problems. Weiss et al. (2022), synthesizing 95 studies with over 156,000 participants, established a significant association between emotion regulation capacity and substance use ($r=0.19$), with the relationship strongest for behaviorally oriented regulation strategies. Collectively, this body of work positions behavioral functioning not as a downstream consequence of substance use but as a factor that shapes, and is shaped by, it.

African research echoes this bidirectional pattern while adding cultural and structural texture. In Nigeria, Peters et al. (2024) linked the erosion of family cohesion and traditional moral structures among Ibibio youth to both substance experimentation and a broader cluster of deviant behaviors, framing substance use as one expression of wider behavioral dysfunction rather than an isolated habit. Emmanuel et al. (2024), reviewing substance use across West Africa, found substantial variation in prevalence tied to peer influence and socioeconomic conditions, factors that other researchers have separately linked to behavioral adjustment. In Ethiopia, Legas et al. (2022) documented a 37.9% prevalence of aggressive behavior among adults with problematic substance use, with psychological distress and life stressors as shared predictors, offering direct evidence that substance involvement and behavioral difficulty travel together within the same population.

Within Kenya, the limited work available on behavioral functioning among vulnerable youth similarly points toward clustering rather than isolated risk. Ssewanyana et al. (2020) identified three distinct behavioral risk clusters among adolescents in Kilifi, low-risk (22.9%), moderate-risk (67.8%), and high-risk (9.3%), with membership in the higher-risk clusters strongly associated

with depressive symptoms, school non-attendance, and reduced parental monitoring, a configuration of risk factors closely mirroring those documented among street-connected populations. Among adolescent girls in Kenyan rehabilitation institutions, Gitonga et al. (2021) found that personality traits linked to emotional instability predicted higher physical and verbal hostility, underscoring that institutional rehabilitation settings host measurable, patterned variation in behavioral adjustment rather than uniform dysfunction. Kinyanjui and Sum (2023), studying university students in Eldoret, similarly linked personality-based emotional instability to elevated substance consumption, reinforcing that the substance-behavior relationship observed elsewhere in Kenya is not confined to institutional or street-involved populations alone.

Despite this accumulating evidence, behavioral functioning among street boys specifically within Kenyan rehabilitation centres, and its statistical relationship with substance use, remains largely undocumented. Kibera, home to Joseph Kang'ethe Rehabilitation Centre, is one of Africa's largest informal settlements, with more than 75% of its population under 18 years of age and over 150,000 orphaned children (Crossing Thresholds, 2023), against a national backdrop of an estimated 250,000 to 300,000 street children, roughly 60,000 of whom live in Nairobi (International Needs, 2022; Greeson et al., 2024). Earlier ethnographic work among street boys in Nakuru drew attention to the behavioral adaptations street life demands, and to the difficulty rehabilitation programs face in reversing them (Kaime-Atterhög & Ahlberg, 2008).

Yet no study identified for this review has quantified behavioral functioning using a standardized instrument among street boys admitted to a Kibera rehabilitation centre, nor tested whether it relates statistically to their substance use histories. It is against this gap that the present study assessed behavioral functioning patterns among street boys at Joseph Kang'ethe Rehabilitation Centre and examined their relationship with substance use. Establishing whether, and how strongly, these two dimensions of recovery move together is a necessary step toward rehabilitation programming that treats substance cessation and behavioral adjustment as a single, integrated goal rather than two separate targets.

METHODOLOGY

This study used an explanatory sequential mixed-methods design, in which quantitative data collection and analysis preceded and informed a subsequent qualitative phase. For the quantitative phase, a census approach was applied to all 80 street boys resident at Joseph Kang'ethe Rehabilitation Centre, Kibera. Behavioral functioning was measured using the Strengths and Difficulties Questionnaire (SDQ), a 25-item screening instrument developed by Goodman (1997) and validated across diverse youth populations, including in sub-Saharan Africa. Respondents rated each item on a three-point scale ("Not True," "Somewhat True," "Certainly True") across five domains, emotional symptoms, conduct problems, hyperactivity, peer relationship problems, and prosocial behavior, from which a total difficulties score was derived. Consistent with established SDQ scoring conventions, total scores were categorized as normal (0-13), borderline (14-16), or abnormal (17 or higher), with higher scores denoting greater behavioral difficulty.

Substance involvement was assessed using the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST), a World Health Organization instrument covering eight substance categories with response options ranging from "never" to "4 or more times a week." A semi-structured interview guide was used to explore participants' behavioral and emotional experiences before and after admission, and the mechanisms through which substance use and behavioral change appeared to intersect. Quantitative data was analyzed in the Statistical Package for Social

Sciences (SPSS) version 28.0. Descriptive statistics, frequencies and percentages, were used to summarize behavioral functioning categories, while the chi-square test of association was used to examine the relationship between substance use and behavioral functioning, appropriate given the categorical nature of both variables and the study's interest in association rather than prediction. Qualitative data from interviews were analyzed thematically, with responses coded and grouped around recurring patterns of behavioral and emotional change. Institutional consent was obtained from the rehabilitation centre administration and individual informed consent was obtained from each participant, with confidentiality maintained throughout data collection, analysis, and reporting.

RESULTS AND DISCUSSION

Sociodemographic Characteristics of Participants

Participants' backgrounds varied across several dimensions, summarized in Table 1. Nearly half (45.3%) were aged 8–14, with a further 30.7% aged 15–19, placing most boys within the early to mid-adolescent window most associated with street life entry and substance experimentation. Schooling had typically been interrupted rather than absent: 82.7% had attended primary or secondary school (46.7% and 36.0% respectively), and the large majority (89.3%) remained literate despite disrupted attendance.

Family structure findings pointed to widespread instability preceding street involvement. 92.0% of boys came from single parent, grandparent headed, or otherwise non-nuclear households, with mother only care (33.3%) the most common arrangement. Consistent with this, poverty and family breakdown emerged as the dominant push factors into street life: 37.3% cited hunger, poverty, or basic needs deprivation, and a further 22.7% cited family conflict or relational breakdown. Despite this history, most boys (81.3%) had retained some contact with family, suggesting reintegration remains a realistic prospect for many.

Street life exposure was generally moderate rather than prolonged. Most of the participants first went to the streets between ages 6–9 (34.7%), and nearly three quarters (74.6%) had spent five years or less on the streets before admission. Begging (37.4%) and item selling (26.7%) were the principal survival strategies, concentrated mainly in central Nairobi. Centre tenure was overwhelmingly short (49.4% had been resident 0–2 months), and most boys (80.0%) were first time entrants to rehabilitation. Despite their difficult histories, participants expressed strongly forward looking orientations, with half (50.7%) citing career aspirations and 41.3% hoping to eventually reunite with family.

Table 1: Sociodemographic Characteristics of Participants

Variable	Category	Frequency (n)	Percentage (%)
Age Group	2–7 years	18	24.0
	8–14 years	34	45.3
	15–19 years	23	30.7
	20 years and above	5	6.7
Education Level	No formal education	3	4.0
	Primary (Grade 1–8)	35	46.7
	Secondary (Form 1–4)	27	36.0
	Other	10	13.3
Literacy Status	Literate	67	89.3
	Illiterate	8	10.7
Family Structure	Single parent (mother/father)	44	58.6
	Both parents	6	8.0
	Grandparents/relatives	23	30.7
	Other arrangements	2	2.6
Number of Siblings	0–2	32	42.7
	3–5	24	32.0
	6 or more	19	25.3
Family Contact	Maintains contact	61	81.3
	No contact	14	18.7
Family Income Source	Formal/informal employment	36	48.0
	Dependence/begging	18	24.0
	Sales and trading	11	14.7
	Agricultural	10	13.3

Behavioral Functioning Patterns among Street Boys

Data was collected through the Strengths and Difficulties Questionnaire (SDQ) examining emotional symptoms, conduct problems, hyperactivity, peer relationship difficulties, and prosocial behaviors. Total difficulty scores were calculated and categorized using established cutoff points to determine overall behavioral functioning levels among rehabilitation centre residents. This is summarized in table 2.

Table 2: Behavioral Functioning Patterns among Street Boys

SDQ Score Range	Behavioral Functioning Category	Frequency (n)	Percent (%)
0 to 13	Normal (no significant difficulties)	39	52.00
14 to 16	Borderline (monitoring recommended)	26	34.67
17 or higher	Abnormal (clinical-level difficulties)	10	13.33
Total		75	100

Over half of participants, 39 boys (52.0%), scored within the normal range, indicating behavioral functioning free of significant difficulty across emotional, conduct, hyperactivity, and peer domains despite histories of street exposure. This majority finding suggests a meaningful degree

of resilience within the population and indicates that most boys arrive at, or develop during, rehabilitation a level of emotional and behavioral stability sufficient to engage productively with programming. A further 26 participants (34.7%) scored within the borderline range, denoting emerging or moderate difficulty that has not reached clinical severity but is significant enough to warrant monitoring. This sizeable middle group likely reflects boys whose behavioral stability fluctuates in response to trauma reminders, peer conflict, or family-related stressors, placing them in a position where early, targeted support could prevent drift toward more entrenched difficulty.

The remaining 10 participants (13.3%) scored within the abnormal range, reflecting clinical-level difficulty across multiple behavioral domains. This smaller group likely carries the heaviest cumulative burden of adversity, prolonged street exposure, severe trauma, or undiagnosed mental health conditions, and is the group most likely to require intervention beyond standard rehabilitation programming, such as individual clinical support. Taken together, these results indicate that behavioral functioning among street boys at the centre is not uniform but instead distributed across three meaningfully distinct profiles, a pattern with direct implications for how rehabilitation resources should be allocated, since a one-size-fits-all program is unlikely to adequately serve boys at both ends of this spectrum.

Relationship between Substance Use and Behavioral Functioning Patterns

Data was collected through the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) questionnaire examining frequency of use across eight substance categories, substance-related problems, attempts to reduce use, and treatment history. A chi-square test of association was then conducted to determine whether substance use patterns, drawn from the ASSIST assessment, to behavioral functioning categories derived from the SDQ. Results are presented in Table 3.

Table 3: Relationship between Substance Use and Behavioral Functioning Patterns

Variable Relationship	Pearson Value	Chi-Square	Asymptotic Significance (2-sided)
Substance use * Behavioral functioning patterns	307.694a		0.027

The chi-square test reveals a statistically significant relationship between substance use and behavioral functioning patterns ($\chi^2=307.694$, $p=0.027$). This significant association indicates that boys' substance use behaviors connect meaningfully with their behavioral functioning levels rather than occurring independently. The p-value of 0.027 falls below the conventional significance threshold of 0.05, confirming that the observed relationship represents a genuine pattern rather than random variation. Boys with higher substance use frequencies or involvement with multiple substances demonstrate elevated rates of behavioral difficulties including emotional problems, conduct issues, hyperactivity symptoms, and peer relationship challenges compared to boys with lower substance involvement. The significant relationship demonstrates that substance use and behavioral functioning do not operate separately but influence each other in ways that shape rehabilitation outcomes. Boys struggling with substance use simultaneously experience more behavioral problems, creating a dual burden requiring integrated intervention approaches.

Qualitative Findings

Participants described lives dominated by street survival in various Nairobi locations including Moi Avenue, Gikomba, Tom Mboya Street, Kangemi, Mathare, and the Central Business District. The boys characterized their pre-rehabilitation existence through terms emphasizing hardship and struggle. One participant stated: *Life in the street of Nairobi was all about struggle*. Another explained: *My life is full of struggles*. Multiple boys described their street identities through activities and survival behaviors: *I was a smoker, Drunker, Drug user, and I was drug seller but I was not able to use*. Several participants referenced violence and conflict as central features, with responses including *Violence and fighting, Always fighting, and I was very bully to the people around me*. Basic survival needs dominated daily existence, with one boy noting: *Hungryness and shelter* as defining concerns.

Family disconnection and uncertain origins characterized many participants' backgrounds. Several boys indicated inability or unwillingness to discuss their past, with responses including: *No, I cannot tell you about my life, I don't know where to start, and Long story*. Others acknowledged family separation: *I ran from my family and I was born in a family which I don't know about it*. Despite difficult circumstances, some participants maintained positive self-perceptions. One stated: *I am a boy who is blessed by God no matter what*, while another described himself as: *Rude boy but humble*. The common thread across narratives was life defined by street survival, substance involvement, violence exposure, and family separation, confirming quantitative findings showing disrupted family structures and economic hardship as primary pathways to street life.

Substance Use Initiation and Reasons

Participants reported diverse substance use patterns ranging from complete abstinence to polysubstance involvement. The most commonly mentioned substances included bhang (marijuana), with multiple participants stating: *Bhang, Bhang, miraa, tobacco, Bhang and cigarette, and Bhang-I was so depressed with my life*. Other frequently cited substances included miraa, tobacco, cigarettes, and alcohol, with responses such as: *Miraa, bhang, cigarettes, chaves, I drink, and Tobacco, nuccos*. Some boys described comprehensive substance involvement, stating: *All kind of drug I found, All, All kind of drugs but not cocaine, and Zote zote (everything)*. Inhalants appeared in responses including: *Ndovu and Gum which is used to fix shoes*. However, a substantial number reported no substance use, with repeated responses of: *None, None of them, Nothing used*, and one emphatic statement: *My entire life on the street I have never used any drug substance*.

Motivations for substance use centered on emotional relief and coping with difficult circumstances. One participant explicitly stated: *Marijuana, I used it as a tool for relieving me from what I was going through*, while another noted: *Bhang-I was so depressed with my life*. The challenging nature of street existence emerged as context, with one boy explaining: *You must live a life of challenges in every way*, and another warning: *Drugs can make you mad*. Some participants indicated experimental or casual use: *Just one day I tried bhang and I try using chang'aa*. Ages of use varied considerably, with participants mentioning: *22 years, 17 years, 18 years, and 29 years*. The diversity of responses; from lifelong abstinence to comprehensive polysubstance use, reflects the heterogeneous nature of street boys' substance involvement, with some maintaining resistance despite peer pressure while others adopted substances as survival tools for managing emotional distress and street life hardships.

Impact of Substance Use on Street Life and Relationships

Participants who reported substance use described predominantly negative consequences affecting behavioral control and social relationships. Multiple boys emphasized loss of self-control, with responses including: *The person can't control himself, I fill like am not of my control, and High than everybody*. Aggressive and violent behaviors emerged as direct consequences, with participants stating: *I felt like fighting with others, fighting with my friends, and I was bullying my friends*. Several boys described comprehensive negative impacts through statements such as: *Very bad, So bad, Bad things through life, and You get bad things in life*. One participant acknowledged dual effects: *Positive and negative*, while another noted transformation: *Things change when you use the drugs*. Health consequences appeared in responses including: *Lungs, Gums problems, and Very harm*. Some boys described emotional effects: *I feel like am released to world my stress, Stress released, and Just fill higher*, indicating substances provided temporary relief despite overall negative impacts.

A substantial number of participants reported no substance-related impacts, primarily those who maintained abstinence. Repeated responses of: *None of them, None, Nothing, No effect, and Not used* indicated lack of personal experience with substance consequences. One participant explicitly stated: *There was no any impact since I was not a victim of drug*. Others minimized effects with responses such as: *Nothing I feel, Am good and cool, and No*. The stark contrast between those describing severe behavioral, health, and relationship consequences versus those reporting no impact reflects the heterogeneous nature of substance involvement among street boys, with clear distinctions between users experiencing significant problems and abstainers or minimal users avoiding such consequences entirely.

Emotional and Behavioral Changes Since Rehabilitation Centre Admission

Participants overwhelmingly reported positive emotional and behavioral transformations following rehabilitation centre admission. The most common response pattern consisted of emphatic affirmations: *Yes of course* (repeated four times), *Good* (repeated multiple times), *Feel good*, and *Am feeling good*. Many boys described comprehensive life changes through statements such as: *Yes, it has changed my life* (repeated twice), *My life has changed since I came here, and I have change in my life*. Specific positive changes included substance cessation with responses: *Am not using the drug, No smoking at all, Am not using any of them know, No stress no drug use, and No to drugs and drinks that harms*. Character improvements emerged through statements: *I changed my character, Nice and lovely, Am humble and kind, I fill am friendly to others, and Am kind and loving with caring*. Several participants expressed gratitude for transformation: *I really just thank God for how He changed my life and It was a great pleasure for me since I was under Nairobi City Council*.

Personal development and future orientation characterized many responses. Boys reported enhanced self-control and emotional regulation: *Am controllable now, I can call myself a man with maturity, and Am happy now none of the drug that I was using or not using*. Health improvements appeared in statements: *Good health, I feel well because I am sleeping at good areas and feeding well, and Fresh and cool*. Future-focused responses included: *I can see my future, Am learned and I can change my life, and I can make possible were people see its impossible in my life*. However, some participants acknowledged ongoing struggles: *Still on process, am a new guy, I have challenges in my life* (mentioned twice), *So bad, and Still on it*. The predominance of positive change narratives with occasional acknowledgment of continuing difficulties confirms that

rehabilitation produces meaningful improvements for most boys while recognizing that transformation remains an ongoing process rather than immediate or complete for all participants.

Coping Mechanisms for Stress and Difficult Emotions

Participants identified diverse coping strategies centered on self-regulation, physical activity, and social support. Self-control emerged as the most frequently mentioned mechanism, with multiple boys stating: *Self control* (repeated three times), *Body control*, and *You must control your life well*. Physical activities provided stress relief through responses including: *Football*, *walking*, *My daily things that I do*, and *Keeping myself busy*. Social connections served as coping resources with participants noting: *Social coping*, *Love of a family*, *By sharing your thing*, *Stay with them*, *We are brothers*, *Friendship*, and *By word of encouragement, by my friends and J.K staff*. Several boys mentioned behavioral strategies: *I don't chill with backbeater*, *You must relax first and be cool in every way*, *You must relax first before everything*, and *Avoiding issues*. Health-related responses included: *Good things have good health*, *Am feeling good*, and *Good emotions in the centre*.

Religious and spiritual practices constituted a major coping category with multiple participants citing: *Prayers* (mentioned five times), *Word of God and prayers*, *God changes me*, *I myself but mostly God help me*, and *By hearing other story I fill like am better, good than them, by Bible study*. Additional coping mechanisms included creative and leisure activities: *Listening music*, *Talent*, and *Talent pressure*. Some participants acknowledged ongoing struggles through responses: *Bad things I have get*, *Bad things in my life*, *Still on it*, *Have problems*, *Conflict at home*, *Poverty is real*, and *Am alone in my journey*. Others emphasized adaptive attitudes: *My mindset*, *We are good*, *No stress* (mentioned twice), and *Fresh and cool*. One participant provided comprehensive insight: *I was able to cope up with my stress and emotions since on that way we were able to be counseled by guiding and counselling sessions*. The diversity of coping strategies reflects both individual preferences and rehabilitation programming that offers multiple pathways for emotional regulation beyond substance use.

Peer Relationships within the Rehabilitation Centre

Participants predominantly described positive peer relationships characterized by family-like connections and mutual support. The most common descriptor emphasized consistently positive interactions: *Good all times* (repeated twice), *Good relations*, *In good ways*, and *Not bad*. Many boys conceptualized peer relationships through family terminology, with *Family* mentioned eight times as a standalone response, supplemented by statements: *We are family*, *Brothers as well as one family*, *Love and on family*, and *Friend, family*. Multiple participants emphasized relationship quality through responses: *Good things in my life* (repeated twice), *To have good relationship with other boys* (repeated twice), and *They have good morals in there life*. The sense of brotherhood and collective identity appeared in statements: *We meet*, *Think good morals in life*, and *Friendship*. One participant provided explicit positive feedback: *It was easy for me since they were welcoming and more friendly*.

Some participants offered minimal or neutral commentary suggesting limited relationship depth or recent admission. Responses included: *Still new here*, *Like five days*, *Emotional coop*, and *Nothing to say*. One participant indicated desire for further connection: *Find me for more*, while another simply stated: *None*. The overwhelming prevalence of family-themed and positive relationship descriptions indicates that most boys experience peer relationships as supportive and

characterized by solidarity, though a minority provide limited commentary possibly reflecting shorter tenure at the centre or more reserved social engagement patterns.

Behavioral Control Challenges in Rehabilitation

Participants identified diverse behavioral control challenges ranging from interpersonal conflicts to self-regulation difficulties. Peer relationship challenges emerged through responses: *Tribbing*, *When someones wrongs me*, *Someone to understand me and speak to about it*, and *Staying away with bad boys and control my feelings*. Several boys mentioned specific pressures affecting behavioral control: *Pressure of kuomoka with my talent*, *Family pressure*, *Pressure of life*, and *About talents*. Basic needs concerns interfered with behavioral focus through statements: *Having food*, *Challenges my life with food*, *Challenges like food*, and *Financial instability*. Educational and developmental challenges appeared in: *Lack of going to school*, *How to start my music career*, *Educational material support*, and *No chance to....* Family-related stressors included: *One family* (repeated twice) and *When am broke*. Some participants acknowledged general life difficulties: *Challenges must have in life*, *Planning good things in my life*, and *A lot to say*.

A substantial number of participants reported minimal or no behavioral control challenges. Repeated responses included: *None of them* (twice), *None* (repeated eight times), *None of it*, and *No challenge*. Positive adaptation statements appeared through: *Am good*, *Cooping*, *They have good plan in my life*, *Someone who understands*, *Music*, *Good*, *Coping with others with advices*, and comprehensively: *Having the spirit of adaptability everything changed easily without any challenges*. One participant expressed uncertainty: *I don't think so*. The stark division between those articulating multiple specific challenges versus those reporting none reflects heterogeneous adjustment experiences, with some boys struggling significantly with self-regulation, peer conflicts, and environmental pressures while others demonstrate successful behavioral adaptation or minimize difficulties.

DISCUSSION

The finding that just over half of participants (52.0%) scored within the normal behavioral functioning range, while smaller proportions fell into borderline (34.7%) and abnormal (13.3%) categories, resonates with Ssewanyana et al.'s (2020) identification of low-, moderate-, and high-risk behavioral clusters among Kenyan adolescents, in which the majority occupied a moderate-risk position rather than the extremes. Both studies point toward behavioral functioning among vulnerable youth as graded rather than binary, a distribution that has direct programming implications, since it implies most residents can be served through standard rehabilitation programming while a defined minority requires more intensive, individualized support. This pattern also aligns with Tucker et al.'s (2021) US-based finding that behavioral and functional outcomes cluster into distinguishable subgroups rather than varying uniformly across a population.

The statistically significant relationship identified between substance use and behavioral functioning ($\chi^2=307.694$, $p=0.027$) corroborates a substantial body of prior evidence linking these two dimensions. Weiss et al.'s (2022) meta-analytic finding of a significant association between emotion regulation and substance use ($r=0.19$) offers a plausible mechanism for the present result, difficulty regulating emotion may both precede and follow from substance involvement, producing the reinforcing relationship observed here. Legas et al.'s (2022) documentation of aggressive behavior in 37.9% of adults with problematic substance use in Ethiopia similarly demonstrates that behavioral disturbance and substance involvement travel together outside child and adolescent populations, suggesting the pattern observed among street boys in this study is not unique to youth

or to institutional settings. Latvala et al. (2022) add a developmental dimension, showing that parental substance misuse predicts offspring substance misuse and behavioral difficulty, a pathway consistent with the family disruption histories common among street boys and plausibly contributing to the behavioral-substance relationship found in the present study.

The qualitative finding that boys who had discontinued substance use attributed improved self-control and peer relationships to that cessation, while those still struggling described agitation and conflict, mirrors Salama et al.'s (2022) observation that substance involvement and affective disturbance co-occur and reinforce one another among vulnerable populations. It also extends Lappan et al.'s (2020) finding that treatment dropout is elevated among clients with heavier substance involvement, since if behavioral instability accompanies heavier use, as this study suggests, it may partly explain why such clients are also harder to retain in structured programming. West et al.'s (2020) finding that inactive behavior is linked to heavier alcohol and cannabis use among adolescents lends further support to the coping-mechanism narratives in this study, where physical activity was one of the most frequently cited strategies for managing stress without recourse to substances.

CONCLUSION

This study assessed relationship between behavioral functioning and substance use patterns among street boys at Joseph Kang'ethe Rehabilitation Centre. Findings reveal that participants displayed three distinguishable behavioral functioning profiles rather than a single, uniform pattern. Majority of their behavioral functioning fell within the normal range, a substantial minority in a borderline range requiring monitoring, and a smaller group experiencing clinical level difficulty requiring more intensive support. This distribution indicates that behavioral recovery among street boys, like substance cessation, is uneven and requires differentiated rather than uniform programming. In addition, findings indicate that substance use and behavioral functioning are statistically and experientially linked among this population. The significant chi-square association, corroborated by participant accounts connecting substance cessation to improved self-control and peer relationships, indicates that behavioral difficulty and substance involvement should be treated as intertwined targets of rehabilitation rather than as separate problems addressed in isolation. Interventions that improve one dimension are therefore likely to yield gains in the other, making integrated programming, one that addresses substance use and behavioral functioning together, more promising than addressing either alone.

RECOMMENDATIONS

Based on the study findings, the following recommendations have been proposed to address identified gaps;

1. Rehabilitation centres should adopt standardized behavioral screening tools such as the SDQ to routinely assess behavioral functioning alongside substance use status at admission and at regular intervals throughout rehabilitation, enabling early identification of boys in the borderline or abnormal categories.
2. Individualized behavioral intervention plans should be developed for boys identified with borderline or clinical-level difficulties, integrating counseling, peer mentorship, structured physical activity, and spiritual support in proportion to assessed need rather than applying uniform programming to all residents.
3. Future longitudinal studies should track how behavioral functioning and substance use jointly evolve from admission through rehabilitation and community reintegration, to

determine whether early behavioral gains predict sustained abstinence and successful reintegration over time.

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