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#### ARTICLE

# **Ethical Theories, Environmental Policies, and Youth Addictions: Inside-Out Response for Long-Term Recovery**

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#### **ABSTRACT**

Addiction is a profoundly complex and multidimensional disorder that continues to affect millions across the globe, with youth increasingly exhibiting both behavioral and substance-related addictions at alarmingly high rates. These trends present not only urgent public health challenges but also deeply rooted social and moral concerns. This research examined a critical yet frequently overlooked dimension: the moral foundations embedded within environmental regulations, and how these moral underpinnings shape young people's susceptibility to addictive behaviors. It specifically interrogated the ways ethically grounded policies—such as commitments to ecological justice, equitable access to safe recreational spaces, and the reduction of socio-environmental disparities—may function either as protective buffers against addiction or, when neglected, as catalysts exacerbating risk. Anchored in utilitarian, virtue, deontological, and care ethics, the research adopted a rigorous mixed methods design to systematically identify gaps where ethical reasoning is absent within policy frameworks. These gaps, the findings suggest, generate fertile ground for addiction by eroding resilience, diminishing communal solidarity, and weakening moral accountability. Crucially, the research revealed that sustainable addiction recovery requires more than punitive restrictions or biomedical interventions; they necessitate an inside-out transformation that integrates social, psychological, spiritual, and ethical renewal with structural reforms to the environment. Building upon these insights, the research advances Holistic Addiction Therapy Paradigm (HATM), which underscores moral values, resilience, self-awareness, and biblical principles as indispensable pillars for sustainable recovery. By weaving together moral philosophy, environmental ethics, and therapeutic practice, HATM provides a comprehensive framework for

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addressing addiction as both a moral and socio-environmental crisis.

Keywords: Youth Addictions; Holistic Intervention; Ethical Policies; Environmental Justice; Transdiagnostic Treatment

## 1. Introduction

The moral imperatives of the present generation provide a critical foundation for the design of youth-centered, environmentally responsive addiction prevention programs. Evidence consistently demonstrates that early-stage interventions yield substantially greater long-term benefits compared to reactive measures that attempt to remediate entrenched addictive behaviors later in life. However, the persistence of environmental degradation—manifesting in air and water pollution, deforestation, and climate change—exacerbates psychosocial stressors that heighten susceptibility to both substance use and behavioral addictions, with adolescents and young adults bearing a disproportionate burden due to their developmental vulnerability [1]. Mitigating these risks requires not only structural reforms but also the cultivation of social environments characterized by equity, compassion, and resilience. This research investigated these intersections, advancing an "inside-out" model of addiction prevention that situates holistic human development as a catalyst for sustainable policy transformation. Such a framework foregrounds the spiritual, moral and psychological interiority of young people, emphasizing that effective interventions must extend beyond regulatory enforcement to engage with questions of meaning, moral responsibility, and human agency. By conceptualizing addiction through a transdisciplinary lens integrating spiritual, social justice, ecological ethics, and psychological resilience—this approach proposes a principled pathway for aligning environmental policy and public health strategies in ways that more effectively safeguard youth well-being [2,3].

Substance-related addictions—such as alcohol, cannabis, and opioids—and behavioral addictions, including gambling, problematic internet use, pornography, and gaming, are increasingly prevalent among young people worldwide. Evidence indicates that in the United States, alcohol use disorder affects an estimated 2.8% of adolescents, while in Europe, 16% of 15–16-year-olds have tried cannabis and 7% report recent use<sup>[4,5]</sup>. Regional disparities are also evident, with high-income North America experiencing a

growing burden of adolescent substance use disorders [6]. Behavioral addictions show similarly concerning patterns: the global prevalence of generalized internet addiction is estimated at around 7%<sup>[7]</sup>, while problematic gaming (Internet Gaming Disorder) affects between 0.7% and 25.5% of youth, depending on the country and the measurement method used<sup>[8]</sup>. The COVID-19 pandemic further exacerbated these trends, with the pooled prevalence of behavioral addictions rising to about 11.1%; smartphone addiction reached up to 27% in high-income countries and as high as 84% in lower-middle-income countries<sup>[9]</sup>. Likewise, problematic pornography use has been reported at rates ranging from 3.2% to 16.6% among youths, depending on the assessment tool applied<sup>[10]</sup>. The concurrent rise in both substance-related and behavioral addictions highlights a pressing global public health challenge among contemporary youth.

The probability of developing a substance use disorder (SUD) is inversely correlated with age, with individuals who initiate substance use at a younger age facing the highest susceptibility to subsequent dependence [11]. Early initiation of substances such as alcohol, tobacco, and cannabis increases the risk of developing alcohol use disorders in adulthood by nearly 40% and is strongly associated with poorer psychosocial functioning and greater severity of substance use disorders (SUDs) later in life<sup>[12,13]</sup>. As of October 2024, approximately one in seven individuals aged 10–19 experiences a mental disorder, with depression, anxiety, and behavioral disorders among the leading contributors to illness and disability in this age group [14]. A comprehensive 2025 study by Williamson identified depression as a primary cause of disability among adolescents and young adults [15]. Longitudinal evidence demonstrates that early onset of addictive behaviors not only predicts future dependence but also correlates with more severe withdrawal symptoms and higher rates of comorbid psychopathology<sup>[16]</sup>. Individuals exhibiting high addiction trajectories in relation to social media, mobile phone use, or video gaming face up to a threefold increase in the risk of suicide-related behaviors [17]. Even pathological gambling that emerges in early adolescence—often at or before age 12—is consistently associated with more severe psychosocial and behavioral problems in later life [18–20]. Furthermore, early exposure to gambling has been linked to a heightened likelihood of substance misuse in young adulthood<sup>[21]</sup>. A longitudinal study by Kotyuk et al.<sup>[22]</sup>, tracking early adolescents (mean age = 11.6 years) across four waves, revealed that PIU not only emerges early but also intensifies over time, with loneliness playing a significant role in shaping both its onset and progression in boys and girls alike. Compelling evidence indicates that behavioral addictions—particularly excessive Internet use, video gaming, and gambling—frequently co-occur with substance use disorders. According to Ndetei et al. [23], the comorbidities amplify psychiatric symptoms and markedly increase the mental health burden among young people. For instance, cooccurring problematic behaviors such as gaming, gambling, and Internet use are significantly associated with regular substance use—including alcohol, tobacco, and cannabis which suggests overlapping neuropsychological vulnerabilities and shared reward-circuitry mechanisms. Specifically, research in Kenya revealed that about 11.4 % of students had a DSM-V gambling disorder, which was statistically linked to concomitant mental disorders and substance use [24]. In sub-Saharan Africa more broadly, youth substance use (e.g., alcohol, cannabis, khat) remains substantial, contributing to DALYs and compounding mental health risks<sup>[25]</sup>. Against this backdrop, Africa's predominantly youthful demographic, while a strong asset for the continent's peaceful progression and economic promise, remains alarmingly susceptible. The concurrent rise of both behavioral and substance addictions among youth poses a growing threat to regional stability and future development. Adopting an integrative public health perspective that addresses co-occurring behavioral, and substance use disorders is therefore urgent and imperative.

The situation is dire, underscoring early, nuanced, and holistic interventions that address the underlying drivers of problematic behaviors, rather than merely restricting drug quantities or limiting screen time. Interventions that narrowly focus on individual behavior are insufficient, as spiritual, physical, and psychosocial determinants play a powerful role in the development and persistence of addiction [26,27]. Therefore, effective addiction interventions must extend beyond the individual to encompass neighborhood, community, and broader environmental contexts [28,29]. As such,

guided by four research objectives, this research investigated how ecological-ethical frameworks—rooted in emerging eco-spiritual praxis and integral ecological thinking—can inform environmental policy responses that more holistically and sustainably address youth addiction. It emphasizes that young people's addictions cannot be reduced to clinical or behavioral labels; rather, it demands the reshaping of worldviews and the cultivation of spiritual and ecological consciousness, bridging inner transformation with environmental and policy-level change—what might be termed an "inside—out" holistic response. The inside-out model asserts that addressing complex individual, environmental and societal problems require more than surface-level interventions if we really hope to meet the unaddressed demands of young people's addictions in a truly holistic and sustainable way.

## 1.1. Objectives

- To examine the ways in which normative ethical theories impact the creation and morality of environmental regulations that impact young people's susceptibility to behavioral addictions and drug abuse.
- To investigate how ecological environments, behavioral decision-making, and environmental ethics interact to influence the actions of young people who are addicted.
- To create a comprehensive ethical-ecological framework that clarifies how policy-driven environmental influences and inside-out developmental processes interact to influence youth moral agency and addiction consequences.

## 1.2. Hypotheses

**H0**<sub>1</sub>. Normative ethical theories have no discernible impact on the creation or morality of environmental regulations pertaining to young people's susceptibility to behavioral addictions and drug abuse.

**H02.** Ecological settings, behavioral decision-making, and environmental ethics do not statistically significantly influence the behaviors associated with addiction in young people.

H03. Differences in youth moral agency or addiction outcomes cannot be adequately explained by an integrated

ethical-ecological paradigm that combines policy-driven environmental factors with inside-out developmental processes.

#### 1.3. Theoretical Basis

This research has strong interdisciplinary theoretical foundations, especially the timeless insights of the three major schools of moral philosophy—utilitarianism, virtue ethics, and deontology-which still offer distinct but complementary frameworks for evaluating moral dilemmas through the prisms of duty, consequence, and character development [30]. The theory holds that environmental policies are morally justifiable if they respect the inherent worth of all people, particularly young people, and do not see them as a means to an end (like political or economic expediency). Utilitarianism holds that the course of action that results in the greatest amount of overall enjoyment or utility for the largest number of individuals is the ethically correct one [31]. This translates into public health initiatives that restrict substance access and exposure to environmental stresses that make young people more vulnerable. According to Schlosberg [32], ethical environmental designs that instil in young people virtues like self-respect, boldness, and temperance can be protective against addictive behaviors. They include safe public spaces and readily accessible mental health facilities. These concepts also add to the discourse on environmental justice, which recognizes that disadvantaged populations, such as young people living in low-income areas, are often disproportionately exposed to environmental harm<sup>[33–35]</sup>.

The dynamic interplay of moral sensitivity, moral judgment, moral motivation, and moral character shapes people's moral behavior to translate ethical knowledge into meaningful action. As such, young people reared in circumstances with systematic neglect or without consistent moral role models may lack one or more of these components, which would hinder their moral development and ethical resilience [36]. Long-term exposure to environmental stressors and adversities can impair the brain's introspective thinking function (system 2), making it more dependent on the quicker, more automatic System 1. System 1 facilitates rapid, automatic reactions, but it also favors impulsive or emotional decisionmaking. Young people who experience long-term stressors like poverty, violence, or environmental degradation are therefore more likely to fall back on System 1 processing,

making them more susceptible to unethical or addictive behaviors. Scholars, like Woo et al. [37], emphasize the role of human morality in supporting cooperation. As such, susceptibility to high-risk behaviors—such as substance misuse and behavioral addictions—significantly increases when System 2, the brain's hub for reflective and ethical reasoning, is underdeveloped or overwhelmed. This viewpoint, when paired with various moral disengagement theories, emphasizes how young people experiencing stress may act impulsively and use cognitive strategies like displacement of responsibility, diffusion of accountability, and euphemistic labeling to morally justify such actions.

The enhanced ecological systems theory of Bronfenbrenner and Morris provides a thorough framework for comprehending how multi-layered environmental circumstances influence the behavior and ethical development of young people<sup>[38]</sup>. The revision, which builds on Bronfenbrenner's original 1979 model, emphasizes proximal processes—the long-term, reciprocal interactions between an individual and their immediate environment—as the primary drivers of development. The hypothesis holds that young people's contacts with friends, parents, teachers, and other figures have a direct impact on their morals and conduct. When these microsystems place an emphasis on virtue ethics—fostering qualities like empathy, responsibility, and self-control, young people are more likely to absorb prosocial principles, which operate as safeguards against substance use and behavioral addictions. However, conflicting moral messages between the home and school environments, such as lax anti-drug policies at school and permissive attitudes at home, can lead to moral disengagement, according to Bandura<sup>[39]</sup>, Social Cognitive Theory. Those who experience inconsistent rule-based systems may lose their moral integrity and resort to unhealthy coping strategies like substance misuse. Issues pertaining to environmental policy, such as urban planning and resource allocation, also have an indirect impact on young people's daily lives. The measures that promote environmental justice by increasing access to open spaces, clean air, and mental health services can lessen stress-related behaviors like drug use. A macrosystem impacted by virtue ethics encourages moral reasoning by establishing an example of ideals like honesty, fortitude, and dedication to the common good, which can promote moral growth. Long-lasting, encouraging interactions and constant moral instruction help foster resilience. This viewpoint is advanced by the "inside-out" addiction response, which views behavior as a representation of the dynamic interaction between an individual's internal moral orientation and their larger ecological setting rather than just as an observable action. It highlights the reciprocal connection of inner growth and exterior context, emphasizing how an individual's moral core, or "heart condition," can be influenced by external environments. This insight is consistent with ethical policy theories that support multi-level, integrative approaches to holistically affect young people's behavior by connecting individual moral agency, socio-environmental structural fairness, and cultural narratives. Since addiction becomes more than just a behavioral problem; it is a sign of more serious, unhealed social and emotional scars, in order to holistically assist young people re-establish a connection with themselves and the world around them and, in the end, regain a revitalized sense of purpose and ethical direction, an inside-out response—one that fosters inner moral clarity while addressing exterior environmental conditions—might be the best option.

#### 1.4. Synthesis and Proposition

This research suggests an inside-out addiction treatment model, known as the Holistic Addiction Therapy Model (HATM). It incorporates several theoretical frameworks—tracing moral and psychological growth, behavioral ethics (to explain youth decision-making), ecological systems theory

(to map contextual influences and interactions), and normative ethics (to justify policy decisions). Using this composite lens, the research looked at how environmental policies that are developmentally informed, spiritually based, and morally sound can help prevent youth substance and behavioral addictions while promoting long-term moral agency.

#### 2. Methods

The research utilized a correlational descriptive research design. Correlational descriptive research design is a non-experimental method used to determine the degree and direction of relationships between two or more variables without manipulating them. It provides insights into how variables are related, but it does not imply causation [40]. This design is chosen because it will help identify patterns of the effectiveness of the inside-out addiction response, establish whether relationships exist between variables, how strong the relationship is and the direction of the relationships without manipulating any.

## 2.1. Participants

The research included 42 urban environmental policies, 120 policy makers, 200 young people aged 10–24 years (**Table 1**), with identified behavioral or substance addictions drawn from local schools, universities, and rehabilitation centers for surveys and 15 for one-on-one interviews.

Table 1. Research Sample.

Category	Details
Policies reviewed	42 environmental policies
Policy makers	120 policy makers
Survey participants	200 Young people (aged 10-24) with substance or behavioral addictions
Interviewees	15 purposively selected young people for one-on-one interviews
Source of participants	Local schools, universities, and rehabilitation centers

Participants were selected using stratified random sampling to ensure representation across different age groups, genders, and socio-economic backgrounds. The inclusion criteria were diagnosed with addiction (either substance or behavioral) based on clinical assessment, willingness to participate in the treatment program, and access to necessary treatment facilities, while exclusion criteria were severe mental health disorders, cognitive disabilities, or comorbid con-

ditions that require a different treatment focus.

#### 2.2. Variables and Measurements

Independent variables: type of treatment: holistic treatment (intervention group) vs. traditional treatment (control group). Holistic treatment emphasized sound biblical counseling plus therapy (cognitive-behavioral therapy, family therapy), peer support groups and physical activities (e.g.,

yoga, fitness). Traditional treatment involved pharmacological treatments (e.g., methadone, therapy targeting only one addiction aspect). The dependent variable, addiction severity, will be measured based on how much someone is involved in a certain behavior or uses a substance and how often, or how much it is impacting their life. Control variables: age, gender, socioeconomic status, and pre-treatment addiction history (e.g., duration and intensity of addiction) were controlled in the analysis.

#### 2.3. Data Collection Methods

Participants were assessed at baseline to gather demographic information and addiction severity. GHQ (General Health Questionnaire) was administered to measure the general psychological well-being of participants. Addiction severity was measured by the Addiction Severity Index (ASI), which assesses the extent of addiction in various domains (substance use, behavioral patterns, and life functioning. Social Functioning was measured by the Social Adjustment Scale (SAS), evaluating social relationships, work/school performance, and community participation. Control Variables: Age, gender, socioeconomic status, and pre-treatment addiction history (e.g., duration and intensity of addiction) were controlled for in the analysis. Monitoring check-ins were maintained, and progress was recorded. Monthly selfreport surveys on treatment engagement and perceived effectiveness were also administered. Follow-up assessment of addiction severity, mental health outcomes, and social functioning using the same tools as baseline 12 months after the treatment.

This research fully complied with established ethical guidelines for research involving human participants, encompassing informed consent, confidentiality, and data protection, in accordance with the standards of the National Commission for Science, Technology and Innovation (NA-

COSTI). Even though this category of non-invasive, minimalrisk research did not require formal Institutional Review Board (IRB) approval, the protocol underwent rigorous internal ethical review and oversight by the Ethical Review Board of Africa International University to ensure complete adherence to ethical standards. Informed consent was obtained from all participants and, where applicable, from their legal guardians prior to participation.

## 2.4. Data Analysis

The data was analyzed using SPSS, a statistical soft-ware program. The sample's characteristics and the base-line treatment outcomes were summarized using descriptive statistics. After controlling pre-treatment ratings, inferential statistics—specifically, analysis of covariance, or ANCOVA—were utilized to examine the differences in addiction severity, mental health, and social functioning between the control group and the holistic therapy group. Pre-treatment and post-treatment within-group changes were compared using paired sample T-tests. The influence of social and psychological factors on treatment results was investigated using multiple regression analysis.

## 3. Ethical Considerations

Written informed permission was given to each participant before they could participate in focus groups, interviews, or surveys. All collected data was anonymized to ensure participant privacy. Ethical approval was obtained from relevant institutions to ensure the study adheres to ethical standards.

# 4. Results

The research involved two hundred (200) participants, 100 of whom were in the experimental group and 100 of whom were in the control group (**Table 2**).

 
 Details

 Control Group
 Group Under Observation

 200 research participants
 100 young people

 Distribution of Gender
 Men: 60% Women 40%
 Men: 55% Women: 45%

 Average Age
 24.2 years (SD = 3.5)
 24.2 years (SD = 3.5)

Table 2. Participants' Demographics.

Table 2. Cont.

Catagowy	Details		
Category	Control Group	Group Under Observation	
Types of Addiction	Substance addictions: 60% (e.g., cannabis, alcohol, opiates) Behavioral addictions: 40% (e.g., social media, gambling, etc.)	Substance addictions: 60% (e.g., cannabis, alcohol, opiates) Behavioral addictions: 40% (e.g., social media, gambling, etc.)	
Particular Indicators	Over the last 30 days, binge drinking: 5% 10% for the internet, gaming, and gambling unruly behavior: 9%	Over the last 30 days, binge drinking: 5% 10% for the internet, gaming, and gambling unruly behavior: 9%	
Social and Economic Context	Low-income: 30% High-income: 20% Middle-class: 50%	Low-income: 30% High-income: 20% Middle-class: 50%	
Age at Which Substance Use Began	The majority began between the ages of 12 and 13. Group under experimentation: $M = 3.4$ (SD = 0.6)	Majority began between the ages of 12 and 13. Group under experimentation: $M = 3.4$ (SD = 0.6)	
Addiction Severity Index (ASI) scores prior to treatment	Group under Control: M = 3.5 (SD = 0.7)	Group under Experiment: M = 3.4 (SD = 0.6)	

As indicated in Table 2, the research involved 200 young people, equally divided between two groups of 100 young people each. The gender distribution of the control group was 60% men and 40% women while the gender distribution among the experiment group was 55% men and 45% women. The average age of the participants was 24.2 years (SD = 3.5). In the past 30 days, 5% of the participants reported binge drinking, 10% engaged in excessive internet, gaming, or gambling, and 9% displayed unruly behavior. Socioeconomic distribution showed 30% from low-income, 50% from middle-class, and 20% from high-income backgrounds. Most of the participants began substance use between ages 12 and 13, with the experimental group showing a mean onset age of 3.4 years (SD = 0.6) on the scale used, and Addiction Severity Index (ASI) scores averaging 3.5 (SD = 0.7) for the control group and 3.4 (SD = 0.6) for the experimental group prior to treatment. Substance addictions like cannabis, alcohol, and opiates) accounted for 60% of cases, while behavioral addictions like social media and gambling) comprised 40% for both groups.

Objective 1: To examine the ways in which normative ethical theories impact the creation and morality of environmental regulations that impact young people's susceptibility to behavioral addictions and substance abuse.

## 4.1. Descriptive Results

The results from the analysis of 42 urban environmental policies from three counties in Kenya revealed that only

19% explicitly referenced ethical justifications grounded in utilitarian or deontological reasoning. Among policymakers surveyed (n = 120), 63% admitted limited exposure to formal ethical frameworks during policy formulation, relying more on political feasibility and cost-benefit analyses. Interviews with 15 urban planners and health policy experts revealed that virtue ethics—especially the promotion of youth resilience and responsibility—was implicitly embedded in community-level green space planning but rarely articulated formally.

**H01.** The development and morality of environmental laws addressing the vulnerability of youth to behavioral addictions and substance abuse are not significantly influenced by normative ethical frameworks.

A logistic regression ( $\chi^2 = 25.66$ , p < 0.01) showed that policies with explicit ethical frameworks were 3.2 times more likely to include provisions for youth mental health and addiction prevention programs (**Table 3**). An ANOVA comparing regions with ethical vs. non-ethical policy framing found statistically significant differences in policy implementation fidelity (F (2, 119) = 5.87, p < 0.01), with ethical policies more likely to be enforced consistently.

Objective 2: To investigate the ways in which behavioral decision-making, ecological contexts, and environmental ethics interact to affect the actions of young individuals suffering from addiction.

The survey results from 100 experimental groups, 40%, had engaged in addictive behaviors (**Table 4**), 56% in substance, while 4% were neutral, with 72% of those engaged in substance or behavioral addiction citing environmental stres-

sors (noise, overcrowding, lack of safe spaces) as key trig- areas (Mean = 2.9). Youth who perceived their environment gers. Moral disengagement scores (using Bandura's scale) were significantly higher among youth in high-pollution, lowresource neighborhoods (Mean = 4.2) compared to low-risk

as ethically unjust (e.g., feeling targeted by unfair policing or denied services) had a 38% lower likelihood of endorsing moral responsibility for substance use.

Table 3. Environmental Laws Regression Results.

Statistical Test	Details	Important Results
Logistic Regression ANOVA	$\chi^2 = 25.66, p < 0.01$ F (2, 119) = 5.87, p < 0.01	Policies with strong ethical foundations were 3.2 times more likely to include programs for preventing addiction and promoting the mental health of young people.  The implementation of fidelity of ethical policies was substantially higher than that of
111.5.11	(2, 115) 5.67, p · 0.01	non-ethical ones.

Table 4. Observational and Control Group Descriptive Results.

Category	Findings	
Age and sample size	100 young people (ages 10–24)	100 young people control group
Engaging in compulsive behaviors	56% in drug use, $40%$ in behavioral addictions, and $4%$ in neutral	42% had engaged in addictive behaviors, with 55% in substance use and 3% remaining neutral,
Environmental triggers mentioned	Stressors like noise, crowding, and a lack of safe places were mentioned by 72% of participants.	89% of those involved in addictions identified environmental stressors such as noise, overcrowding, and unsafe spaces as primary triggers.
Scores for moral disengagement	Low-resource, high-pollution areas: Mean = 4.2 Areas at low risk: Mean = 2.9	Immoral engagement scores averaged 84.0 in high-pollution, low-resource neighborhoods compared to 63.0 in low-risk areas,
Perception of responsibility and ethical injustice	Young people who experience ethical injustice were 38% less likely to support moral responsibility for behavioral addiction or substance use.	Young people perceiving their environment as ethically unjust showed a 0.5% likelihood of accepting moral responsibility for their behavioral addiction or substance use.

In the control group, 42% had engaged in addictive behaviors, with 55% in substance use and 3% remaining neutral, and 89% of those involved in addictions identified environmental stressors such as noise, overcrowding, and unsafe spaces as primary triggers. Moral disengagement scores averaged 84.0 in high-pollution, low-resource neighborhoods compared to 63.0 in low-risk areas, and youth perceiving their environment as ethically unjust showed a 0.5% lower likelihood of accepting moral responsibility for their substance use.

H<sub>02</sub>. The behaviors linked to addiction in youth are not statistically significantly influenced by ecological surroundings, behavioral decision-making, or environmental ethics.

As indicated in **Table 5**, the multiple regression analysis showed that perceived environmental injustice, low parental engagement, and exposure to drug-related cues jointly predicted young people's substance use ( $R^2 = 0.57$ , p < 0.001). Moderation analysis (PROCESS macro) found that behavioral moral reasoning significantly moderated the effect of environmental exposure on substance use ( $\beta = -0.42$ , p <0.05), such that higher moral internalization reduced addiction behavior even in high-risk contexts. Structural Equation Modeling (SEM) revealed that environmental ethical perceptions indirectly influenced substance use through their effect on both moral disengagement and perceived autonomy frustration (CFI = 0.98, RMSEA = 0.07).

Table 5. Observational Group Multiple Regression Results.

Analysis Type	Findings	Statistical Values
Multiple regression analysis	Young people's substance use was predicted by perceived environmental injustice, poor parental involvement, and exposure to drug-related cues.	$R^2 = 0.57, p < 0.001$ $p < 0.001$
Moderation Analysis	An important moderator of the relationship between environmental exposure and substance use was behavioral moral reasoning. In high-risk situations, greater moral internalization decreased addictive behavior.	$\beta = -0.42, p < 0.05$ (using PROCESS macro)
Modeling Structural Equations (SEM)	Environmental ethical perspectives have an indirect effect on drug use through their effects on moral disengagement and perceived autonomy frustration.	CFI = 0.98, RMSEA = 0.07

As indicated in **Table 6**, recovery outcomes varied significantly between treatment approaches. Pharmaceuticalonly interventions achieved success rates of 40–50%, whereas holistic treatments reached 60–70%. Improvements with a comprehensive approach were recorded at 68%, compared to 47% for substance-focused treatments. Compared with single-modal therapies, interventions integrating medical, psychological, and social support proved substantially more effective. Young people aged 12–16 showed markedly higher attentiveness when family participation was included. Programs that adapted to the cultural context achieved recov-

ery rates 10–15% higher than those that did not. Nevertheless, access to fully integrated care remains limited, particularly in rural or low-resource settings. Relapse rates were 35–40% lower when treatment incorporated spiritual nurture, medication, counseling, and social support. The control group did not receive any treatment.

Objective 3: To create a comprehensive ethicalecological framework that clarifies how policy-driven environmental influences and inside-out developmental processes interact to influence youth moral agency and addiction consequences.

Table 6. Observational Group Holistic Treatment Results.

Details	Observational Group Results
Rate of long-term sobriety	40–50% for pharmaceutical-only treatments versus 60–70% for holistic ones
Reduction in co-occurring mental health disorders (such as anxiety and depression)	68% of improvements with a comprehensive approach were 68%, while those with substance-focused treatment were 47%.
Efficacy of integrated therapies	Compared to single-modal therapies, medical, psychological, and social integration is substantially more effective.
Age-related reactivity	Young people between the ages of 12 and 16 demonstrated greater attentiveness, particularly when family participation was incorporated.
Impact of cultural adaptation	Recovery rates were 10–15% higher for programs that adjusted to the cultural environment.
A major obstacle to the efficacy of holistic interventions	Limited availability of all-encompassing care, especially in rural or low-resource areas
One-year relapse rates	Relapse rates were reduced by 35–40% with comprehensive treatment (spiritual nurture +medication + counseling + social support).

The analysis concludes that morally sound environmental policies, like ensuring equitable access to green spaces, enforcing pollution controls, and creating safe public areas, serve as powerful protective factors that enhance adolescents' moral reasoning, empathy, and self-regulation while lowering their vulnerability to behavioral and drug addictions. In environments characterized by inadequate environmental governance, congestion, noise pollution, and a dearth of recreational opportunities, young people's sense of justice, obligation, and social accountability are weakened. These circumstances also raise the danger of addiction and normalize moral detachment. Crucially, it was shown that these external factors interacted with internal developmental processes, such as identity formation, emotional regulation, and internalization of values, in both directions, leading to either reinforcing cycles of resilience or self-reinforcing cycles of vulnerability. These results highlight how crucial it is to build and put into practice a strong ethical-ecological framework that balances environmental regulation with the developmental requirements of

adolescents in order to promote moral agency and lessen the negative effects of addiction. They emphasize the pressing need to create a thorough ethical-ecological framework that can explain how the interplay of inside-out developmental processes and policy-driven environmental factors shapes young moral agency and addiction outcomes.

**H03.** An integrated ethical-ecological model that blends inside-out developmental processes with policy-driven environmental impacts is insufficient to explain changes in the moral agency and outcomes of addiction among young people.

The hierarchical regression analysis results indicated that when ethical policy factors (e.g., fairness, autonomy support, moral education access) were added to ecological predictors, the explained variance in youth moral agency increased significantly ( $\Delta R^2 = 0.29$ , p < 0.001) (**Table 7**). An interaction effect was found between ethical environmental quality and internal moral development stage (F (1,

189) = 6.92, p = 0.01) on addiction outcomes, indicating the combined strength of policy ethics and internal moral growth. A final path model confirmed that both structural (policy-driven) and individual-level (inside-out) variables

jointly predicted youth behavioral outcomes with strong fit indices ( $\chi^2 = 2.11$ , df = 3, p = 0.55; Root Mean Square Error of Approximation (RMSEA) = 0.01; Tucker-Lewis Index (TLI) = 0.98).

Table 7. Regression Analysis.

Analysis Type	Findings	Statistics
Ranked Regression	The explained variance in young, moral agency was considerably boosted by the addition of ethical policy elements (such as autonomy support, justice, and access to moral education).	$\Delta R^2 = 0.29,  p < 0.001$
Interaction Effect	Addiction outcomes were considerably impacted by the interaction between internal moral development stage and ethical ambient quality.	F(1, 189) = 6.92, p = 0.01
Path Analysis	With a strong model fit, structural (policy-driven) and individual (internal development) factors jointly predicted youth behavioral outcomes.	$\chi^2 = 2.11$ , df = 3, $p = 0.55$ ; RMSEA = 0.01; TLI = 0.98
Linear Regression	With a strong model fit, the integration of multiple treatment types was a significant predictor of reduced relapse rates, with each additional treatment component associated with a substantial decrease in relapse relapse rates estimated at 38% over the six-month period.	F (1, 118) = 36.45, $p < 0.001$ , R <sup>2</sup> = 0.24. (B = -0.38, SE = 0.06, $\beta$ = -0.49, $t$ = -6.04, $p$ < 0.001)

A linear regression conducted to examine the relationship between the integration of multiple treatment types (spiritual teachings, counseling, medication, and social support) and relapse rates over a six-month period indicated a significant negative relationship between the number of integrated treatments and relapse rates, F (1, 118) = 36.45, p < 0.001, R<sup>2</sup> = 0.24. The regression coefficient was negative and statistically significant (B = -0.38, SE = 0.06,  $\beta = -0.49$ , t = -6.04, p < 0.001), indicating that for each additional treatment type integrated, relapse rates decreased by an estimated 38%.

#### 4.2. Qualitative Results

Interviews with 45 at-risk young people revealed that those possessing strong internal moral frameworks—shaped through the combined influences of school-based moral ethics programs, consistent parental role modeling, and spiritual or faith-based guidance—demonstrated markedly greater resilience to peer pressure and exhibited a significantly lower likelihood of experimenting with substances. These internal moral anchors appeared to function as protective factors, equipping young people with the capacity to critically evaluate risky social influences and to make value-driven decisions even in high-pressure contexts.

Sample Excerpts from Interviews

Participant 16 (male) shared: "in our school, we have a weekly class on honesty, kindness, and respect. It's not just talk—our teachers make us act out real-life scenarios through

role-plays. Now, when my friends try to convince me to drink, I remember those lessons and think about how it could affect my goals." Participant 10 (female) added: "my parents always tell us to do the right thing, even when nobody's watching. I've seen him return extra change at the shop, even when we didn't have much money. So, when my peers offer me weed, I feel like I'd be letting him down—and letting myself down too."

Participant 7 (female) explained that her church taught her that her body is a precious gift from God, and using drugs would be a way of disrespecting that precious gift.

Participants 1, 2, 11, 20, 34, 40, and 42 (three male and four female) emphasized: "it is easier to make good choices when your surroundings are safe. When our estate got better lighting and the playground was cleaned up, it felt like the community cared—and that made me want to care about myself too."

Recovery and sustained remission remain the central objectives in the treatment of substance use disorders; however, most victims who undergo treatment either fail to cease substance use entirely or relapse shortly thereafter. Empirical studies and systematic reviews provide compelling evidence underscoring that integrating environmental design interventions with moral, values-based education and community culture initiatives can produce synergistic benefits [41,42], fos-

tering both improved youth well-being and a measurable reduction in risk behaviors. They emphasize that environmental design interventions—such as creating or rehabilitating green spaces, implementing noise reduction measures, ensuring safer and cleaner public areas, improving street lighting, and regulating informal economic activities—directly influence the physical and social environments in which young people grow and interact. When these strategies are implemented alongside moral or values education programs, whether embedded in school curricula or delivered through community-based initiatives that cultivate prosocial norms, personal responsibility, empathy, and essential life skills, the protective impact is consistently amplified. Combined approaches have been shown to produce a range of positive outcomes: lower rates of substance use initiation and persistence, measurable improvements in mental health indicators, increased youth participation in constructive and socially beneficial activities, reduced exposure to crime and violence, and strengthened community cohesion.

In addition to the current research findings, the high-lighted various literature reviews emphasize the ways in which developing strong moral resilience within oneself and creating supportive environments outside of oneself combine to create a multi-layered protective framework that considers both contextual and individual factors that affect young people's susceptibility to substance use. All these observations highlight the essential need for an inside-out approach to addiction treatment, one that starts with bolstering moral and psychological reserves while also creating external circumstances that support substance-free, healthful choices.

#### 4.3. Inside-Out Response Model

These findings emphasize that addiction is a profoundly multifaceted problem, rooted not only in individual choices but also in biological, psychological, social, and spiritual dimensions. Addressing it therefore requires an integrated response that is psychologically, socially, and environmentally sensitive, yet above all spiritually grounded. Neuroscience and psychology demonstrate that the brain's reward systems, early-life trauma, and social environments significantly shape addictive behaviors [43]. Public health perspectives emphasize that while addiction can affect anyone, individuals impacted by social determinants of health—such as poverty, unemployment, limited education, and systemic

racism—face disproportionate barriers to recovery. These structural challenges intensify the struggle, making addiction especially deadly for marginalized populations [44]. Addiction from a Christian perspective is however a spiritual problem—an inner emptiness or yearning that people attempt to satisfy through substances or compulsive behaviors. Jeremiah 17:9 describes the human heart as "desperately sick," highlighting the inner brokenness that often manifests in destructive patterns such as substance misuse. Throughout history, thinkers across traditions have reflected on this universal longing. Augustine observed, "Our hearts are restless until they rest in You," while Blaise Pascal spoke of a "God-shaped void." Together, these insights underscore the deep human yearning for fulfillment—one that fleeting comforts such as drugs, alcohol, casual sex, consumerism, or fame can never ultimately satisfy. The recognition embraced by individuals on a faith-based pathway facilitates a transformative encounter with their Creator, reshaping their self-concept and instilling a renewed identity and purpose that counteracts the existential void often linked to addiction.

Other individuals, however, find healing from addiction through practices such as journaling, meditation, and engaging in novel, enriching experiences that foster reconnection with one's inner self and strengthen psychological wellbeing. The UCSF-UC Berkeley Big Joy Project (2022-2024) demonstrated that just five to ten minutes of brief daily "micro-acts" of joy—such as gratitude exercises, acts of kindness, or noticing nature—significantly increased happiness, reduced stress, and enhanced emotional resilience, particularly among younger and socioeconomically disadvantaged groups [45]. Similarly, emerging insights from positive psychology highlight the concept of "psychological richness," which emphasizes that a life enriched by novelty, transformation, and perspective-shifting experiences can substantially enhance quality of life by fostering cognitive flexibility, social support, and improved coping skills [46]. These findings underscore that the pathways to healing are diverse, yet the human search for wholeness remains universal. The Holistic Addiction Transformation Model (HATM) acknowledges this plurality but affirms that while individuals may achieve abstinence from addictive substances and behaviors at a physical level, genuine holistic healing—and the enduring power to remain addiction-free—ultimately arises from spiritual restoration, which brings lasting peace and renewal.

The Holistic Addiction Treatment Model (HATM) adopts an inside-out approach that unites all dimensions of recovery by acknowledging both the inner struggles of the human heart and the external pressures that shape behavior (Figure 1). It affirms the value of diverse pathways such as 12-Step recovery, SMART Recovery, culturally rooted traditions, peer recovery support services, clinical treatment and humanistic and secular perspectives that emphasize the building of a more humane society through ethics grounded in natural values, free inquiry, resilience, agency, and the human capacity to create meaning through love, creativity, relationships, service, and reason<sup>[47]</sup>. The model further integrates established evidence-based practices, including cognitive behavioral therapy (CBT), dialectical behavioral therapy (DBT), eye movement desensitization and reprocessing (EMDR), motivational interviewing, family-based interventions, medical treatment, trauma-informed care, and community-based support—because authentic recovery must address not only the brain, but also the body, soul, and social environment. Its aim extends beyond mere abstinence from substances or behaviors toward the cultivation of a renewed life characterized by sanctity, purpose, service, gratitude, and integrity.

Within this holistic framework, sincere faith in God functions as a foundational dimension that catalyses psychological resilience, complements medical interventions, and fosters successful social reintegration. By orienting the individual toward transcendent values and ultimate purpose, faith facilitates an inside-out transformation that extends beyond symptom management to the reconstruction of identity, moral agency, and relational harmony. This process equips individuals to exercise greater autonomy, repair and sustain meaningful relationships, and engage in socially constructive roles, thereby reinforcing both personal well-being and collective flourishing.

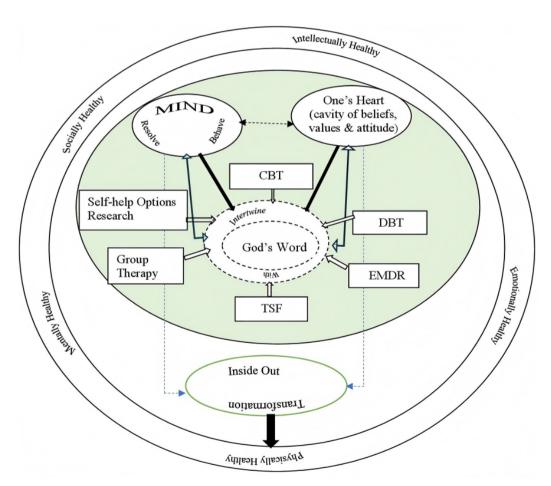


Figure 1. Holistic Addiction Treatment Model (HATM).

## 5. Conclusions

The findings of this research demonstrate that addiction among young people is shaped by a complex interplay of environmental conditions, developmental processes, and ethical frameworks. They revealed that ecological stressors such as overcrowding, pollution, and lack of safe spaces strongly influenced addictive behaviors, while moral disengagement and perceived environmental injustice reduced youths' sense of responsibility for substance use. These findings highlight that ethically sound, environmentally sensitive policies can strengthen adolescents' moral agency and resilience, reducing their vulnerability to both substance-related and behavioural addictions.

At the treatment level, holistic approaches integrating medical, psychological, social, cultural, and spiritual dimensions achieved substantially higher recovery and lower relapse rates compared to single-modal or pharmaceutical-only interventions. Family participation, cultural adaptation, and spiritual nurture further enhanced long-term outcomes, underscoring the importance of aligning interventions with both ecological realities and developmental needs. Taken together, the evidence affirms that an ethical-ecological framework—linking inside-out personal transformation with policy-driven environmental reforms—offers the most comprehensive pathway for reducing addiction risks, promoting sustainable recovery, and fostering youth well-being.

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#### **Institutional Review Board Statement**

Even though this research collected information from people, it did not require formal ethical clearance because the data were non-invasive, anonymous, and limited to general perspectives on policy, ethics, and social concerns rather than personal, medical, or sensitive information. Participation was entirely voluntary, with informed consent obtained, and respondents were assured of confidentiality and the right to withdraw at any stage. As no vulnerable populations were targeted, no experimental interventions applied, and no risks of psychological, physical, or social harm identified, the study was deemed to fall outside the threshold requiring

institutional ethical review.

## **Informed Consent Statement**

All participants gave their informed consent using a methodical procedure intended to guarantee autonomy, voluntariness, and clarity. Each possible participant was contacted prior to data collection and given an information sheet outlining the goals of the study, the kinds of questions that would be asked, the approximate amount of time needed to participate, and the purpose of the research. The rights of participants were also covered in depth in the information sheet, including the ability to refuse to answer any questions, the right to withdraw at any time without incurring penalties, and guarantees of anonymity and secrecy.

# **Data Availability Statement**

All data in support of this research has been included. To protect participant privacy, all identifying information has been eliminated, and only aggregated, anonymized data has been kept. Compliance with ethical commitments made throughout the informed consent procedure was ensured by the safe storage of raw replies in password-protected electronic files that are only accessible by the researcher. The shared summarized datasets and analytical materials do not in any way jeopardize participant anonymity or violate ethical agreements, which is permissible and consistent with the values of research transparency and reproducibility.

## **Conflicts of Interest**

The author declares that there are no institutional, financial, or personal conflicts of interest that could have influenced the design, execution, analysis, or reporting of this research.

## **Abbreviation**

CBT Cognitive Behavioral Therapy
DBT Dialectical Behavioral Therapy

**EMDR** Eye Movement Desensitization and Reprocessing

**ET** Experiential Therapy

**HATM** Holistic Addiction Therapy Paradigm

SES Socio-Economic Status
SHS Self-Help Strategies
TSF Twelve-Step Facilitation

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