PREVENTION IS BETTER THAN CURE: STATE INTERVENED RISK ASSESSMENT SCREENING TO PROTECT POTENTIAL VICTIMS OF DOMESTIC VIOLENCE

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Abstract

Severe impacts of intimate partner violence have been deemed to be a public health crisis, but the legal framework remains merely reactive, which intervenes only after the harm has taken place. Existing literature lacks a proactive, preventive mechanism that identifies risk factors of intimate partner violence prior to the first instance of abuse, especially within the pre-marital context, where early intervention can be done to disrupt the abusive cycle of coercive control. This research paper proposes a novel, prevention-based legal framework that intends to integrate affective computing to screen for linguistic and vocal indicators of coercive control during mandatory pre-marital interviews. With scenario-based dialogues, the system extracts measurable behavioural and acoustic data such as speech patterns and lexicon choices associated with domination, isolation, and micro regulation to flag potential risk while refraining from diagnosing emotions or intent. It is argued that such a tool with robust safeguards, including communal oversight, transparency protocols and clauses, may fulfil the state's positive duty to prevent foreseeable harm while also balancing individual autonomy and privacy. By changing Intimate Partner Intervention from reaction to prevention, this research offers a contemporary, ethics-based model that receives public health screening as a means of protecting relational integrity and reducing systemic violence.

1. Introduction

The research paper intends to prevent the mental and physical effects of Intimate Partner Violence (IPV).[2] IPV is the cause of physical and mental health harm[3]. To break the abusive cycle, intervention must occur early.

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[2] <Violence against women>Accessed on 3rd December 2025. UN definition of Intimate partner violence – behaviour of an intimate partner or ex-partner which causes physical, sexual or psychological harm including physical aggression, sexual coercion, psychological abuse and controlling behaviour.

[3]Amanda L Coker and others, 'Physical and Mental Health Effects of Intimate Partner Violence for Men and Women' (2002) *23 American Journal of Preventive Medicine 260.* <https://www.researchgate.net/publication/11058611_Physical_and_Mental_Health_

Therefore, the research paper prioritizes prevention of first instance[4] IPV - the initial act of physical abuse triggering health consequences.

2. Theoretical Foundations

The proposed screening rests on two claims: that the state has a positive duty to intervene in the private sphere to prevent IPV, and affective computing identifies risk factors of coercive control before harm occurs.

2.1. *Positive Duty of the State*

The state has a positive duty to take active measures to protect individuals from foreseeable harm. Domestic violence (DV) is a cause of severe physical and psychological harm; therefore, the state has a duty to take active measures to prevent such harm, measures that include making laws mandatory for the well-being of citizens. Therefore, the proposed idea of pre-marital screening is a mechanism implemented to fulfil the state's duty to protect victims from IPV. The European Court of Human Rights (ECHR) has held that the state has a horizontal duty to protect individuals from harm and must take proportionate measures to do so. Screening is a proportionate measure aimed at preventing severe harm.[5]

2.2. *Public Health Risk Screening*

The proposed procedure is treated as a public health risk screening instrument; therefore, DV is treated as a preventable cause of severe injury and death[6] instead of a crime, equal to checking for risk factors

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Effects_of_Intimate_Partner_Violence_for_Men_and_Women> Accessed on December 1st 2025. For both men and women, physical IPV victimization was associated with an increased risk of current poor health, depressive symptoms, substance use, and developing a chronic disease, chronic mental illness, and an injury.

[4] Initial act of violence.

[5] Vitaliy Kovalchuk and others, 'Human Rights and Positive Obligations of the State' (2021) *28 Journal of the National Academy of Legal Sciences of Ukraine 27* <(PDF) Human rights and positive obligations of the state> Accessed on 3rd December 2025.

[6] Heidi Stöckl and Susan B Sorenson, 'Violence Against Women as a Global Public Health Issue' (2025) *46 Annual Review of Public Health* <Stockl-and-Sorenson-2024-Violence-Against-Women-as-a-Global-Public-Health-I.pdf> Accessed December 3rd 2025. Violence against women has been recognized as a public health issue by world health assembly in 2016. It causes physical, mental health effects such as injury, bruises, fracture depression Post traumatic stress disorder, depression and Anxiety.

for high blood pressure or other diseases. The purpose of assessment is not to diagnose or judge individuals but to identify risk factors.[7] By intervening at the initial stage, the state fulfils its public health mandate by preventing harm before it occurs, thereby justifying risk screening as a tool for societal well-being.[8]

3. Coercive Control

The assessment identifies coercive control, a term coined by Evan Stark. According to Stark, domestic violence is not a series of physical violence but a gendered pattern of domination that captures the victim through isolation, intimidation, and micro-regulation. Screening identifies indicators of coercive control, such as use of language indicating isolating language, saying cutting ties with supporting network, intimidation through threatening language and micro regulation expressing controlling word choices.[9] These are linguistic markers of control.

4. Affective Computing

The system is based on the narrow application of affective computing,[10] a system coined by Picard.[11] The system instead utilizes affective

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[7] Such as linguistic and behavioural indicators associated with coercive control.

[8] Anne H Outwater and Ellen Nolte, 'Disease Prevention: An Overview' in SR Quah and WC Cockerham (eds), *International Encyclopedia of Public Health* (2nd edn, Academic Press 2016) 338. <https://www.researchgate.net/publication/310453018_Disease_Prevention_An_Overview> Accessed on December 1st 2025. This aligns with the concept of secondary prevention where they arrest disease through early detection, it targets measurable risk factors before the disease escalates examples include screening for cervical cancer hypertension or congenital disorder to enable intervention at the right time and prevent progression.

[9] Evan Stark, Coercive Control: *The Entrapment of Women in Personal life* (Oxford University Press 2007) 198 – 227.

[10] This is a field that 'recognizes, understands and stimulates human emotions, but the system purposefully avoids labelling of internal emotions. Research shows that there is limitation in emotional recognition, especially from facial expressions or tone alone. Rosalind W Picard, 'Affective Computing: Challenges' (2003) *59 International Journal of Human-Computer Studies 55.*

[11]Ephraim Nissan, 'A Search—Rosalind W. Picard, Affective Computing' (1999) *7(1) Pragmatics and Cognition 149* <Rosalind W. Picard, Affective Computing> Accessed on December 3rd 2025.

computing as a basis for objective signal extraction, analyzing measurable, physical properties of communication, which is a form of behavioural biometrics. Vocal features: acoustic properties of speech such as pitch variation, speech rate, and spectral characteristics. Linguistic features: Patterns observable in speech in the choice of words. These extracted features are not interpreted as emotions but are treated as quantifiable elements of expressive behaviour. The core theoretical premise is that communicative acts contain objective, measurable signatures that can be analyzed for patterns without inferring subjective internal states. These extracted elements are merely treated as quantifiable features of expressive behaviour. The core idea of this framework is that communication consists of measurable and objective signals that can be analyzed for patterns without interfering with internal subjective states.

5. Feasibility

The proposed idea is drawn parallel from successful applications in clinical field research.[12] This proves that affective computing, treating vocal features as measurable markers of psychological states, is scientifically valid. Similar ideology is applied not to diagnose depression but to measure communicative arousal and vocal tension as objective indicators of the speaker's expressive state during critical dialogue. The linguistic component of the proposal is supported by the use of Natural Language Processing (NLP) within the field of affective computing;[13] these systems utilize affective computing from

[12] The application utilized artificial neural network to extract acoustic features such as MFCC, formants, prosodic markers) from speech shows co relation (with the severity of depression achieving absolute error 3.137. Wang, Y., Liang, L., Zhang, Z., Xu, X., Liu, R., Fang, H., Zhang, R., Wei, Y., Liu, Z., Zhu, R., Zhang, X., & Wang, F., 'Fast and accurate assessment of depression based on voice acoustic features: A cross-sectional and longitudinal study' *Frontiers in Psychiatry, 14,* (2023) 1195276 <Fast and accurate assessment of depression based on voice acoustic features: a cross-sectional and longitudinal study > Accessed on 3rd January 2026.

[13] These models have classified texts as 'Abusive', 'Hateful' or 'offensive' by identifying patterns in lexicon and syntax. The NLP based system achieved 91% accuracy in hate speech, while a Bert model achieved score of 84.3 for offensive language detection.

behavioural data without inferring emotions. This draws a parallel that NLP can identify patterns of harmful speech. This precedent is applied to the proposed model scanning linguistics of coercive ideology using a similar computational analogy.

6. Interview Procedure

Parties to marriage must complete a confidential video-recorded interview using a fixed set of scenario-based questions tailored to extract natural conversations regarding partner dynamics. An interview is conducted to extract behavioural data, such as speech and language, for analysis.

6.1. *Dual Behavioural Analysis*

After recording, the system performs acoustic and linguistic analysis, audio extracts vocal features (such as pitch variation, speech rate and spectral rate) validated in the assessment of depression, creating a timeline of vocal properties. Linguistic is analyzed by audio transcription by an NLP model, informed by abusive language detection research, to flag instances of predefined lexical and syntactic patterns associated with coercive dialogues. The system finds interconnections where high-risk sentences are spoken with vocal stress. This will flag them for human review with triggers that made the system reach a conclusion.

6.2. *Legal Consequences of a Flag*

When there is a flag, parties must undergo a joint counselling session with a family counsellor, who uses flagged data to initiate a conversation on healthy relationships. Then, we will attend a 14-day cooling-off period before issuing a marriage license. Parties can marry irrespective of the results. Counsellor recommends support services.

7. Limitations of Risk Screening

Despite evidentiary support from other fields, validation for pre-marital prevention needs a pilot test. Test deploys the tool in relevant

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Kandarpa Venkata Abhiram and Panigrahi Srikanth, 'Abusive Language Detection Using NLP' (Paper presented at the International Journal of Creative Research Thoughts, Rajam, India) <IJRTI> Accessed on January 3rd 2026.

jurisdictions under the ethics board, comparing flags with relationship consequences. With such validation, the state's duty will be equated to demonstrable efficacy. The system is not immune to flaws. One flaw is that the system catches only predefined risk indicators; it will not identify hidden, latent risk. If individuals intentionally moderate their language during an interview or whose behaviours fall outside linguistic indicators, tendencies that surface later on after marriage, due to financial stress, and emotional distress, will not be identified. System intervenes against observable patterns of linguistics, not against the whole spectrum of human potential for violence. Therefore, results are based more on probability.

8. Ethical Realization: Objections to a Viable Framework with Condition.

Screening reflects the expansion of preventative state power. Justification requires not only a demonstration of potential benefit but a stringent grappling with its significant ethical risks. It is argued in its strongest form, then addresses the non-negotiable safeguards they require, ensuring acknowledgement of the inevitable trade-offs in any interventions.

9. Foundational Objections

9.1. *Pre-crime and Chilling Effect*

Fundamental shifts are made through moving the state's justification from preventing actual harm to intervening against futuristic harm based on communication. Shift treats private speech, which is the base for trust and intimacy, as data for state assessment. Therefore, the consequence is a chilling effect, where parties to marriage moderate their most private expressions to avoid algorithmic flagging, corrupting the autonomy and authenticity of the marriage covenant from its inception. State becomes a silent third-party auditor in marriage.

9.2. *Structural Bias under the Veil of Care*

Considering communities with a history of state surveillance and family disruption, the proposed idea merely creates punitive intrusion. Models designed based on majority group data will certainly create social biases, condemning minority dialects, cultural styles of communication, and justifiable distrust as 'risk factors'. Assessments intended to protect the

vulnerable may become a surveillance tool, which will create further distrust among individuals in the name of public health.

9.3. *Corruption of Relationship Autonomy and State-prescribed Commitment.*

Marriage is a union of mutual understanding done through private negotiation. The proposed model intrudes into the private sphere, with the algorithm flagging at the initiation of the covenant. It claims that a party's private language must be checked by a public model for 'low risk' before their union can proceed. This transforms a genuine personal process into a state-administered quality control checkpoint. Flagged results lead to a state-prescribed correction instead of help-seeking, which also teaches parties to see marriage through the lens of risk management instead of mutual commitment.

10. Safeguards - Non-negotiable Prerequisite: Responses.

Raised objections are a condemnation of the proposal's ethical bone if implemented as a standard state requirement. Therefore, the proposal depends on safeguards that directly respond to challenges.

10.1. *Structural Bias – Veto Power.*

The system design, deployment and operation will be governed by an independent oversight board. The board consists of representatives from historically monitored communities, who ought to hold a majority or veto power in this board. They have the authority to approve models, select external bias auditors, and define counsellor training protocols. This results in a conversion of power dynamics. This will hinder the state from turning into a tool of state bias by surrendering it to communities susceptible to harm. If the community board withdraws, the consent system stops.

10.2. *Pre-crime and Chilling Effect Response - Transparency*

Flagged results must accompany 'Right to full Explanation', a plain language report detailing exact phrases used and the vocal features that triggered it. A low-barrier appeal process to a human review panel must be available, pausing any mandates during appeal. Done to handle the chilling effect by making state reasoning transparent and contestable, it

transforms an algorithm into a debatable claim, protecting individual agency and checking state power.

11. Further Responses

11.1. *Mandatory Review.*

Legal authority of the programme expires every five years, demanding actual legislative renewal coupled with rigorous independent review of its efficacy, fairness and social impact, as judged by the community oversight board, ensuring humility, recognizing the balance between prevention and oppression will be reviewed, preventing administrative entrenchment and forcing continuous ethical justification.

11.2. *Inevitable Trade-offs – Cost of Prevention.*

Irrespective of the inclusion of safeguarded network intervention, which creates necessary costs, trade-offs must be acknowledged as the price of the preventative paradigm.

11.3. *Privacy and Prevention.*

Limited one-time state analysis of speech to prevent lifelong invasion of privacy that is coercive control. The trade-off stands between a regulated intrusion and an uncontrollable intrusion of entrapment and violence.

11.4. *Procedural Liberty Against Protective Duty*

In the moment of procedural friction, state intervention is imposed at the outset to fulfil the state's positive duty to protect individuals from severe, foreseeable harm within the state-sanctioned institution. The trade-off lies between absolute procedural autonomy and the duty of the state to ensure that the legal relationship is not a medium of predation.

11.5. *An Imperfect System against Reactive Failure.*

The system proposes a probabilistic, algorithmic tool with risk (false positive/negative) because the alternative is more harmful. Trade-off between handling errors of the preventative tool and accepting the cost of the reactive mechanism.

12. Conclusion

The proposal submits a legal framework incorporating affective computing for violence prevention. It balances the state's duty of protection with rights through careful safeguards.