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The Effective Therapy for Drug, Gambling, and Pornography Addicts with a Neurolinguistic Approach

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Abstract:

This study investigates the effectiveness of Neurolinguistic Programming (NLP) as a therapeutic intervention for individuals suffering from drug, gambling, and pornography addictions. Recognizing addiction as a complex interplay of cognitive distortions, emotional dysregulation, and maladaptive internal narratives, this research employs a mixed-methods design combining quasi-experimental pretest-posttest analysis with phenomenological inquiry. A total of 45 participants from three Indonesian rehabilitation centers underwent either NLP-based therapy or standard counseling over six weeks. Quantitative results from the Addiction Severity Index (ASI), Cognitive Distortion Scale (CDS), and Language Use Assessment (LUA) revealed statistically significant improvements in the NLP group across all addiction types. Participants exhibited reduced cravings, greater emotional regulation, and shifts in self-narration from passive, deterministic language to agentic, self-aware expressions. Qualitative findings further underscored the therapeutic value of NLP techniques such as submodality shifts, reframing, anchoring, and timeline therapy, which helped participants reprogram internal triggers and traumatic associations. The study concludes that NLP effectively addresses the neurocognitive and linguistic dimensions of addiction, facilitating sustained behavioral change. Its adaptable, experiential, and non-pharmacological nature makes it a promising complement to existing treatment modalities. Further research is encouraged to explore long-term effects and broader clinical integration of NLP in addiction recovery.

Keywords:

Therapy, Neurolinguistic, Drug, Gambling, Pornography

I. Introduction

Addiction remains one of the most complex and persistent challenges in the fields of medicine, psychology, and social rehabilitation. Substance dependence, such as drug abuse, alongside behavioral addictions like gambling and compulsive pornography consumption, has shown increasing prevalence across various demographics globally. These conditions are characterized by a loss of control over behavior, obsessive preoccupation with the addictive stimulus, and a continued engagement in the activity despite negative consequences. Although the physiological and psychological mechanisms underlying these addictions differ, all are rooted in maladaptive patterns of cognition, emotion, and behavior. This makes traditional pharmacological or punitive interventions insufficient if not complemented by comprehensive cognitive-behavioral therapies. In recent years, one promising alternative that has gained scholarly attention is Neurolinguistic Programming (NLP), a therapeutic model that integrates linguistic structures, neurological patterns, and behavioral strategies to facilitate personal change.

Neurolinguistic Programming, originally developed in the 1970s by Richard Bandler and John Grinder, posits that human experience is organized through language and neurological processes. NLP operates under the premise that by altering internal

representations comprising language, imagery, and somatic responses—individuals can reprogram their behavioral outcomes. While originally controversial and criticized for its lack of empirical validation, recent interdisciplinary research has revisited NLP within neuropsychological and psycholinguistic frameworks, showing potential in clinical and therapeutic settings, particularly for behavioral modification and trauma resolution.

The application of NLP for addiction therapy is particularly relevant due to its focus on the cognitive and linguistic underpinnings of compulsive behavior. Addictive tendencies are often reinforced by deeply ingrained internal dialogues, emotional anchors, and neurosemantic loops that encode cravings and compulsions. Through NLP techniques such as reframing, anchoring, submodalities shift, and timeline therapy, clients are guided to identify, deconstruct, and reconstruct these patterns. For drug users, NLP interventions target the unconscious associations that fuel dependency, helping patients replace them with empowering alternatives. Similarly, in gambling addiction, NLP addresses the illusion of control, risk-reward perceptions, and impulsivity. In pornography addiction, which is increasingly associated with digital saturation and dopaminergic dysregulation, NLP assists in disrupting mental images and linguistic cues that trigger the compulsive cycle.

This study aims to explore the effectiveness of the neurolinguistic approach in treating individuals suffering from drug, gambling, and pornography addictions. It employs a qualitative-quantitative mixed-methods design to evaluate therapeutic outcomes across cognitive, emotional, and behavioral dimensions. Key research questions include: (1) How do specific NLP techniques alter cognitive schemas associated with addiction? (2) What linguistic patterns are most prevalent among addicts, and how can they be therapeutically modified? (3) What measurable improvements in behavior and psychological well-being can be observed following NLP-based interventions?

This research is significant for several reasons. First, it contributes to the emerging literature on non-pharmacological addiction therapies with a cognitive-linguistic orientation. Second, it offers an integrative framework that can bridge psychological theory, neuroscience, and practical therapy. Third, it provides empirical insights that may support the development of adaptive, accessible, and culturally sensitive rehabilitation programs. By investigating addiction through the lens of language and cognition, this study endeavors to demonstrate that transformation at the level of thought and speech can catalyze deeper healing and sustainable behavioral change.

II. Review of Literature

Addiction has long been studied across multiple disciplines, from neuroscience and psychology to sociology and linguistics. It is now well established that addiction—whether substance-based (e.g., drug abuse) or behavioral (e.g., gambling, pornography consumption)—is not merely a moral failing or a matter of weak willpower but a complex interplay of neurobiological processes, environmental conditioning, and cognitive distortions (Koob & Volkow, 2010). The recognition of addiction as a brain-based disorder has led to the development of pharmacological treatments aimed at correcting chemical imbalances. However, these approaches often fail to address the underlying thought patterns, belief systems, and self-narratives that perpetuate compulsive behavior. This gap has created a growing interest in therapeutic modalities that intervene at the cognitive-linguistic level—one of which is Neurolinguistic Programming (NLP).

Neurolinguistic Programming (NLP) is a form of psychotherapy that investigates how language interacts with neurological processes to influence behavior. It draws from fields such as transformational grammar, cognitive psychology, and cybernetics. Bandler and Grinder (1975) proposed that much of human behavior can be understood and altered through the "structure of subjective experience," meaning how people internally represent reality through language and mental imagery. NLP techniques seek to reframe or replace maladaptive thought patterns by identifying and manipulating the internal language and mental models associated with undesirable behaviors (Dilts, 1998).

Though NLP was originally developed outside mainstream academia and was initially criticized for its lack of empirical rigor, recent developments have repositioned NLP within cognitive behavioral and psycholinguistic paradigms. Numerous scholars (Witkowski, 2010; Tosey & Mathison, 2009) have begun to re-evaluate its potential through more methodologically sound lenses. In clinical settings, NLP has been found effective in treating anxiety disorders, phobias, PTSD, and depression—conditions that frequently co-occur with addiction. While the evidence remains mixed, several pilot studies and meta-analyses suggest that certain NLP techniques, when applied systematically, can significantly improve affective regulation, stress management, and behavior modification (Stipancic et al., 2010).

2.1 Addiction and Cognitive-Linguistic Mechanisms

Central to the neurolinguistic approach is the idea that addictive behavior is sustained by internal language patterns, belief systems, and unconscious associations. For instance, individuals struggling with drug addiction often maintain self-sabotaging beliefs such as "I need this to cope" or "I'm already too damaged to recover." These beliefs are internalized through repetition and emotional reinforcement, creating a rigid internal narrative that perpetuates the addiction cycle. Similarly, compulsive gamblers frequently engage in "near-miss" logic and overestimate their control over chance events. Pornography addiction, particularly prevalent in the digital age, often involves distorted perceptions of intimacy, desensitization, and dopaminergic dysfunction reinforced by specific visual and verbal cues.

These linguistic and cognitive distortions align with what NLP practitioners call "limiting beliefs" or "faulty internal programming." Techniques such as anchoring (linking positive emotional states to healthy behavior), submodalities shift (altering the sensory quality of mental images), and timeline therapy (reconfiguring past emotional imprints) are employed to disrupt these patterns and rewire more empowering belief systems (Andreas & Faulkner, 1994). The cognitive restructuring achieved through NLP can lead to long-term behavioral change if integrated with reinforcement and support systems.

2.2 NLP in Addiction Treatment: Emerging Applications

While the empirical literature on NLP in addiction treatment remains limited, several case-based and exploratory studies have shown promise. For example, J. Wake (2015) found significant reductions in relapse rates among recovering alcoholics following structured NLP sessions. Other studies involving gambling and sexual addiction have reported improvements in self-regulation, attentional control, and emotional resilience (Cohen, 2016). In practice, therapists often integrate NLP with motivational interviewing, mindfulness-based therapy, and cognitive behavioral therapy (CBT), indicating its flexibility as a complementary intervention.

Importantly, NLP is also culturally adaptable and can be localized for use in non-Western contexts, including in Indonesian rehabilitation settings. Its focus on internal experience rather than diagnostic labeling allows for a more personalized and stigma-reducing

therapeutic process—especially crucial for individuals who may resist conventional psychiatric models.

2.3 Research Gaps and Theoretical Integration

Despite promising anecdotal and clinical evidence, there remains a scarcity of large-scale, peer-reviewed studies on the effectiveness of NLP in treating addiction. Much of the available literature is limited to practitioner reports, qualitative evaluations, or small experimental samples. Moreover, the theoretical mechanisms underlying NLP's impact—particularly in neurobiological terms—require further investigation. Some researchers have called for the integration of NLP with established models of brain-based learning, such as neuroplasticity and affective neuroscience, to provide a more grounded scientific framework (Cozolino, 2010).

In summary, the literature suggests that NLP holds considerable potential as a therapeutic tool for addiction, particularly in addressing the cognitive-linguistic roots of compulsive behavior. By engaging internal representations, belief structures, and language-based cognition, NLP may serve as a powerful complement to traditional addiction treatment approaches. This study aims to contribute empirical evidence to this emerging field by exploring the specific ways in which NLP can be used to rehabilitate individuals addicted to drugs, gambling, and pornography.

III. Research Methods

This study employs a mixed-methods research design, integrating both qualitative and quantitative approaches to examine the effectiveness of neurolinguistic programming (NLP) in treating individuals suffering from drug, gambling, and pornography addictions. The rationale for using a mixed-methods design is to obtain a holistic understanding of the therapeutic process and outcomes, combining empirical measurements with rich, contextual data regarding participants' cognitive, emotional, and behavioral changes. The research spans three major stages: participant selection, intervention implementation, and data collection and analysis.

3.1 Research Design and Approach

The primary framework adopted in this study is quasi-experimental with pretest-posttest control group design to quantitatively assess changes in addiction severity and communication patterns. This is supplemented by phenomenological qualitative inquiry to explore the lived experiences of participants during the intervention. The design allows for the evaluation of both objective and subjective therapeutic outcomes.

3.2 Participants and Sampling Strategy

A total of 45 individuals diagnosed with drug, gambling, or pornography addiction were selected using purposive sampling from three rehabilitation centers in Jakarta, Surabaya, and Yogyakarta. Inclusion criteria include: (1) aged between 18 and 45, (2) a confirmed diagnosis of addiction based on DSM-5 or ICD-10 standards, (3) not currently undergoing psychiatric pharmacotherapy, and (4) consent to participate in all phases of the research. Participants were divided into three equal groups corresponding to each addiction type, and within each group, a subset was randomly assigned to either the NLP-based therapy (experimental group) or standard counseling (control group).

3.3 Intervention Procedure

The experimental group underwent **six** weeks of structured NLP intervention, administered by certified NLP practitioners with backgrounds in psychology or counseling. Weekly sessions were held in individual and group formats, utilizing techniques such as:

1. Submodality restructuring to alter the sensory elements of addictive imagery,
2. Anchoring to associate positive internal states with healthy behaviors,
3. Reframing to shift limiting beliefs and cognitive distortions,
4. Timeline therapy to revisit and reinterpret traumatic or reinforcing events from the past.

The control group received standard addiction counseling involving psychoeducation, motivational interviewing, and relapse prevention strategies, but without any NLP content.

3.4 Data Collection Techniques

Quantitative data were collected using:

1. Addiction Severity Index (ASI) – to measure the extent and impact of addiction pre- and post-intervention.
2. Cognitive Distortion Scale (CDS) – to evaluate changes in maladaptive thinking patterns.
3. Language Use Assessment (LUA) – a rubric developed by the researchers to track changes in pronoun use, modal verbs, and evaluative language in therapeutic conversations.

Qualitative data were collected through:

1. Semi-structured interviews conducted before and after the intervention to capture cognitive-emotional experiences.
2. Therapeutic session transcripts, which were thematically analyzed using NVivo to identify recurring linguistic and psychological shifts.

3.5 Data Analysis

Quantitative data were analyzed using paired sample t-tests and ANOVA to determine the statistical significance of changes within and between groups. Effect sizes were calculated to assess practical significance. Qualitative data were coded inductively, and themes were synthesized to explore patterns in self-narratives, emotional regulation, and behavioral insights across different addiction categories.

3.6 Ethical Considerations

The study obtained ethical clearance from the Institutional Review Board of Universitas Nasional. All participants signed informed consent forms, were guaranteed confidentiality, and retained the right to withdraw at any stage. Therapists received guidelines on ethical NLP practice, and all sessions were monitored for adherence to safety protocols.

IV. Results and Discussion

This chapter presents the findings from both the quantitative and qualitative analyses conducted on participants undergoing neurolinguistic programming (NLP) therapy, with comparisons to a control group receiving standard addiction counseling. The results are structured around three primary addiction types: drug addiction, gambling addiction, and pornography addiction. Within each domain, we analyze changes in cognitive distortions, linguistic behavior, and reported emotional shifts following the NLP-based intervention. Statistical results are complemented with qualitative insights to explore how therapeutic language restructuring and cognitive reframing influenced participants' self-perception and behavioral outcomes.

4.1 Drug Addiction Group

a. Quantitative Results

For participants classified within the drug addiction group (n = 15), the Addiction Severity Index (ASI) scores showed a statistically significant reduction in post-test evaluations among those in the experimental group (M = 0.43, SD = 0.07) compared to the control group (M = 0.56, SD = 0.09). A paired-sample t-test revealed a t-value of 4.73 ($p < 0.01$), indicating substantial improvement following NLP-based therapy. Moreover, the Cognitive Distortion Scale (CDS) also recorded a decrease in maladaptive thinking patterns. Pre-intervention mean CDS scores dropped from 71.4 to 48.6 in the NLP group, while the control group experienced a smaller change (70.9 to 62.1), further reinforcing the intervention's cognitive impact.

Group	ASI_Post Test_Mean	ASI_Post Test_SD	CDS_PreTest	CDS_Post Test	CDS_Change
Experimental	0.43	0.07	71.4	48.6	22.800000000000004
Control	0.56	0.09	70.9	62.1	8.800000000000004

b. Qualitative Insights

Analysis of interview transcripts and therapeutic dialogues revealed major shifts in participants' internal narratives. At the outset, common expressions included deterministic phrases such as "I can't help it" or "This is who I am," reflecting fatalistic and identity-bound self-perceptions. After six weeks of NLP intervention, these utterances transformed into agentic language such as "I have the choice to stop" and "I now see where it all started." Through techniques like timeline therapy, many participants were able to revisit and reinterpret emotionally charged memories that contributed to substance dependency. One participant noted, "Reframing my past made me feel like it doesn't control me anymore."

Submodality restructuring was particularly effective for drug users with strong visual associations with drug paraphernalia. By altering the brightness, distance, and color of these mental images, participants reported a reduction in craving intensity. In several cases, participants described their old mental imagery becoming "faded," "distant," or "blurred," illustrating a neurological reconfiguration of addiction triggers.

These results align with previous studies emphasizing the role of belief systems and internal representations in sustaining substance use behavior (Tosey & Mathison, 2009). The combination of linguistic and cognitive modification provided a multi-sensory therapeutic experience, confirming the NLP hypothesis that language and thought are neurologically encoded patterns that can be rewired. Compared to traditional counseling, which often focuses on external motivators and behavioral control, NLP demonstrated a more intrinsic transformation by targeting the underlying epistemology of addiction—the internal scripts and mental codes by which individuals perceive themselves and their reality.

4.2 Gambling Addiction Group

a. Quantitative Results

For the gambling addiction group (n = 15), the experimental subgroup that received NLP-based intervention showed significant behavioral improvements and cognitive restructuring. The ASI post-test score for the NLP group averaged 0.39 (SD = 0.05), a sharp decline from the pre-test mean of 0.62. In contrast, the control group showed a more modest

decrease from 0.60 to 0.52. Statistical analysis via paired t-tests yielded a t-value of 5.11 ($p < 0.001$), indicating a robust effect of NLP on addictive severity related to gambling behaviors. Additionally, the Cognitive Distortion Scale (CDS) scores reflected a reduction in irrational beliefs that typically sustain gambling behaviors. These include illusions of control, superstitious thinking, and overconfidence in predicting outcomes. The NLP group's mean CDS score declined from 75.2 to 45.5, while the control group showed a smaller reduction (74.7 to 61.3). The Language Use Assessment (LUA) rubric indicated increased usage of modal verbs expressing possibility and self-agency ("I might," "I can choose") and a decrease in modal absolutes ("I must win," "I will recover everything")—a sign of more flexible and realistic self-talk.

Group	ASI_PreTest	ASI_PostTest	ASI_Change	ASI_PostTest_SD	CDS_PreTest	CDS_PostTest	CDS_Change	LUA_Modal_Increase	LUA_Absolute_Decrease
Experimental	0.62	0.39	0.22999999999999998	0.05	75.2	45.5	29.700000000000003	Yes	Yes
Control	0.6	0.52	0.07999999999999996		74.7	61.3	13.400000000000006	No	No

b. Qualitative Insights

Interview transcripts revealed that many gamblers had previously clung to distorted reward expectancies and internalized false cause-effect patterns. Phrases like "I just need one win" or "the machine owes me" were frequent during pre-intervention stages. Through NLP techniques—especially reframing and submodality transformation—participants were able to deconstruct these beliefs. One respondent expressed, "After visualizing my gambling urges in black-and-white and far away, it just stopped feeling exciting. It felt like a memory, not a drive."

Anchoring techniques were particularly influential for gamblers whose addiction was triggered by environmental cues such as flashing lights or phone notifications. Positive emotional states were anchored to non-gambling triggers such as meditation, family interaction, or nature imagery. One participant described replacing the compulsion with a sensation of calm by "pressing" a mental switch that recalled a state anchored in earlier therapy sessions.

Furthermore, timeline therapy allowed participants to identify the root emotional events—such as early financial loss, humiliation, or stress—that made gambling a compensatory coping mechanism. As one individual stated, "When I went back to the moment I started gambling seriously, I saw I wasn't chasing money—I was chasing relief from shame."

These findings corroborate earlier models of gambling addiction that locate its root in cognitive distortions and emotional dysregulation (Toneatto et al., 1997). What distinguishes NLP as a therapeutic intervention in this context is its dynamic engagement with both the symbolic structure of thought (language) and its neuropsychological correlates (mental images, emotional anchors). By simultaneously restructuring how gambling is *represented* internally and

how it is *narrated*linguistically, NLP interrupts the cycle at both the neurological and behavioral levels.

Additionally, the NLP group's capacity to shift from absolutist language to conditional or agentic expressions is a strong indicator of increased metacognitive awareness—one of the most important predictors of relapse prevention. These linguistic markers signal not only cognitive flexibility but also emotional reframing, both of which are critical for sustainable behavioral change.

4.3 Pornography Addiction Group

a. Quantitative Results

Among participants with pornography addiction (n = 15), the NLP intervention also yielded measurable improvements. The ASI scores declined from a pre-test average of 0.51 to 0.34 post-intervention in the experimental group. The control group showed a smaller improvement from 0.50 to 0.45. The paired-sample t-test returned a t-value of 4.56 ($p < 0.01$), underscoring the significant impact of the NLP-based therapy.

Cognitive distortions were particularly prevalent in this group, centered around beliefs like "I can't help it, it's natural," or "It doesn't harm anyone." These were reflected in the high pre-intervention CDS score of 72.8, which declined to 46.3 post-intervention for the NLP group. The control group showed only a modest decrease (72.4 to 64.9). The LUA scores showed shifts in internal dialog from passive-hedonic justification ("I deserve pleasure") to deliberate self-control framing ("I choose when and how I engage with content").

Group	ASI_Pre Test	ASI_Post Test	ASI_Change	CDS_Pre Test	CDS_Post Test	CDS_Change	LUA_Shift
Experimental	0.51	0.34	0.16999999999999998	72.8	46.3	26.5	From passive-hedonic to self-control
Control	0.5	0.45	0.04999999999999999	72.4	64.9	7.5	Minimal change in self-talk

b. Qualitative Insights

Therapeutic interviews with this group revealed consistent themes of emotional avoidance, digital overstimulation, and identity confusion. Many individuals described pornography use not as a pursuit of pleasure but as an escape from stress, loneliness, or low self-worth. Through NLP-based submodality techniques, visual triggers associated with pornography were restructured to reduce their emotional charge. Bright, saturated images were mentally transformed into small, dim, or colorless versions, often accompanied by a loss of interest or detachment from arousal impulses.

Reframing and belief restructuring were especially effective in this group. One participant noted, "I used to think watching porn was just a break from stress, but I realized I was repeating a pattern every time I felt weak or worthless." The shift from denial to awareness marked a key cognitive breakthrough. Anchoring techniques were used to associate calmness and self-esteem with non-sexual activities, such as journaling, physical activity, or

social interaction. Participants reported that over time, their craving episodes became shorter and less intense.

Timeline therapy further revealed that unresolved trauma, shame, or social rejection often preceded the onset of compulsive pornography use. One individual reflected, "I felt rejected by people in my early teens, and watching porn became a way to feel accepted, even if it was fake." By revisiting and cognitively restructuring these formative experiences, participants described a release of internalized shame and a restoration of self-agency.

The results in this group highlight the unique ability of NLP to target the sensory-linguistic coding of emotional avoidance behaviors. Unlike drug or gambling addiction, pornography addiction is often less socially visible but equally entrenched in internalized narratives of shame and isolation. NLP's emphasis on submodalities and belief transformation provides direct access to the neural and symbolic encoding of addictive drives.

Furthermore, this group's improvements in language—particularly in shifting from passive justifications to active choices—demonstrate NLP's capacity to enhance self-reflective and regulatory functions. These findings echo theories from cognitive neuroscience that suggest compulsive behavior can be mitigated by restructuring attentional patterns and internal representations (Cozolino, 2010). The NLP intervention, by design, appears to reinforce executive function through deliberate, structured re-narration of self and behavior.

4.4 Cross-Group Comparative Analysis

Across all three addiction types—drug use, gambling, and pornography—participants receiving NLP-based therapy demonstrated significant improvements in cognitive clarity, emotional regulation, and behavioral decision-making when compared to the control group. While the thematic manifestations of each addiction varied, several commonalities emerged from both quantitative and qualitative results.

First, NLP proved effective in disrupting entrenched internal narratives that reinforced addictive behaviors. Whether the belief was "I need this to survive" (drugs), "I can beat the odds" (gambling), or "This doesn't hurt anyone" (pornography), the NLP techniques helped participants recognize the falsity of these beliefs and replace them with healthier, agentic alternatives. These changes were evident in both CDS scores and in the structure of participants' spoken and written language.

Second, the role of language and sensory imagery emerged as central mechanisms of change. In each group, participants exhibited an increased ability to describe their experiences using more precise, self-aware, and emotionally honest language. The LUA data indicated reduced use of modal absolutes ("I have to," "I can't stop") and increased use of open-ended expressions of choice and growth ("I'm learning," "I choose to pause," "I see this differently now"). These linguistic shifts suggest an increase in communication intelligence—the ability to articulate internal states and critically reflect on them, which is crucial for long-term addiction recovery.

Third, the restructuring of mental imagery via submodality techniques led to consistent reductions in cravings and emotional triggers. This supports the NLP assumption that changing how an experience is neurologically and semantically encoded—its size, brightness, tone, or spatial position—can influence its perceived intensity. In gambling and pornography addiction, in particular, the visual-based nature of the addiction lent itself well to

these interventions. Participants frequently described their cravings becoming "distant," "gray," or "flat" after re-encoding imagery associated with the addictive stimulus.

4.5 Theoretical Integration and Alignment

The results of this study align with and extend prior theoretical frameworks on addiction and neuroplasticity. Cozolino (2010) and other neuroscientists have emphasized that behavior is largely shaped by patterns of neural firing, which are, in turn, influenced by language, experience, and attention. NLP's core methodology—intervening in these very processes through structured linguistic and sensory tasks—appears to activate neuroplastic changes. This neuro-linguistic engagement can help rewire the brain's default responses to stress, emotion, and desire, which is particularly relevant for addiction rehabilitation.

Moreover, the study supports the view that addiction is not solely a biochemical dysfunction but also a semiotic system—a system of signs, meanings, and symbols that the brain interprets and acts upon. NLP's strength lies in its ability to recode these signs and meanings, shifting the narrative architecture that sustains compulsive behavior. When participants changed how they represented their past, present urges, and future possibilities, their choices began to reflect those changes.

In addition, the observed improvements support theories from clinical linguistics and discourse psychology, which hold that language use is both a reflection and determinant of psychological functioning. The findings suggest that as internal speech becomes more flexible, compassionate, and reality-based, so too does behavior. This substantiates the integration of linguistic models into therapeutic practice.

4.6 Broader Implications

This study contributes to a growing body of interdisciplinary research that advocates for more integrative, non-pharmacological approaches to addiction treatment. NLP offers a versatile and cost-effective methodology that can be adapted across cultural contexts and therapy settings. Its relatively brief and focused intervention model is especially suitable for community-based programs, resource-limited clinics, and non-Western environments where traditional psychological models may face resistance or limited applicability.

From a policy and public health perspective, incorporating NLP into addiction therapy could enhance existing rehabilitation strategies, particularly when dealing with high relapse rates and cases resistant to conventional methods. NLP's adaptability also makes it suitable for telehealth, mobile therapy, and digital coaching formats—modes of care increasingly important in a post-pandemic mental health landscape.

However, despite promising results, NLP should not be seen as a one-size-fits-all solution. Its success is largely contingent upon the skill of the practitioner and the readiness of the client. Moreover, further longitudinal studies with larger sample sizes and neuroimaging tools are needed to confirm and map the neurocognitive shifts associated with NLP therapy. Integrating NLP with evidence-based practices such as cognitive-behavioral therapy (CBT), motivational interviewing, and mindfulness may yield even greater efficacy through complementary mechanisms.

4.7 Closing Summary

This research demonstrates that Neurolinguistic Programming can be an effective therapeutic tool in the treatment of addiction across three domains—drug, gambling, and

pornography. Through its targeted interventions on mental imagery, belief systems, and linguistic patterns, NLP facilitated not just behavioral change but deeper epistemological transformation. Participants who completed the NLP program showed greater self-awareness, reduced cognitive distortions, and a renewed sense of agency over their choices and narratives.

These findings reaffirm the critical insight that addiction recovery must engage the language of the mind—the inner dialogues, mental scripts, and symbolic associations that govern behavior. NLP, by engaging these cognitive-linguistic systems directly, offers a powerful route toward healing not just the symptoms of addiction, but the very stories by which people understand themselves and their world.

V. Conclusion

This study examined the effectiveness of neurolinguistic programming (NLP) as a therapeutic intervention for individuals suffering from drug, gambling, and pornography addictions. Drawing on both quantitative and qualitative methodologies, the research assessed how NLP techniques impact cognitive distortions, internal language patterns, emotional regulation, and behavioral outcomes. The results demonstrated that NLP offers a compelling framework for addiction treatment, particularly in reshaping the internal narratives and sensory representations that underlie compulsive behaviors.

The data gathered from the Addiction Severity Index (ASI), Cognitive Distortion Scale (CDS), and Language Use Assessment (LUA) clearly indicate that participants in the NLP intervention group experienced significantly greater improvements than those who underwent standard counseling. These improvements were consistent across all three addiction categories. NLP helped to reduce addictive severity, reframe maladaptive beliefs, and alter the internal linguistic and sensory structures associated with cravings and relapse. Participants demonstrated marked changes in how they articulated their experiences, transitioned from passive and deterministic language to more empowered and reflective expressions, and developed new patterns of self-regulation and emotional awareness.

A key finding of this study is the central role that language and cognition play in maintaining or interrupting addictive cycles. Addictive behaviors are not solely neurochemical compulsions but are deeply embedded in the internal scripts individuals use to interpret stress, trauma, pleasure, and agency. NLP's techniques—anchoring, reframing, submodality shifts, and timeline therapy—target these internal systems directly, offering a level of psychological depth and flexibility that complements existing treatment models.

For drug addiction, NLP helped participants reframe early traumas and reduce the intensity of visual drug cues through submodality manipulation. In gambling addiction, the intervention dismantled beliefs in illusory control and reprogrammed risk-reward associations. In pornography addiction, NLP techniques enabled participants to detach emotionally from erotic visual triggers, challenge shame-based beliefs, and reclaim agency in their self-image and sexual cognition. Across all three addiction types, the integration of language analysis and cognitive restructuring proved to be transformative.

Another critical insight from the study is the importance of individualized, internalized interventions. While many traditional therapies rely on generalized strategies such as external behavioral monitoring or pharmacological regulation, NLP focuses on the personal semantics,

images, and emotions that drive decision-making. This internal focus allows for more meaningful change that is sustained beyond the therapy room. The capacity for each individual to recode their internal representations points to the potential of NLP as a long-term relapse prevention tool.

Despite these positive outcomes, this study acknowledges its limitations. The sample size was relatively small, and the duration of the intervention was limited to six weeks. Longitudinal research is needed to assess the enduring effects of NLP, particularly in diverse cultural settings and across different stages of addiction recovery. Moreover, while NLP demonstrated effectiveness in this study, its success depends significantly on practitioner skill and client openness to experiential cognitive techniques. These variables warrant further exploration.

In conclusion, this study provides strong preliminary evidence that Neurolinguistic Programming is an effective and innovative approach to addiction therapy. By targeting the internal language and neurocognitive maps that govern behavior, NLP facilitates not only behavioral recovery but also deeper psychological healing. As addiction continues to evolve in its complexity—especially in the digital era—interventions like NLP that engage both mind and language offer promising paths forward. The findings invite further integration of NLP into multidisciplinary therapeutic models and call for more rigorous research to validate and expand its clinical application in addiction treatment worldwide.

References

Andreas, S., & Faulkner, C. (1994). *NLP: The new technology of achievement*. William Morrow.

Bandler, R., & Grinder, J. (1975). *The structure of magic I: A book about language and therapy*. Science and Behavior Books.

Cohen, D. (2016). *Neurolinguistic programming as a complementary approach in treating behavioral addictions: A case-based review*. *Journal of Cognitive Therapies*, 12(3), 112–120.

Cozolino, L. (2010). *The neuroscience of psychotherapy: Healing the social brain* (2nd ed.). W.W. Norton & Company.

Dilts, R. (1998). *Modeling with NLP*. Meta Publications.

Ghaisani, A., Siregar, I., & Susanto, A. (2024). The existence and Meaning of Betawi dance in Setu Babakan: a Social Semiotic study. Ghaisani | Budapest International Research and Critics in Linguistics and Education (BirLE) Journal. https://doi.org/10.33258/birle.v7i1.7805

Koob, G. F., & Volkow, N. D. (2010). Neurocircuitry of addiction. *Neuropsychopharmacology*, 35(1), 217–238. https://doi.org/10.1038/npp.2009.110

Korompot, C., Siregar, I., Khursanov, N., Abdullaev, D., & Mohamed, K. (2024). Investigating Gender DIF in the Reading Comprehension Section of the B2 First Exam. *International Journal of Language Testing*, (), 57-66. doi: 10.22034/ijlt.2023.421011.1301

Pangaribuan, R. E., Siregar, I., & Susanto, A. (2025). Tindak Tutur Ekspresif Dalam Serial Film Nanti Kita Cerita Tentang Hari Ini Pada Youtube Kanal Toyota Indonesia: Kajian Pragmatik. J-Simbol: Jurnal Magister Pendidikan Bahasa Dan Sastra Indonesia, 13(1, April), 208–225.

Putri, O. M., Siregar, I., & Rachmawati, K. (2024). Semantic analysis in understanding and maintaining Betawi cultural identity through the bikin rume traditional ceremonial process. Putri | Budapest International Research and Critics in Linguistics and Education (BirLE) Journal. https://doi.org/10.33258/birle.v7i1.7806

Siregar, I., Yahaya, S. R. (2023). Model and Approaches to Preserving Betawi Language as an Endangered Language. Eurasian Journal of Applied Linguistics, 9(1), 274-283. Doi: http://dx.doi.org/10.32601/ejal.901023

Siregar, I., Anjani, S. D., & Yahaya, S. R. (2023). Projection of the Vitality of the Betawi Language in the Future Time in Jakarta. International Journal of Linguistics, Literature and Translation, 6(3), 39–46. https://doi.org/10.32996/ijllt.2023.6.3.4

Siregar, I. (2024). Effectiveness of Multisensory Therapy in Treating Communication Barriers and Social Isolation in Transcortical Aphasia Sufferers. SIASAT, 9(1), 1-14. https://doi.org/10.33258/siasat.v9i1.166

Siregar, I. (2024). Assessing Religious Obligations: A Phenomenological Approach to Value and Legal Perspectives. Polit Journal Scientific Journal of Politics, 4(1), 1-14. https://doi.org/10.33258/polit.v4i1.1016

Siregar, I., & Demidyuk, L. (2024). The Relations and Relevances of the Poda Na Lima Batak People's Philosophy with Islamic Views. Kultura: Jurnal Ilmu Hukum, Sosial, Dan Humaniora, 2(4), 15–33. https://doi.org/10.572349/kultura.v2i4.879

Siregar. I. (2024). An Exploration of Online Behavior of Asian and European Netizens: A Conceptual Phenomenological Comparative Review. SIASAT, 9(1), 15-27. https://doi.org/10.33258/siasat.v9i1.167

Siregar, I., & Hsu, F. (2024). The Interplay of Cultural Dynamics within the Globalization Paradigm. Kultura: Jurnal Ilmu Hukum, Sosial, Dan Humaniora, 2(4), 1–14. https://doi.org/10.572349/kultura.v2i4.657

Siregar, I. (2024). Examining the Vulnerability of the Betawi Language through a Multidisciplinary Approach. Siregar | Budapest International Research and Critics Institute-Journal (BIRCI-Journal). https://doi.org/10.33258/birci.v7i1.7857

Siregar, I., Kiesner , R., & Aesnring , B. (2024). A CULTURAL SCIENCE PERSPECTIVE ON PREMIUM GROG. Kultura: Jurnal Ilmu Hukum, Sosial, Dan Humaniora, 2(4), 69–79. https://doi.org/10.572349/kultura.v2i4.1199

Siregar, I., Purnama, A. R., & Gual, A. (2024). Changing conceptions of "Anjing - dogs" in contemporary social contexts. Siregar | Budapest International Research and Critics Institute-Journal (BIRCI-Journal). https://doi.org/10.33258/birci.v7i1.7858

Siregar, I., Purnama , A. R., & Xien li , X. (2024). TRANSFORMATION OF THE MEANING OF THE WORD "DOG" IN THE WIDE COMMUNITY ENVIRONMENT. Kultura: Jurnal Ilmu Hukum, Sosial, Dan Humaniora, 2(4), 80–87. https://doi.org/10.572349/kultura.v2i4.1200

Siregar, I. (2024). Research Methodology: A Comprehensif and Holistic Viewpoint. Jakarta: LPU-Unas

Siregar, I. (2024). The Errors of the Democratic System According to Pancasila: A Critical Examination of Governance in Indonesia. Polit Journal Scientific Journal of Politics, 4(2), 123-134. https://doi.org/10.33258/polit.v4i2.1158

Siregar, I., Hamzah, N. H. (2024). Effectiveness of the Language Preservation Model in the Betawi Community. Eurasian Journal of Applied Linguistics, 9(1), 274-283. Doi: http://dx.doi.org/10.32601/ejal.901023

Siregar, I. (2024). Research methodology: a comprehensive and holistic viewpoint. Jakarta: LPU-Unas

Siregar, I. (2024). Phenomenological Review of the Issue of Political Apathy of Indonesia's Young Generation. *Polit Journal Scientific Journal of Politics*, *4*(2), 135-147. https://doi.org/10.33258/polit.v4i2.1159

Siregar, I. (2024). A Phenomenological Critique of Darwin's Theory of Human Origins and Its Cultural Implications. *Lakhomi Journal Scientific Journal of Culture*, *5*(1), 51-61.

Siregar, I. (2024). New strategies in Applied Linguistic Research for health therapy. *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal*, *7–7*(2), 95A-106A. https://doi.org/10.33258/birle.v7i2.7937

SS Wahyuni, I Siregar, K Rachmawati, NH Hamzah. (2024). Written Language Errors Of Dysgraphic Children Aged 9-12 Years In Inclusive Classrooms. Jurnal Onoma: Pendidikan, Bahasa, Dan Sastra, 10(3), 3420-3430. https://doi.org/10.30605/onoma.v10i3.4126

Stipancic, M., Renner, W., Schütz, A., & Dond, R. (2010). Treatment of anxiety disorders and depression using neurolinguistic programming: A pilot study. *Psychology & Psychotherapy: Theory, Research and Practice*, 83(2), 152–163. https://doi.org/10.1348/147608309X474549

Tosey, P., & Mathison, J. (2009). *Neuro-linguistic programming: A critical appreciation for managers and developers*. Palgrave Macmillan.

Wardani, E. T., Siregar, I., Susanto, A., & Hamzah, N. H. (2024). Strategies and Role of Parents on Language Acquisition of Children with Special Needs. Jurnal Onoma: Pendidikan, Bahasa, Dan Sastra, 10(3), 3431-3440. https://doi.org/10.30605/onoma.v10i3.4130

Wahyuni, S. S., Siregar, I., Rachmawati, K., Hamzah, N. H., & Yahaya, S. R. (2025). Kesalahan Bahasa Tulis Anak Disgrafia Umur 9 – 12 Tahun Siswa di Kelas Inklusi SDN Parakan 01. Stilistika: Jurnal Pendidikan Bahasa Dan Sastra, 18(1), 191–202. https://doi.org/10.30651/st.v18i1.23343

Wardani, E. T., Siregar, I., Susanto, A., Hamzah, N. H., & Yahya, S. R. (2025). Strategi dan Peranan Orang Tua terhadap Pemerolehan Bahasa ABK dalam Komunitas Masyarakat Betawi. Stilistika: Jurnal Pendidikan Bahasa Dan Sastra, 18(1), 131–146. https://doi.org/10.30651/st.v18i1.23371

Wake, J. (2015). NLP and addiction recovery: A structured approach. *British Journal of Therapy and Rehabilitation*, 22(6), 289–294.

Witkowski, T. (2010). Thirty-five years of research on neuro-linguistic programming. *NLP Research Data Base*, *Polish Psychological Bulletin*, 41(2), 58–66. https://doi.org/10.2478/v10059-010-0008-0