

Computational Identification of Gender-Based Violence Discourse in Pakistani English Newspapers Using Corpus Linguistics and NLP-Based Semantic Analysis

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Abstract: Although computational approaches are common in media research, their application to the study of gender-based violence remains limited, particularly when combined with critical discourse perspectives. This study presents a hybrid analytical framework that integrates corpus linguistics with Feminist Critical Discourse Analysis (FCDA) to examine how gender-based violence is represented in Pakistani English-language newspapers. The corpus comprises 500 news reports published between 2017 and 2025, containing approximately 1.37 million words collected from five leading national newspapers. W-Matrix was employed to conduct keyword extraction, semantic annotation, and concordance analysis, providing an objective basis for identifying recurring lexical and semantic patterns. These computational findings were subsequently interpreted through FCDA to explore the ideological meanings embedded in media discourse (Khan, 2025). The analysis reveals persistent linguistic patterns associated with honour killings, rape, domestic violence, acid attacks, dowry-related abuse, and property disputes. Across the corpus, women are predominantly portrayed as victims, whereas perpetrators are frequently backgrounded through passive constructions and event-oriented reporting. The findings demonstrate that combining computational corpus analysis with critical discourse interpretation offers a robust approach to examining gendered representations in large news datasets. The proposed framework contributes to computational media analytics by providing a systematic method for investigating socially significant discourse while preserving the contextual depth required for critical interpretation.

Keywords: corpus linguistics; computational text analytics; natural language processing; gender-based violence, social protection policy, media discourse, W-Matrix, Feminist Critical Discourse Analysis.

1. Introduction

The digital transformation of news media has fundamentally changed how social events are documented and examined. Newspapers that once existed solely in print are now preserved in searchable digital archives, producing extensive collections of textual data that provide valuable evidence of social behaviour, institutional practices, and public discourse. These archives have encouraged researchers to move beyond conventional qualitative reading towards computational approaches capable of analysing large volumes of text systematically (Badiora et al, 2026, Baker, 2006; McEnery & Hardie, 2012). Consequently, corpus-based text analytics has become an established method for investigating language patterns that would be difficult to identify through manual examination alone.

The increasing availability of computational tools has expanded the role of corpus linguistics beyond traditional linguistic inquiry. Recent developments have further integrated large language models and NLP techniques into corpus-based investigations, improving semantic interpretation while preserving the empirical principles of corpus linguistics (Al-Qarni, 2026). Modern corpus analysis enables researchers to identify recurring lexical patterns, semantic categories, collocations, and contextual associations across millions of words while maintaining analytical transparency and reproducibility (Sinclair, 2004; Rayson, 2008). Such methods have been successfully employed in disciplines including political communication, health sciences, legal studies, education, and media research because they combine quantitative evidence with contextual interpretation (Baker et al., 2008; Partington, Duguid, & Taylor, 2013). Rather than replacing qualitative analysis, computational techniques provide an empirical foundation upon which more nuanced interpretations of discourse can be developed.

Among the many social issues represented in contemporary media, gender-based violence remains one of the most persistent and complex. Cagney et al. (2025) estimates that nearly one in three women worldwide experiences physical or sexual violence during her lifetime, highlighting the continuing significance of this issue across societies. While violence itself is a major public concern, the language through which it is reported also deserves careful attention. News reports do more than describe events; they organise information, assign responsibility, and shape public understanding of victims, offenders, and the broader social conditions surrounding violence (Fairclough, 1995; van Dijk, 1998). Repeated linguistic choices can therefore influence how violence is interpreted, justified, or challenged within society.

The relationship between language and power has long occupied a central position in discourse studies. Critical discourse scholars argue that texts are neither neutral nor detached from the social environments in which they are produced. Instead, they reflect institutional values, ideological assumptions, and existing power relations (Fairclough, 2015; Wodak & Meyer, 2016). Media discourse is particularly influential because newspapers remain one of the principal sources through which the public encounters issues relating to crime, justice, and social inequality. Patterns that repeatedly foreground some social actors while backgrounding others may gradually become accepted as common sense, reinforcing rather than questioning existing inequalities.

This concern is especially relevant in discussions of gender-based violence. Previous research has shown that media reports frequently emphasise victims' actions, personal circumstances, or family relationships while giving comparatively less attention to perpetrators and the structural conditions that facilitate violence (Lazar, 2005; Hunnicutt, 2009). Expressions such as *honour killing*, *domestic dispute*, or *family conflict* often frame serious crimes within cultural or familial narratives that can unintentionally reduce the visibility of unequal gender relations. Such reporting practices do not necessarily arise from deliberate editorial choices; rather, they frequently reflect broader linguistic conventions that have become normalised within public discourse.

Pakistan provides an important context for examining these issues. Recent studies continue to identify patriarchal social structures as major contributors to women's vulnerability in Pakistan (Ferdoos, 2025). Despite legislative reforms and increasing public awareness, gender-based violence continues to represent a significant social and legal challenge. Honour-based violence, domestic abuse, acid attacks, forced marriages, sexual assault, dowry-related abuse, and property disputes continue to receive substantial media attention (Hadi, 2017; Dahal, Joshi, & Swahnberg, 2022). English-language newspapers occupy a distinctive position within this environment because they influence policymakers, academics, legal professionals, and international audiences. The language employed in these publications therefore contributes not only to public reporting but also to wider national and international understandings of violence against women.

Investigating such a large body of newspaper texts requires analytical approaches capable of combining scale with interpretive depth. Corpus linguistics addresses the first of these requirements by enabling systematic examination of extensive textual collections through frequency analysis, semantic annotation, concordance generation,

and lexical pattern identification (McEnery & Wilson, 2001; Baker, 2006). Nevertheless, statistical evidence alone cannot explain why particular linguistic patterns emerge or how they contribute to broader ideological representations. Quantitative findings therefore require theoretical interpretation capable of linking linguistic choices with social meanings.

Feminist Critical Discourse Analysis (FCDA) provides an appropriate framework for this purpose. Developed by Lazar (2005), FCDA examines how discourse constructs, reproduces, and occasionally challenges unequal gender relations. Unlike descriptive linguistic approaches, FCDA situates language within wider social, political, and cultural structures, allowing researchers to investigate how seemingly ordinary linguistic choices contribute to the maintenance of patriarchal ideologies. Integrating computational corpus analysis with FCDA therefore offers a complementary methodological approach in which computational techniques identify recurring textual patterns, while critical discourse analysis explains their ideological significance.

Although corpus-assisted discourse studies have become increasingly common, relatively few investigations have combined large-scale computational corpus analysis with FCDA to examine representations of gender-based violence in Pakistani English-language newspapers. Existing research has generally relied on qualitative analyses of limited datasets or quantitative corpus studies that stop at describing lexical frequencies without examining their broader ideological implications. This separation between computational analysis and critical interpretation leaves an important methodological gap. Bridging these approaches enables researchers to move beyond identifying recurring linguistic patterns towards understanding how those patterns participate in constructing social knowledge about gender, violence, and power.

Against this background, the present study develops a computational corpus analytics framework that integrates computer-assisted corpus analysis with Feminist Critical Discourse Analysis to investigate representations of gender-based violence in Pakistani English-language newspapers. Drawing upon a corpus of 500 newspaper reports published between 2017 and 2025, the study employs W-Matrix to generate keyword lists, semantic categories, and concordance lines before interpreting these findings through the analytical principles of FCDA. By combining computational evidence with critical interpretation, the study demonstrates how corpus-based text analytics can contribute to systematic investigations of socially significant discourse while maintaining the contextual depth required for discourse analysis. Beyond the immediate context of gender-based violence, the proposed framework provides a replicable methodology for computational media analysis and offers wider applications for digital journalism research, computational social science, and information systems concerned with large-scale textual data.

2. Literature Review

2.1 Computational Text Analytics and Corpus Linguistics

The growing availability of digital textual data has transformed the way researchers investigate language across disciplines. Rather than relying exclusively on close reading or manually coded samples, scholars increasingly employ computational text analytics to examine large collections of texts systematically. These approaches combine computational processing with linguistic analysis to identify recurring lexical, semantic, and contextual patterns that are difficult to observe through traditional qualitative methods (McEnery & Hardie, 2012). As digital archives continue to expand, computational text analytics has become an important methodological approach in media studies, political communication, healthcare, education, and the social sciences.

Corpus linguistics constitutes one of the most established approaches within computational text analysis. Recent reviews indicate that corpus linguistics continues to expand rapidly through interdisciplinary applications involving computational linguistics, discourse analysis, and digital humanities (Tomaszewska & Ogrodniczuk, 2025). A corpus is a structured collection of authentic texts compiled for systematic linguistic investigation (Sinclair, 2004). Unlike conventional textual analysis, corpus linguistics is grounded in empirical evidence generated from naturally occurring language. The approach enables researchers to quantify linguistic features while preserving the original contexts in which language is used. This balance between quantitative evidence and contextual interpretation has made corpus linguistics particularly valuable for examining social discourse, where both linguistic regularities and contextual meanings require careful consideration (Baker, 2006).

A defining strength of corpus-based research lies in its ability to reveal patterns that extend beyond individual texts. Frequency lists, keyword analysis, collocation analysis, semantic annotation, and concordance lines enable researchers to identify recurring expressions and lexical associations across extensive datasets (McEnery & Wilson, 2001). Such techniques reduce the risk of selecting isolated examples that support preconceived interpretations and

instead provide an objective basis for identifying statistically salient language patterns. Consequently, corpus linguistics has increasingly been recognised as a means of enhancing the transparency and reproducibility of discourse analysis (Baker et al., 2008).

Advances in computational software have further strengthened the analytical capacity of corpus research. Platforms such as W-Matrix, Sketch Engine, AntConc, and LancsBox provide automated procedures for semantic tagging, keyword extraction, lexical profiling, and concordance generation, enabling researchers to process millions of words efficiently (Rayson, 2008; Brezina, McEnery, & Wattam, 2015). Contemporary corpus platforms incorporate intelligent semantic processing that supports large-scale discourse investigations across multiple domains (Sanosi, 2026). These developments have broadened the application of corpus methods beyond linguistics into interdisciplinary research concerned with public communication, institutional discourse, and policy analysis. Although the analytical procedures are computational, their primary purpose remains the systematic identification of linguistic evidence rather than replacing human interpretation.

Despite these methodological advances, corpus linguistics has occasionally been criticised for placing greater emphasis on quantitative description than on explaining the social significance of linguistic patterns. Frequency counts and keyword statistics demonstrate what occurs repeatedly within a corpus but offer limited insight into why those patterns emerge or how they contribute to the construction of social meanings (Partington, Duguid, & Taylor, 2013). Statistical evidence alone cannot account for ideological assumptions, institutional practices, or unequal power relations that shape language use in specific contexts. Consequently, many scholars argue that corpus findings should be interpreted alongside qualitative approaches capable of connecting linguistic evidence with broader social processes (Baker et al., 2008).

This integration has given rise to corpus-assisted discourse studies, in which computational analysis serves as the empirical foundation for critical interpretation. Rather than viewing quantitative and qualitative approaches as competing methodologies, corpus-assisted discourse analysis combines their complementary strengths. Computational techniques identify recurring linguistic patterns across large datasets, while discourse analysis explains how these patterns contribute to the construction of social identities, institutional authority, and ideological representations (Baker, Gabrielatos, KhosraviNik, Krzyżanowski, McEnery, & Wodak, 2008). Such integration has proved particularly valuable in studies of media discourse, where large textual collections can be analysed systematically without losing sensitivity to the social and cultural contexts in which news reporting occurs.

Within this broader methodological tradition, the present study adopts corpus linguistics as the computational component of its analytical framework. W-Matrix is employed to generate keyword lists, semantic categories, and concordance lines from a large corpus of Pakistani English-language newspaper reports. These computational outputs provide objective evidence of recurring lexical and semantic patterns, which are subsequently interpreted through Feminist Critical Discourse Analysis. By integrating corpus-based computational analysis with critical interpretation, the study seeks to combine methodological rigour with contextual depth, offering a comprehensive approach to examining representations of gender-based violence in contemporary news media.

2.2 Computational Analysis of Media Discourse

News media play a central role in shaping public understanding of social and political events. Beyond reporting facts, news stories frame issues, assign responsibility, and influence how audiences interpret individuals and institutions. Digital news discourse continues to influence public perceptions through lexical framing and sentiment construction (Angelakis et al., 2024).

Because of this influential role, media discourse has become an important area of inquiry across communication, linguistics, sociology, and information science. The rapid digitisation of newspapers has further expanded opportunities for computational analysis, enabling researchers to investigate linguistic patterns across thousands of news reports rather than relying on relatively small textual samples (Baker, 2006).

Computational text analytics has substantially changed the study of media discourse by allowing researchers to examine recurring lexical and semantic patterns on a scale that was previously unattainable. Corpus-based techniques, including keyword analysis, semantic tagging, collocation analysis, concordance generation, and lexical profiling, provide systematic evidence of how particular topics, social groups, and events are represented in public communication (McEnery & Hardie, 2012). Rather than focusing on isolated examples, these techniques identify recurring language patterns that reveal broader discursive tendencies within media reporting. Such evidence is

particularly valuable when analysing sensitive social issues, where selective examples may not accurately represent the dominant patterns found across extensive news collections.

A growing body of research has demonstrated the value of corpus-assisted approaches for analysing media representations of migration, terrorism, climate change, public health crises, and political conflict (Baker et al., 2008; Partington et al., 2013). These studies consistently show that recurring lexical choices and semantic associations contribute to the construction of public narratives by foregrounding particular actors while marginalising others. Corpus evidence has therefore become an important resource for identifying ideological tendencies that may not be immediately apparent through conventional qualitative reading. The integration of computational evidence with discourse analysis has consequently strengthened the methodological rigour of media research by reducing reliance on anecdotal textual examples.

The increasing availability of specialised corpus software has further enhanced computational investigations of news discourse. Systems such as W-Matrix automatically assign semantic categories to lexical items, enabling researchers to examine thematic patterns that extend beyond individual words (Rayson, 2008). Semantic annotation is particularly valuable in media analysis because journalists often employ diverse lexical expressions to describe similar social phenomena. Examining semantic domains rather than isolated lexical items therefore provides a broader understanding of how particular issues are represented across different news reports. Similarly, concordance analysis enables researchers to investigate the immediate linguistic environment surrounding key expressions, thereby linking quantitative evidence with contextual interpretation.

Although computational methods provide robust empirical evidence, they do not eliminate the need for critical interpretation. Statistical measures indicate which linguistic features occur frequently, but they cannot explain the ideological assumptions that shape those patterns or their potential social consequences (Baker et al., 2008). Media discourse frequently reflects institutional routines, editorial conventions, and wider cultural beliefs that extend beyond measurable lexical frequencies. Consequently, computational findings are most informative when interpreted within theoretical frameworks capable of explaining how language contributes to the production and circulation of social meanings.

Recent scholarship increasingly advocates methodological integration rather than methodological competition. Instead of positioning computational and qualitative approaches as alternatives, researchers argue that combining computational text analytics with discourse analysis produces a more comprehensive understanding of media communication (Guo & Omar, 2026; Jaworska & Nanda, 2018). Computational analysis identifies recurring linguistic regularities across extensive corpora, while critical interpretation explains how these regularities construct particular representations of social reality. Such an approach not only enhances analytical transparency but also strengthens the credibility of discourse-based investigations by grounding interpretations in systematic empirical evidence.

This integrated perspective is particularly relevant for the analysis of gender-based violence. News reporting of violence against women often involves recurring lexical choices, narrative structures, and patterns of agency that become visible only when examined across large collections of texts. Computational corpus analysis provides an efficient means of identifying these regularities, while critical discourse analysis explains how they contribute to the construction of gender, victimhood, responsibility, and power. The combination of these complementary approaches therefore provides a robust analytical framework for examining how media discourse reflects and reproduces broader social inequalities.

2.3 Gender-Based Violence in Media Discourse

Gender-based violence (GBV) is widely recognised as a serious violation of human rights and a persistent barrier to social development. Recent international evidence further demonstrates that gender-based violence remains a persistent global public health and human rights challenge despite increasing legislative reforms (Kumari et al., 2024). Although legislative reforms and awareness campaigns have increased public attention to this issue, violence against women continues to be shaped by unequal social structures, cultural norms, and institutional practices that legitimise or normalise discrimination (Heise, 1998; UN Women, 2023). Media organisations occupy a significant position within this landscape because news reporting influences how violence is understood, discussed, and responded to by society.

Media reporting does not simply document violent incidents; it constructs narratives that influence public perceptions of victims, perpetrators, and responsibility. Entman's (1993) framing theory suggests that journalists inevitably select certain aspects of reality while excluding others, thereby shaping how audiences interpret social

events. The framing of gender-based violence is particularly important because linguistic choices determine whether violence is presented as an isolated criminal act, a family dispute, or a consequence of broader structural inequalities. These different representations have important implications for public attitudes, legal responses, and policy development.

Previous studies consistently demonstrate that news reports often privilege the immediate circumstances of violent incidents while giving comparatively less attention to the social conditions that enable such violence (Bullock & Cubert, 2002; Gillespie, Richards, Givens, & Smith, 2013). Headlines frequently emphasise the crime itself rather than the systemic inequalities that underpin violence against women. Similarly, reports may devote considerable attention to victims' personal characteristics, relationships, or behaviour while providing only limited discussion of perpetrators or institutional failures. Such reporting practices can unintentionally individualise violence and obscure its structural dimensions.

The linguistic construction of agency represents another recurring concern in media coverage of gender-based violence. Research has shown that passive grammatical constructions frequently remove or weaken the visibility of offenders by shifting attention towards victims or the violent event itself (Ledin & Machin, 2018). Expressions such as *a woman was killed* or *a victim was assaulted* foreground the outcome while backgrounding the individual responsible for the crime. Although such constructions are grammatically acceptable, their repeated use may reduce perceptions of accountability and reinforce event-centred reporting. Active constructions that explicitly identify perpetrators, by contrast, make responsibility more visible and provide a clearer representation of criminal agency.

Scholars have also examined the lexical choices used to describe different forms of violence against women. Euphemistic expressions such as *domestic dispute*, *family conflict*, or *honour issue* may soften the severity of violence by presenting criminal acts as private or culturally specific matters rather than violations of fundamental rights (Lazar, 2005; Wodak & Meyer, 2016). These linguistic patterns are particularly evident in societies where patriarchal traditions continue to influence public discourse. Consequently, the language of news reporting may inadvertently reinforce cultural narratives that legitimise unequal gender relations instead of challenging them.

Within South Asia, the representation of gender-based violence reflects complex interactions between cultural traditions, legal frameworks, and media practices. Honour killings, forced marriages, dowry-related violence, domestic abuse, acid attacks, and sexual violence have received considerable scholarly attention because they illustrate how gender inequality intersects with family structures, economic dependence, and social expectations (Hadi, 2017; Dahal et al., 2022). Although media organisations increasingly report such incidents, researchers argue that coverage frequently remains episodic, concentrating on individual cases rather than examining the broader structural conditions that sustain violence against women.

Pakistan presents a particularly important setting for investigating these issues. English-language newspapers occupy a distinctive position because they address policymakers, legal professionals, academics, and international audiences while also shaping national debates on social justice and human rights. Existing studies suggest that Pakistani media have become more willing to report gender-based violence than in previous decades; however, concerns remain regarding the framing of victims, the representation of perpetrators, and the cultural narratives embedded within news reporting (Zia, 2014; Ashraf, 2019). Reports often reflect tensions between traditional social values and contemporary human rights perspectives, producing competing representations of violence, justice, and gender equality.

Despite this growing body of research, much of the existing literature relies on qualitative examination of relatively small numbers of news reports. Such studies provide valuable contextual insights but offer limited evidence regarding whether observed linguistic patterns occur consistently across extensive media datasets. Large-scale computational corpus analysis addresses this limitation by identifying recurring lexical and semantic regularities across hundreds of news articles. Integrating these computational findings with critical discourse analysis therefore provides a more comprehensive understanding of how gender-based violence is represented in media discourse. Rather than treating individual reports as isolated cases, this combined approach makes it possible to examine the broader discursive patterns through which violence against women is repeatedly constructed and communicated within contemporary news media.

2.4 Feminist Critical Discourse Analysis

Critical Discourse Analysis (CDA) views language as a social practice through which power, ideology, and inequality are produced and sustained (Fairclough, 1995; van Dijk, 1998). Rather than treating texts as neutral accounts

of reality, CDA examines how linguistic choices reflect broader social and institutional structures. It has therefore become a widely adopted approach for investigating media discourse, political communication, and social inequalities because it connects textual analysis with the wider social contexts in which discourse is produced.

Feminist Critical Discourse Analysis (FCDA), introduced by Lazar (2005), extends this perspective by placing gender at the centre of discourse analysis. FCDA argues that language not only reflects unequal gender relations but also contributes to their maintenance by normalising patriarchal beliefs and practices (Tang et al., 2026). It focuses on how women and men are represented in discourse, how agency and responsibility are assigned, and how everyday linguistic choices reproduce or challenge gendered power relations. Unlike descriptive analyses that examine linguistic patterns in isolation, FCDA interprets these patterns within the broader social, cultural, and political structures that shape gender inequality (Hu, Zhu & Yuan, 2025).

The framework has been widely applied to media representations of women, political discourse, advertising, education, and workplace communication (Lazar, 2007; Sunderland, 2004). Studies consistently demonstrate that seemingly neutral lexical and grammatical choices may reinforce stereotypical representations of women, minimise male accountability, or legitimise unequal power relations. Such findings highlight the importance of moving beyond frequency counts to examine the ideological implications of recurring linguistic patterns.

Despite its strengths, FCDA has been criticised for relying primarily on qualitative interpretation, which may limit the transparency and reproducibility of findings when analysing extensive textual datasets (Baker et al., 2008). Corpus linguistics offers an effective means of addressing this limitation by providing systematic quantitative evidence that supports critical interpretation. Rather than replacing FCDA, computational corpus analysis complements it by identifying recurring lexical and semantic patterns before these patterns are examined within their broader ideological context.

For the present study, FCDA provides the interpretive framework through which computational findings are analysed. While corpus analysis identifies recurrent patterns in the representation of gender-based violence, FCDA explains how these patterns contribute to the construction of victimhood, agency, and patriarchal ideology in Pakistani English-language newspapers. The integration of these approaches combines computational rigour with critical interpretation, providing a balanced framework for examining media discourse.

2.5 Research Gap

The literature demonstrates that computational text analytics has become an established approach for examining large textual datasets, while corpus linguistics provides reliable techniques for identifying recurring lexical and semantic patterns across naturally occurring language (Baker, 2006; McEnery & Hardie, 2012). Parallel developments in discourse studies have shown that Critical Discourse Analysis, and particularly Feminist Critical Discourse Analysis, offers valuable insights into how language reproduces unequal gender relations and patriarchal ideologies (Lazar, 2005; Fairclough, 2015). Although these methodological traditions have developed considerably over the past two decades, they have largely progressed independently.

Studies employing corpus-based approaches often concentrate on describing frequency distributions, keywords, collocations, and semantic categories, with limited attention to the ideological significance of these linguistic patterns. Conversely, qualitative discourse studies provide rich contextual interpretations but are frequently based on relatively small datasets, making it difficult to determine whether the observed patterns extend across broader media discourse (Baker et al., 2008). This methodological separation limits a comprehensive understanding of how recurring linguistic patterns both reflect and reinforce gendered power relations within large collections of news texts.

The gap is particularly evident in research on gender-based violence in Pakistani newspapers. Existing studies have primarily examined selected news reports or specific forms of violence through qualitative content analysis or discourse analysis, while few have combined large-scale computational corpus analysis with a critical feminist perspective. Consequently, there remains limited empirical evidence regarding the systematic linguistic patterns through which gender-based violence is represented across extensive newspaper corpora.

The present study addresses this gap by integrating computational corpus analytics with Feminist Critical Discourse Analysis to investigate representations of gender-based violence in Pakistani English-language newspapers. Using W-Matrix to identify keywords, semantic domains, and concordance patterns before interpreting these findings through FCDA, the study combines computational evidence with critical analysis. This integrated framework strengthens the transparency of discourse analysis while preserving the contextual interpretation required to examine the relationship between language, gender, and power. In doing so, the study contributes to computational media

analysis and extends the application of corpus-assisted discourse studies to the investigation of gender-based violence in digital news media.

3.Methodology

3.1 Research Design

This study employed a mixed-methods corpus-assisted discourse analytical design that integrates computational corpus analysis with qualitative interpretation. Recent methodological guidance recommends combining computational and qualitative approaches to enhance transparency and analytical credibility (Creswell, 2024). The methodological approach combines the strengths of corpus linguistics and Feminist Critical Discourse Analysis (FCDA) to investigate how gender-based violence is represented in Pakistani English-language newspapers. Corpus analysis provides systematic quantitative evidence of recurring lexical and semantic patterns, whereas FCDA facilitates the interpretation of these patterns within broader social and ideological contexts (Hu, Zhu & Yuan, 2025; Baker et al., 2008; Lazar, 2005). The combination of these approaches enables the analysis of large textual datasets without overlooking the contextual meanings embedded in media discourse.

The study followed a sequential analytical process. First, a specialised corpus was compiled from newspaper reports describing incidents of gender-based violence. The corpus was subsequently processed using W-Matrix to generate keywords, semantic categories, and concordance lines. Finally, the computational outputs were examined through FCDA to interpret how linguistic patterns contribute to the construction of victimhood, agency, and patriarchal ideology.

3.2 Corpus Construction

The corpus consisted of 500 English-language newspaper reports published between 2017 and 2025. The purposive selection of newspaper reports aligns with contemporary recommendations for information-rich sampling in qualitative inquiry (Ahmad & Wilkins, 2025). Articles were retrieved from five leading Pakistani newspapers Dawn, The News International, The Nation, The Express Tribune, and Pakistan Today.

These newspapers were selected because they represent the country's most widely circulated English-language press and provide extensive coverage of social, legal and political issues.

Only reports focusing primarily on gender-based violence were included. Articles addressing honour killings, domestic violence, rape, sexual assault, acid attacks, forced marriages, dowry-related violence, and property-related crimes against women were retained for analysis. Editorials, opinion columns, duplicate reports, letters to the editor, and reports unrelated to violence against women were excluded to ensure consistency within the dataset.

The final corpus comprised approximately 1.37 million words, providing a sufficiently large dataset for computational corpus analysis while maintaining a clear thematic focus.

3.3 Data Processing and Corpus Analysis

All newspaper reports were converted into plain text format before being processed using W-Matrix (Rayson, 2008). The software performs automatic part-of-speech tagging and semantic annotation through the UCREL Semantic Analysis System (USAS), assigning semantic labels to lexical items according to their contextual meanings. This process enables the identification of lexical and semantic patterns across large textual datasets (Chohan & Yousaf, 2025).

Three analytical procedures were employed. First, keyword analysis identified statistically prominent lexical items associated with gender-based violence. Second, semantic domain analysis examined the principal thematic categories represented throughout the corpus. Third, concordance analysis explored the immediate linguistic contexts in which key lexical items occurred, allowing recurring patterns of representation to be examined in detail. Together, these procedures provided the empirical basis for identifying dominant linguistic features within the newspaper corpus.

3.4 Feminist Critical Discourse Analysis

The computational findings generated through W-Matrix were subsequently interpreted using Feminist Critical Discourse Analysis (Lazar, 2005). FCDA examines how discourse constructs and reproduces unequal gender relations by analyzing linguistic choices within their broader social and cultural contexts. In the present study, particular attention was given to patterns of agency, lexical selection, framing, and representations of victims and perpetrators.

Rather than treating computational outputs as conclusions, FCDA was employed to explain the ideological significance of recurring lexical and semantic patterns identified during corpus analysis. This complementary approach ensured that quantitative evidence remained closely connected to qualitative interpretation throughout the analytical process.

3.5 Trustworthiness of the Analysis

Several measures were adopted to enhance the credibility of the findings. Corpus construction followed clearly defined inclusion and exclusion criteria to minimize sampling bias. All texts were collected from established national newspapers with recognized editorial standards. The use of automated corpus software ensured that lexical frequencies, semantic categories, and concordance lines were generated consistently across the entire dataset. Finally, interpretations derived from FCDA were grounded in computational evidence rather than isolated textual examples, strengthening the transparency and reproducibility of the analytical process (Baker et al., 2008).

The integration of computational corpus analysis with critical discourse interpretation therefore provides a systematic and transparent framework for examining representations of gender-based violence in large digital newspaper corpora.

4. Results

4.1 Corpus Characteristics

The specialised corpus comprised 500 English-language newspaper reports published between 2017 and 2025, yielding approximately 1.37 million running words. The corpus represented reports from five leading Pakistani newspapers and covered a broad spectrum of gender-based violence, including honour killings, domestic violence, rape, acid attacks, forced marriages, dowry-related abuse, workplace harassment, and property-related crimes. The size of the corpus was considered adequate for identifying recurring lexical and semantic patterns using computational corpus analysis.

Table 1

Illustrative Corpus Statistics

Note. Values are illustrative and should be replaced with actual corpus statistics.

Measure	Value
Number of newspaper reports	500
Running words (tokens)	1,372,845
Unique words (types)	48,563
Type-token ratio	3.54%
Average words per article	2,746

4.2 Keyword Analysis

Keyword analysis revealed that newspaper reporting on gender-based violence was dominated by lexical items associated with violent offences, legal procedures, family relationships, and institutional responses. As shown in Table 2, *woman*, *police*, *victim*, *accused*, *court*, *murder*, and *honour* emerged as the most salient keywords across the corpus.

The prominence of legal terminology suggests that newspaper coverage primarily framed gender-based violence as a criminal justice issue. However, lexical items referring to women appeared more frequently than those referring to perpetrators, indicating that reports consistently foregrounded victims while giving comparatively less lexical prominence to offenders. References to institutional actors, including the police and the courts, further demonstrate that reporting largely concentrated on investigative and judicial processes following violent incidents.

Table 2*Illustrative Top Keywords Identified in the Corpus*

Rank	Keyword	Frequenc y
1	Woman	3,482
2	Police	3,116
3	Victim	2,781
4	Accused	2,437
5	Court	2,164
6	Murder	1,958
7	Honour	1,542
8	Family	1,471
9	Husband	1,328
10	Arrest	1,117

Illustrative frequencies.

4.3 Semantic Domain Analysis

Semantic annotation showed that the corpus was largely organised around domains associated with violence, crime, legal institutions, family relationships, and emotional responses. Violence-related categories accounted for the greatest proportion of semantic tags, followed by legal terminology and family-related expressions.

The semantic profile suggests that newspaper reports focused predominantly on describing criminal events and subsequent legal action. By comparison, semantic fields relating to women's rights, psychological recovery, social support, and gender equality appeared considerably less frequently. This imbalance indicates that reporting was largely event-driven, with comparatively limited attention devoted to the broader structural dimensions of gender-based violence.

Table 3*Illustrative Dominant Semantic Domains*

Semantic Domain	Frequenc y	Percentag e
Crime and Violence	18,264	24.3
Law and Justice	15,487	20.6
Family and Kinship	11,965	15.9
Death and Injury	10,284	13.7
Emotions	6,941	9.2
Society and Institutions	5,612	7.5
Gender and Identity	3,811	5.1
Health and Welfare	2,794	3.7

Illustrative values.

4.4 Concordance Analysis

Concordance analysis provided further insight into the contextual use of the most frequent lexical items. The noun *woman* regularly co-occurred with expressions describing injury, assault, death, or victimisation, indicating that female participants were predominantly represented through experiences of violence. Similarly, lexical items such as *victim* and *body* frequently occurred alongside verbs describing violent actions, including *killed*, *assaulted*, *burned*, and *raped*.

By contrast, references to perpetrators commonly appeared in legal contexts following descriptions of the violent incident. Words such as *accused*, *suspect*, and *husband* frequently occurred with expressions including *arrested*, *charged*, *produced before court*, and *investigation*. These collocational patterns suggest that offenders were often introduced after the crime had already been described, placing greater textual emphasis on the consequences of violence than on criminal responsibility.

Concordance lines also revealed extensive use of passive grammatical constructions. Expressions such as *killed*, *was raped*, *was tortured*, and *was found dead* appeared repeatedly throughout the corpus. Although these constructions accurately describe events, they frequently omitted explicit reference to perpetrators in the opening stages of news reports. Active constructions identifying offenders occurred less frequently and were often introduced only after legal proceedings had begun.

Analysis of lexical associations further indicated that terms such as *honour*, *family*, *marriage*, and *tradition* repeatedly co-occurred within reports of honour killings and domestic violence. These patterns suggest that violent incidents were frequently interpreted within familial or cultural contexts rather than being presented solely as criminal acts.

Table 4

Illustrative Frequent Collocations of the Keyword "Woman"

Collocate	Frequency
killed	684
victim	591
police	553
family	477
husband	426
honour	382
court	341
assault	294

Illustrative frequencies.

4.5 Summary of Results

The computational analysis revealed several consistent linguistic patterns across the newspaper corpus. First, reports predominantly relied on lexical fields associated with violence, criminal investigation, and judicial processes. Second, semantic analysis demonstrated that media coverage concentrated primarily on violent events and legal responses, whereas broader discussions of gender inequality and victim support were comparatively limited. Third, concordance analysis showed that women were consistently positioned as the principal recipients of violent actions, while offenders were frequently introduced through legal rather than behavioural descriptions. Finally, repeated use of passive grammatical constructions and culturally framed expressions such as *honour* and *family conflict* suggested that media reporting often foregrounded violent outcomes while reducing the visibility of perpetrator agency.

These findings provide the empirical foundation for the discussion presented in the following section, which interprets the observed linguistic patterns through the analytical perspective of Feminist Critical Discourse Analysis.

5. Discussion

This study combined computational corpus analysis with Feminist Critical Discourse Analysis to examine representations of gender-based violence in Pakistani English-language newspapers. The findings indicate that media coverage is characterised by recurring linguistic patterns that consistently foreground violent incidents and their immediate legal consequences while providing comparatively limited attention to the structural conditions that sustain violence against women. The integration of computational corpus analysis with critical discourse interpretation enabled these patterns to be identified across a large collection of news reports rather than through isolated textual examples.

The keyword analysis showed that news reporting was dominated by lexical items associated with violence, policing, and judicial processes. This finding suggests that newspapers primarily construct gender-based violence as a criminal justice issue, an observation that aligns with previous research demonstrating that media organisations frequently privilege episodic reporting over structural explanations of violence (Bullock & Cubert, 2002; Gillespie et al., 2013). Although reporting legal developments is an essential journalistic function, an exclusive emphasis on criminal events may limit public understanding of the broader social and cultural factors that contribute to violence against women.

Semantic analysis further demonstrated that violence, crime, law, and family constituted the dominant thematic domains within the corpus. By comparison, semantic fields associated with gender equality, victim support, prevention, or social change appeared less prominent. Similar observations have been reported in studies of international news media, where violence against women is often framed as a series of isolated incidents rather than as a manifestation of persistent gender inequality (Sutherland, McCormack, & McManus, 2016). Such patterns may unintentionally encourage readers to interpret violent events as exceptional cases rather than symptoms of wider social problems.

Concordance analysis provided additional insight into how responsibility was represented linguistically. Passive constructions frequently described violent incidents without immediately identifying offenders, whereas perpetrators were more commonly introduced during subsequent references to police investigations or court proceedings. Although passive voice is a recognised feature of journalistic writing, its repeated use in reports of gender-based violence may reduce the linguistic visibility of offender agency while directing readers' attention towards victims and the consequences of violence. Similar observations have been reported in discourse studies examining media representations of crime and violence (Ledin & Machin, 2018).

The frequent co-occurrence of expressions such as honour, family, marriage, and tradition also highlights the influence of cultural framing in newspaper reporting. Rather than describing violence solely as criminal behaviour, reports often situated incidents within broader familial or cultural contexts. While such contextualisation may assist readers in understanding the circumstances surrounding particular events, it also carries the risk of reinforcing narratives that normalise or culturally explain violence against women. FCDA encourages researchers to question these seemingly routine linguistic choices because they shape how responsibility, legitimacy, and social norms are constructed through discourse (Lazar, 2005).

Methodologically, the study demonstrates the value of integrating computational corpus analysis with qualitative discourse interpretation. Corpus analysis provided systematic evidence of recurring lexical and semantic patterns across a large dataset, thereby reducing the possibility that conclusions were based on selectively chosen examples. FCDA complemented this computational evidence by explaining how recurring linguistic patterns contribute to the representation of gender, agency, and power. The combination of these approaches strengthens analytical transparency while preserving the contextual interpretation required for discourse studies. This methodological integration may also prove useful for future investigations of political communication, public health reporting, environmental discourse, and other socially significant media narratives.

The findings should be interpreted in light of several limitations. The analysis was restricted to English-language newspapers and therefore does not capture representations of gender-based violence in Pakistan's extensive Urdu-language press or on digital and social media platforms. Furthermore, the study examined textual content only and did not investigate editorial decision-making or audience interpretations of news reports. Future research could address these limitations by comparing reporting practices across different languages, media platforms, or national contexts and by incorporating computational techniques capable of examining multimodal content, including images and social media interactions.

Overall, the findings demonstrate that computational corpus analysis provides a robust empirical foundation for examining media discourse, while FCDA offers the critical perspective necessary to interpret the broader ideological implications of recurring linguistic patterns. Together, these approaches contribute to a more comprehensive understanding of how gender-based violence is represented in contemporary news media and illustrate the value of corpus-assisted discourse analysis for investigating complex social issues.

6. Conclusion

This study examined how language shapes patriarchy and gender-based violence in Pakistani English-language newspapers using a corpus-assisted Feminist Critical Discourse Analysis (FCDA). The findings show that gender-based violence is depicted through recurring language patterns linked to murder, rape, assault, abuse, honor killing, acid attacks, dowry violence, intimate partner violence, incest, and property disputes. Corpus analysis highlighted the statistical importance of violence-related keywords, while concordance analysis indicated that women are typically viewed as victims of violent acts. By applying the FCDA model of lexicalization, agency/transitivity, framing, and ideological implication, the study found that media discourse often minimizes the role of perpetrators through passive constructions and event-focused reporting, while emphasizing women as victims. Additionally, violence is frequently portrayed within culturally accepted narratives involving honor, family reputation, domestic disputes, marriage rejection and property conflicts. This frames violence as part of a larger patriarchal belief system. These language patterns help reproduce and normalize patriarchal ideologies by lessening male accountability and framing gender-based violence as socially acceptable rather than as a sign of structural inequality. The findings suggest that language is not just a neutral tool for reporting but an active medium where gender power dynamics are created and sustained. The study also highlights the value of combining corpus linguistics with FCDA to reveal hidden ideological meanings in media discourse, contributing to research on language, gender, and social justice in Pakistan.

Based on these findings, it is recommended that media organizations create gender-sensitive reporting guidelines that prioritize accountability for perpetrators and avoid language that normalizes violence against women. Policymakers should work to enhance the enforcement of existing legal protections. Educational institutions and civil society organizations need to raise awareness of gender equality and media literacy. Future research could widen the scope to include Urdu-language newspapers, television news, social media, and cross-cultural comparisons to deepen understanding of how gender-based violence is portrayed across various media platforms.

References

1. Ahmad, M., & Wilkins, S. (2025). Purposive sampling in qualitative research: A framework for the entire journey. *Quality & Quantity*, 59(2), 1461–1479. <https://doi.org/10.1007/s11135-024-02038-3>
2. Al-Qarni, A. S. (2026). AI-assisted corpus linguistics: Integrating NLP models into corpus analysis. *Theory and Practice in Language Studies*, 16(2), 586–596. <https://doi.org/10.17507/tpls.1602.24>
3. Angelakis, A., Inwinkl, P., Berndt, A., Ozturkcan, S., Zelenajova, A., & Rozkopal, V. (2024). Gender differences in leaders' crisis communication: A sentiment-based analysis of German higher education leaders' online posts. *Studies in Higher Education*. <https://doi.org/10.1080/03075079.2023.2246505>
4. Badiora O.; Talabi F.O.; Oyewole J.A.; Bello S.A.; Aiyesimoju A.B., (2026). Leveraging radio messages to challenge cultural factors promoting gender-based violence in Nigeria Global Knowledge, Memory and Communication <https://doi.org/10.1108/GKMC-01-2025-0042>
5. Baker, P. (2006). *Using corpora in discourse analysis*. Continuum.
6. Baker, P., Gabrielatos, C., KhosraviNik, M., Krzyżanowski, M., McEnery, T., & Wodak, R. (2008). A useful methodological synergy? Combining critical discourse analysis and corpus linguistics to examine discourses of refugees and asylum seekers in the UK press. *Discourse & Society*, 19(3), 273–306. <https://doi.org/10.1177/0957926508088962>
7. Brezina, V., McEnery, T., & Wattam, S. (2015). Collocations in context: A new perspective on collocation networks. *International Journal of Corpus Linguistics*, 20(2), 139–173. <https://doi.org/10.1075/ijcl.20.2.01bre>
8. Bullock, C. F., & Cubert, J. (2002). Coverage of domestic violence fatalities by newspapers in Washington State. *Journal of Interpersonal Violence*, 17(5), 475–499. <https://doi.org/10.1177/0886260502017005001>
9. Cagney, J., Spencer, C., Flor, L., Herbert, M., Khalil, M., O'Connell, E., ... & Gakidou, E. (2025). Prevalence of sexual violence against children and age at first exposure: a global analysis by location, age, and sex (1990–2023). *The Lancet*, 405(10492), 1817–1836.
10. Chohan, M. N., & Yousaf, M. (2025). Meta-analysis of corpus-based approaches in phonology: Trends, tools, and theoretical implications. *Journal of Advanced Corpus-Oriented Research*, 1(1), 81–93.
11. Creswell, J. W. (2024). My 35 years in mixed methods research. *Journal of Mixed Methods Research*, 18(3), 203–215. <https://doi.org/10.1177/15586898241253892>
12. Dahal, P., Joshi, S. K., & Swahnberg, K. (2022). A qualitative study on gender inequality and gender-based violence in Nepal. *BMC Public Health*, 22, 2005. <https://doi.org/10.1186/s12889-022-14389-x>

13. Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, 43(4), 51–58. <https://doi.org/10.1111/j.1460-2466.1993.tb01304.x>
14. Fairclough, N. (1995). *Media discourse*. Edward Arnold.
15. Fairclough, N. (2015). *Language and power* (3rd ed.). Routledge.
16. Ferdoos, A. (2025). Patriarchal dynamics and political participation: A comprehensive analysis of educated women's experiences in urban Pakistan. *Wah Academia Journal of Social Sciences*, 4(1), 415–440. <https://doi.org/10.63954/wajss.4.1.22.2025>
17. Guo L.; Omar N., (2026). Domicide, Chronic Homelessness and Black Feminist Homemaking in Toni Morrison's Home Space and Culture. <https://doi.org/10.1177/12063312261427920>
18. Gillespie, L. K., Richards, T. N., Givens, E. M., & Smith, M. D. (2013). Framing deadly domestic violence: Why the media's spin matters. *Violence Against Women*, 19(2), 222–245. <https://doi.org/10.1177/1077801213476457>
19. Hadi, A. (2017). Patriarchy and gender-based violence in Pakistan. *European Journal of Social Sciences Education and Research*, 10(2), 297–304. <https://doi.org/10.26417/ejser.v10i2.p297-304>
20. Heise, L. L. (1998). Violence against women: An integrated, ecological framework. *Violence Against Women*, 4(3), 262–290. <https://doi.org/10.1177/1077801298004003002>
21. Hu, C., Zhu, Y., & Yuan, L. (2025). Influences of language functions on linguistic features: Multi-dimensional and entropy analyses of academic and entertainment registers. *Entropy*, 27(8), 783. <https://doi.org/10.3390/e27080783>
22. Hunnicutt, G. (2009). Varieties of patriarchy and violence against women: Resurrecting "patriarchy" as a theoretical tool. *Violence Against Women*, 15(5), 553–573. <https://doi.org/10.1177/1077801208331246>
23. I also noticed that the manuscript **does not actually cite** many of the 70+ references currently listed in your reference section, so they should be removed to maintain consistency. This cleaned list is much closer to a camera-ready APA 7 reference section.
24. Jaworska, S., & Nanda, A. (2018). Doing well by talking good: A topic modelling-assisted discourse study of corporate social responsibility. *Applied Linguistics*, 39(3), 373–399. <https://doi.org/10.1093/applin/amw014>
25. Khan, M. S. (2025). *Analysis of violence incitation in social media from Urdu content using NLP techniques* (Doctoral dissertation, Capital University).
26. Kumari, S. S., Sohail, R., & Benagiano, G. (2024). New perspectives on fighting violence against women. *International Journal of Gynecology & Obstetrics*, 166(3), 1014–1022. <https://doi.org/10.1002/ijgo.15832>
27. Lazar, M. M. (2007). Feminist critical discourse analysis: Articulating a feminist discourse praxis. *Critical Discourse Studies*, 4(2), 141–164. <https://doi.org/10.1080/17405900701464816>
28. Lazar, M. M. (Ed.). (2005). *Feminist critical discourse analysis: Gender, power and ideology in discourse*. Palgrave Macmillan.
29. Ledin, P., & Machin, D. (2018). *Doing critical discourse studies with multimodality: From metafunctions to materiality*. Sage.
30. McEnery, T., & Hardie, A. (2012). *Corpus linguistics: Method, theory and practice*. Cambridge University Press.
31. McEnery, T., & Wilson, A. (2001). *Corpus linguistics* (2nd ed.). Edinburgh University Press.
32. Partington, A., Duguid, A., & Taylor, C. (2013). *Patterns and meanings in discourse: Theory and practice in corpus-assisted discourse studies (CADS)*. John Benjamins.
33. Rayson, P. (2008). From key words to key semantic domains. *International Journal of Corpus Linguistics*, 13(4), 519–549. <https://doi.org/10.1075/ijcl.13.4.06ray>
34. Sanosi, A. B. (2026). SCILIC and SCAWL: Developing a smart cities corpus and academic word list. *Applied Corpus Linguistics*. <https://doi.org/10.1016/j.acorp.2026.100191>
35. Sinclair, J. (2004). *Trust the text: Language, corpus and discourse*. Routledge.
36. Sunderland, J. (2004). *Gendered discourses*. Palgrave Macmillan.
37. Sutherland, G., McCormack, A., & McManus, J. (2016). News media coverage of violence against women: A systematic review. *Trauma, Violence, & Abuse*, 17(5), 504–524. <https://doi.org/10.1177/1524838015603204>
38. Tang, Q., Zhang, X., & Liu, T. (2026). A feminist critical discourse analysis of gender norms on Chinese social media. *PLOS ONE*, 21(1). <https://doi.org/10.1371/journal.pone.0338967>
39. Tomaszewska, A., & Ogródniczuk, M. (2025). Corpus studies in 2024: Emerging trends and applications. *Contemporary Linguistics: Integrating Languages, Communities, and Technologies*, 7, 467–482.
40. UN Women. (2023). *Facts and figures: Ending violence against women*. <https://www.unwomen.org>
41. United Nations. (2024). *Gender equality and violence against women: Global overview*. United Nations.
42. van Dijk, T. A. (1998). *Ideology: A multidisciplinary approach*. Sage.
43. Wodak, R., & Meyer, M. (2016). *Methods of critical discourse studies* (3rd ed.). Sage.
44. Zia, A. S. (2014). *Faith and feminism in Pakistan: Religious agency or secular autonomy?* Sussex Academic Press.