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Speaking Frames of Cognitive Resilience: A Corpus-Driven Discourse Narratives of Health Communication in the Print Journalism of Pakistan

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ABSTRACT

Cognitive resilience occupies a central position in current research. In recent years, corpus linguistic tools have afforded language researchers and health practitioners a powerful means of understanding the linguistic character of health-related communication across diverse contexts. However, the language associated with mental health has so far been relatively underexplored. Newspaper discourse oscillates between empathy and stigma to linguistically construct mental health, acting as both a mirror and a moulder of social consciousness. The foundation of society's perception of mental health is greatly influenced by the language choices made by the press, which frequently reinforce or weaken stigma through subtle linguistic and discursive choices. The researcher employed a corpus-driven discourse approach to monitor how Pakistani newspapers choose and shape the language used to portray mental health in English-language publications (Dawn, The News, Express Tribune) between 2020 and 2025. Cultural norms and stigma frequently impact Pakistani media portals; stigma surrounding mental health is still a significant problem in the nation. This study collects a diachronic corpus and uses Sketch Engine to analyze concordance lines, collocation networks, keyword keyness, semantic prosody, and metaphorical expressions. This study employs data-driven analysis to identify the subtle ideological and emotional biases that influence how mental health is portrayed in the Pakistani press by using actual, unedited newspaper texts. By doing this, it fills a glaring void in the literature on health communication, where the linguistic framing of mental health is frequently disregarded.

1. Introduction

The intersections of language, culture, and media in Pakistan provide a rich environment for examining how mental health is discussed and comprehended. English-language newspapers are especially powerful in this environment. They function as a conduit for international ideas to enter local discourse in addition to serving the nation's educated and policymaking circles. Fairclough (1995) asserts that media language not only depicts reality but also quietly moulds it by introducing ideologies into common conversation. This concept is consistent with Entman's (1993) framing theory, which describes how journalists draw attention to specific aspects of a problem to define its causes, pinpoint its culprits, and offer solutions. This kind of framing can lead to mental health being portrayed as a personal shortcoming, a strictly medical problem, or a more public health issue.

Small word choices have a big impact, especially in headlines. A headline that uses medicalized language or crisis metaphors

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may affect readers' perceptions of those who have a mental illness. Even though mental health is a serious public health issue in Pakistan, stigma around it is still pervasive, and newspapers frequently perpetuate these beliefs. Public assumptions are shaped by media language, and in the Pakistani context, English-language outlets add a layer. English newspapers target more urban and elite audiences because English is an official language rather than a common one, and their language frequently reflects both local cultural norms and global influences. The framing of mental health narratives is influenced by these overlapping factors, which can both soften and reinforce stigma.

This study uses corpus linguistics to analyze these patterns. Working with a sizable collection of actual newspaper articles enables the researcher to examine recurring word patterns and associations rather than isolated instances. Semantic prosody and collocation analysis are two tools that can be used to determine whether certain terms related to mental health are frequently used in stigmatizing, neutral, or supportive contexts. It is challenging to attain objectivity in analysis through close reading alone, but corpus methods do.

According to researchers such as McEnery and Hardie (2015), corpus linguistics provides a strong empirical foundation by analyzing concordance lines, patterns, and frequencies across thousands of texts. As in the Corpus-Assisted Discourse Studies (CADS) tradition, the approach gains even more potency when paired with discourse analysis. It enables the researcher to spot the subtle ways stigma might appear, like the frequent pairings of *depression* with victimhood or *suicide* with crisis frames. Qualitative analysis of these quantitative results can provide a more comprehensive picture of how mental health is portrayed in Pakistani media.

Framing theory and conceptual metaphor theory serve as the study's theoretical foundation. Framing theory explains how some interpretations of mental illness, such as those that depict people as overseeing their condition or as dealing with a real health issue, come to dominate. Another perspective is provided by conceptual metaphor theory (Lakoff & Johnson, 1980), which demonstrates how readers' conceptions of psychological states are influenced by figurative language, such as *breaking down* or *cracking under pressure*. The study identifies metaphorical structures and semantic patterns in typical mental health N-grams in Pakistani newspapers using the MIPVU procedure in conjunction with corpus tools such as collocation and concordance analysis.

1.1 Problem Statement

Mental health is frequently presented in Pakistan's English-language newspapers in limited and occasionally dramatic ways that ultimately serve to perpetuate the stigma that already exists in the community. For instance, previous research has shown that words like *suffer* are often used in conjunction with *depression*, subtly portraying people with mental illness as defeated or powerless. Additionally, everyday experiences of mental distress are given far less attention in news coverage than extreme incidents like violence or suicide. Nevertheless, a large portion of this commentary is based on small datasets or sporadic examples. A comprehensive, methodical investigation of how the media discusses mental health is still lacking. Because of this discrepancy, we are unable to determine whether these troubling trends are isolated incidents or a part of a larger, more widespread pattern in Pakistani media.

Additionally, Pakistani English-language newspapers contribute their own cultural conflicts to the coverage of mental health issues. Despite writing for a society where people think and speak about illness through very different linguistic traditions, these outlets frequently rely on Western medical vocabulary because English is associated with colonial history and elite education. This discrepancy can lead to subtle distortions, such as confusion or inadvertent changes in meaning, when metaphors drawn from international psychiatric discourse do not always correspond to common Urdu or Punjabi expressions. The impact of these patterns has gone largely unrecognized because no extensive linguistic study has examined them. This study employs corpus methods to investigate how various ideological frames, be they medical, moral, sociopolitical, or overtly stigmatizing, are ingrained in press language. It is possible to determine whether terms related to mental health tend to be neutral, positive, or negative by closely examining semantic prosody, or the emotional "charge" that accumulates around specific words through repeated use. By revealing hidden prejudices, euphemistic inclinations, and nuanced framing decisions, this methodical approach can provide insights that could eventually encourage more culturally sensitive and ethical health communication.

1.2 Research Objectives

1. To compile and analyze a diachronic corpus of Pakistani English language newspaper texts using Sketch Engine, focusing on concordance, collocation, and keyness analyses to uncover linguistic framing patterns.
2. To measure and compare the keyness and frequency of core mental health terms to map thematic emphases and framing orientations within the press.
3. To identify and categorize the most frequent N-grams associated with mental health discourse and interpret them within

dominant narrative and metaphorical frames.

4. To examine the dominant frames and metaphorical structures used in media reporting of mental health by analyzing recurrent lexical patterns, collocations, and semantic prosody, and by applying a systematic metaphor identification procedure (MIPVU) to detect underlying conceptual metaphors.

1.3 Research Questions

1. How are common N-grams, collocation patterns, and the general emotional tone surrounding important terms used in Pakistani English-language newspapers to frame mental health issues?
2. How do differences between the keyness scores and raw frequencies of mental-health-related words help reveal the framing strategies and narrative tendencies used by the press?
3. Which bigrams and trigrams related to mental health occur most frequently, and what dominant narrative frames do they signify?
4. What conceptual metaphors and semantic prosodic patterns characterize mental health discourse, and how do they align with broader ideological constructions of stigma?

2. Literature Review

There is growing recognition in health communication scholarship that the media actively shape audiences' perceptions of mental health, as well as reporting facts. Corpus linguistics is uniquely suited to revealing the subtle linguistic choices that underline this shaping (Baker, 2006). These patterns show how Entman's (1993) framing functions manifest in Pakistani English-language newspapers: whether mental illness is presented as a crisis, a moral failing, a social issue, or a treatable condition. Narrative patterns, recurrent collocates, and keywords influence these frames. This study situates Pakistani press coverage within broader discussions of framing, metaphor, stigma, and discourse by using Sketch Engine to map frequency patterns, identify n-grams, and examine concordance lines. This demonstrates how common language used in the media can either subtly perpetuate negative stereotypes or, on the other hand, provide more sympathetic and knowledgeable perspectives on mental health.

Framing theory examines how communicative content highlights certain aspects of reality to shape interpretation. Frames involve taking some aspects of a perceived reality and making them more salient in a communicating text, according to Entman (1993), to support specific problem definitions, causal interpretations, moral judgments, or treatment suggestions. Thus, media frames serve to define problems, diagnose causes, make moral judgments, and suggest remedies by privileging some information and omitting other information. In the context of health communication, framing scholars have shown that how an issue like mental illness is defined and discussed affects stigma and policy support (Entman, 2007; Tewksbury & Scheufele, 2009). Notably, corpus discourse researchers note that these framing functions are realized through recurrent language patterns, keywords, metaphors, concepts, and collocational networks that can be systematically detected in text data. For example, Concordances and collocations serve as *interpretive packages* that correspond to the core components of framing (problem definition, cause, judgment, remedy), according to Baker (2006). On the given account, framing theory posits that media reports construct reality by emphasizing certain semantic and evaluative associations. This process can be empirically studied through linguistic patterns in the news.

Media research confirms that news coverage of mental health often carries potent frames. McGinty, Kennedy-Hendricks, and Barry (2016) discovered that more than half of mental health articles focused on violence, with only a minority mentioning recovery. Their study used LexisNexis and ProQuest to sample 362 print and 25 TV news articles about mental illness from major U.S. outlets between 1995 and 2014. They verified coder reliability ($\kappa \geq 0.69$) using a 69-item coding instrument covering five domains: topics, causes, consequences, depictions, and policies. 55% of stories connected mental illness to violence, while only 14% emphasized recovery, according to statistical tools like chi-square and logistic regression. Over time, violence-related framing grew, intensifying stigma. The study serves as an example of how dominant frames can be found through methodical coding and quantitative analysis. For CADS-based media analysis of Pakistani mental health discourse, it acts as a model. The media's overemphasis on violence frames raises the possibility that these narratives could strengthen public stigma.

According to Zehra (2023), stigmatizing discourses, such as labelling, negative stereotyping, and marginalizing people with mental illness, are frequently employed in Pakistani headlines of English-language newspapers. Zehra, Khan, and Naureen (2023) examined how mental illness was portrayed in 150 headlines from English-language newspapers in Pakistan published between 2015 and 2023. They identified recurrent stigmatizing patterns by coding lexical and syntactic choices using Fairclough's three-dimensional Critical Discourse Analysis model. According to the analysis, people with mental illness are frequently labelled, stereotyped, and marginalized. Headlines that portrayed mental distress as weakness or shame frequently referenced moral or

religious discourses. These depictions hampered empathy and public discourse while reinforcing cultural stigma. The study shows how social exclusion is normalized through language in Pakistani news discourse.

These framing techniques draw attention to cultural norms and anxieties. They are consistent with findings from other contexts that involve episodic, individualistic framing, such as narratives of personal failure or danger, which may limit support for systemic solutions. The framing literature on health and mental illness suggests that readers' perceptions of mental health issues are significantly influenced by journalists' language choices, including which groups to blame, what causes stress, and which metaphors to employ.

The theory of health communication also interacts with media framing. Scholars of health communication stress that news frames influence public perception and policy. For instance, research has demonstrated that while thematic news frames emphasize social factors (Reese et al., 2001), episodic news frames tend to place blame on individuals (Iyengar, 1991) and can intensify stigma. The quantitative application of these concepts has begun in corpus-based health discourse research. For example, Hunt and Brookes (2020) examine how members of online support communities discuss diabetes, depression, and anorexia by combining corpus linguistics, critical discourse analysis, and health sociology. They show how patients' *semantic prosodies*, or recurrent linguistic patterns, are revealed by corpus evidence (frequent collocates and concordance contexts), and they emphasize how language use can influence health communication tactics. Such research demonstrates how framing theory influences health media. By identifying the words and metaphors repeatedly used in public discourse, researchers gain insight into the implicit evaluative frameworks that news audiences encounter. The applied literature on health communication frames, ranging from thematic versus episodic analyses to meta-analyses of news content, emphasizes that media language choices shape how people perceive mental health.

Metaphors such as *containers of negative emotions* reveal social stigma and coping schemas in health communication, according to Shi and Khoo's corpus study of metaphors in an online Chinese depression community, which extracted 652 metaphorical expressions and categorized them into Personal Life, Interpersonal Relationships, Time, and Cyberculture domains.

In a corpus-based study, Tobin and Lyddy (2013) examined how youth depression was portrayed in 269 Irish newspaper articles (176,223 words) that were published between 2007 and 2011. They examined how depression was linguistically framed in Irish broadsheets using keyword, frequency, and cluster analyses. According to their analysis, emotional terms like *sadness* or *hopelessness* were less common than *depression*, which was frequently associated with *suicide*, *alcohol*, and *bullying*. There was a strong medical framing of mental illness, as evidenced by the predominance of references to psychiatric professionals. The authors concluded that, rather than showing recovery or social causes, Irish media coverage promoted medicalized, crisis-oriented narratives. The present study's CADS approach to Pakistani media is closely aligned with this methodological rigour and framing focus. Tobin and Lyddy's quantitative analysis of Irish newspaper coverage further shows that crisis-oriented frames, suicide collocated with depression, and the privileging of psychiatric authorities can skew public perception toward fear and medicalization.

Hazel Price (2019) conducted a diachronic analysis of UK press texts. The study analyzed a 50-million-word MI 1984-2014 corpus of UK newspaper articles on mental illness published between 1984 and 2014. Using keyness, collocation, and concordance analysis alongside Critical Discourse Analysis, she examined how lexical and grammatical choices framed mental illness. The data, drawn from national and regional newspapers, revealed a semantic shift from *mental illness* to *mental health* and persistent identity-first naming (e.g., a person with schizophrenia) despite emerging person-first trends. She also found frequent inaccurate symptom portrayals and euphemistic framing of distress. Her approach demonstrates how corpus methods expose ideological change across decades, offering a model for this study's analysis of Pakistani English-language press framing of mental health.

They found a clear euphemistic drift from *mental illness* to *mental health* and then to *wellbeing*, each term carrying progressively lighter semantic prosody, *mental illness* collocating with *suffer* and *violent*. In contrast, *well-being* co-occurs with *resilience* and *self-care*. In addition to reflecting broader ideological shifts toward destigmatization, semantic bleaching, a reduction of meaning intensity through repeated use, may also conceal persistent social injustices. Replicating diachronic keyness analyses and n-gram frequency in Pakistani newspapers reveals whether a similar trajectory appears in a setting where stigma is still deeply ingrained.

Price uses Critical Discourse Analysis in conjunction with quantitative measures (such as logDice collocation scores and keyness) in Corpus-Assisted Discourse Studies (CADS) of mental illness in the press to identify negative semantic prosody, fear-inducing terms such as '*dangerous*' or '*unpredictable*,' and ideological biases in media language. It illustrates how language choices both reflect and perpetuate power structures that marginalize people with mental health conditions by drawing on Foucault's discourse theory and the Sapir-Whorf hypothesis.

Steen, Dorst, Herrmann, Kaal, Krennmayr, & Pasma (2010), which uses a five-step process to identify metaphoricity by methodically comparing a word's basic (lexical) meaning to its contextual usage. Complementing bottom-up MIPVU, the DMIP

method allows us to flag deliberate, persuasive metaphors, those where source domains like *battle* or *journey* are invoked for rhetorical effect. By classifying *mental health* metaphors into domains (e.g., burden, outbreak, path), this dual pipeline uncovers both pervasive and strategic figurative patterns in Pakistani press discourse.

Hazel Price's (2022) examination of UK press subcorpora for DSM-V symptom portrayal uses keyword analysis, semantic domain tagging, and prototypical text reading to reveal a symptom hierarchy, PTSD locked to combat, schizophrenia equated with violence, OCD reduced to cleanliness, with many clinical features underrepresented. Syntactic queries further expose *bundling* of disorders (e.g., *depression and suicide*), amplifying public fear. This illness-specific sub-corpora in Pakistani newspapers unveils which symptoms are visible, which are suppressed, and how cultural or religious lexemes fill clinical gaps.

Möttönen's (2024) qualitative study of first-person narratives in the WHO mental health report identifies four discourses: despair, stigma, treatment, survivor, and reveals how figurative language (drowning in sadness) and pronoun use construct identities of victimhood or empowerment. By mapping these discourses onto opinion, it hints whether Pakistani newspapers reproduce a predominance of despair and stigma frames or include emergent treatment and survivor perspectives.

In media analysis, concordance has allowed the researcher of this study to observe real usage patterns of a frame-related term across articles. Concordance analysis is foundational to the study of discourse. A concordance output (KWIC display) shows every occurrence of a search word in its textual context. For example, Gabrielatos and Baker (2008) conducted a corpus-based study of UK newspaper discourse on refugees and asylum seekers. They used concordance lines of the keyword refugee and related terms to identify the conceptual categories in which the word appeared. In their 140-million-word press corpus, concordance analysis revealed predominantly negative and dehumanizing collocational clusters (e.g., *flooding, swarm, illegal*) around refugees, pointing to a strongly negative framing of the issue. Such studies show how keyword concordances can *reveal the construction* of social issues: by reading enough concordance lines in context, the analyst discerns the narrative slots and metaphors (e.g., flood of refugees, illegals, etc.) that collectively form a frame. Indeed, corpus linguists argue that concordances not only give frequency counts but also ground those counts in concrete textual evidence; they *ensure engagement with textual reality* in discourse research. In this research study, using concordances of mental-health terms, e.g., depression, anxiety, treatment, allows identification of how topics are framed across Pakistani press media.

Collocation and keyness analysis extend concordance by quantifying word associations. Collocation refers to the tendency of words to co-occur more often than chance. In discourse analysis, collocation helps identify the *semantic prosody* or evaluative bias of terms. For example, Concordance and collocation analysis in the Sketch Engine might show that depression frequently co-occurs with words like prevalence, treatment, or stigma. In contrast, violence might co-occur with mentally ill. Word sketches effectively display these patterns: Kilgariff (2004) describes word sketches as "automatic, corpus-based summaries of a word's grammatical and collocational behaviour". By inspecting the word sketch for terms like patient or therapy, one can see whether the typical collocates have positive, neutral, or negative connotations. Similarly, keyness analysis, comparing the target corpus to a reference corpus, flags which words are unusually frequent or salient in mental-health articles. Keyness lists are useful for identifying domain-specific vocabulary, according to Baker (2006). For instance, in a mental health news corpus, terms like PTSD, illness, or counselling may show up as key, indicating important aspects of the discourse.

Semantic prosody and metaphor analysis are two subtle corpus techniques that capture evaluative framing. The consistent *aura of meaning* that a word's collocates impart is referred to as semantic prosody (Louw, 1993). For example, Louw demonstrated that although the word 'cause' itself is neutral, it almost always appears in negative contexts (such as 'damage' or 'problems'), giving it a negative prosody. Finding prosodic patterns surrounding mental-health terms in health discourse reveals hidden sentiment, as Stubbs (2001) famously showed how *cause* and *pose* carry negative semantic prosodies. To map the evaluative frame, corpus analysts examine large concordance sets to determine whether terms such as *patient, clinic, or diagnosed* frequently co-occur with positive or negative language.

Additionally, metaphor analysis is corpus-assisted; current research combines manual metaphor identification with concordance (Charteris-Black, 2004). Rana (2024), who gathered Covid-19 editorials and employed corpus tools to reveal a prevalent WAR metaphor in the Pakistani press, is a notable example. Words like *battle, enemy, soldiers, and victory* frequently collocate with pandemic terms, methodically framing the virus as an invading enemy, according to the specialized PakNCovid-19 corpus. This is consistent with framing theory: metaphors like WAR or BATTLE carry moral and action-oriented connotations, leading readers to perceive COVID-19 as a crisis that calls for aggressive action. For instance, the capacity to identify these metaphorical clusters through concordance filtering lines for recurring thematic words highlights how corpus methods make otherwise implicit framing explicit.

In recent literature, the combination of corpus linguistics and framing theory has been referred to as *Corpus-Assisted Discourse Studies* (CADS). CADS researchers specifically use corpus tools to examine discourse patterns (Baker & McEnery, 2015). According to Gillings' (2023) review of the field, the breadth and spread of corpus-assisted discourse studies (CADS) indicate their usefulness for exploring language use in social contexts. Baker, Gabrielatos, and McEnery (2013) have used CADS

in media and health communication to address topics such as how Islam is portrayed and to demonstrate how co-occurring adjectives and metaphors create social meaning. CADS techniques have been used by Hardt-Mautner (1995) to map the contextualization of scientific concepts and illnesses in public discourse. Importantly, CADS does not replace critical discourse analysis but complements it: the corpus findings (frequent patterns, collocation profiles, statistically salient items) provide an empirical backbone that the analyst can then interpret in context.

The existing interdisciplinary scholarship of literature on framing, health communication, and corpus linguistics converges on a methodological foundation for the proposed research study. On the framing side, Entman's paradigm and subsequent media studies (e.g., Barry, 2014; Zehra, 2023) make clear that news frames about mental illness influence stigma and public understanding. On the corpus side, key scholars (Gries, 2009; Hunt & Brookes, 2020) have demonstrated that frequency-based analyses, concordance, collocation, keyness, and semantic prosody can systematically uncover those very frames in large text sets. The reviewed literature supports the researcher's guiding approach in this study. By compiling a corpus of Pakistani English-language newspaper articles and applying CADS methods, it will map the linguistic construction of mental health frames. This allows this research study to determine whether words associated with disorder tend to co-occur with terms of crisis or support, which metaphors dominate editorials, and which news-value terms appear as keywords. Such corpus-driven evidence will ground the analysis of how Dawn, The News, and Express Tribune frame mental health linguistically, building directly on the scholarly tradition outlined above.

3. Methodology

Using a corpus linguistic approach based on the research of Baker (2006) and Biber et al. (1998), this study examines linguistic patterns, collocations, frequency distributions, and N-grams in Pakistani English newspaper coverage of mental health using Sketch Engine. Entman's (1993) framing theory, which highlights the importance of selection and salience in influencing public perception through media discourse, serves as the theoretical framework. Research on mental health stigma (Corrigan, 2004), which emphasizes how language contributes to social exclusion, and media-effects literature (Wahl, 2003), which shows how news framing affects public attitudes and behaviour, further contextualizes the conversation.

The corpus included 1,264-word types and 3810 tokens from major English-language Pakistani newspapers. By gathering information from prominent Pakistani English-language newspapers (such as Dawn, The News, and Express Tribune) published between 2020 and 2025, the researcher created a corpus of news articles on mental health. We created concordance lines and extracted content into our corpus by using Sketch Engine to search for *mental health*. Screenshots of Sketch Engine outputs (concordance lines, keyword lists, n-grams, frequency lists, and word sketches) are included in the dataset along with the articles' underlying text. This method ensures that our sample captures a range of language use in Pakistani media and adheres to standard corpus-assisted discourse techniques (Baker, 2006). According to Baker's observation, the design aims to expose *repeated patterns of language* throughout the news discourse because recurrent grammatical and lexical patterns indicate underlying frames or biases.

The researcher used the corpus tools in Sketch Engine for analysis. To determine the most prevalent vocabulary in mental health coverage, it first generated word-frequency lists. The next step is keyword extraction, which highlights unusually salient terms by comparing the researcher's customized corpus with a general English reference. The next step involved creating word sketches for key terms (such as *depression* and *anxiety*) to look at their grammatical relationships and common collocations. Common multi-word phrases (like *mental health awareness* and *social stigma*) were identified using N-gram analysis (bigrams/trigrams). For manual review, screenshots of each concordance line were exported. To determine which ideas and N-gram collocations predominate in the discourse, these procedures navigated the data.

The corpus was analyzed using a mixed quantitative and qualitative approach. Term frequencies, keyword rankings, and N-gram association metrics (such as MI scores) for target-term collocates were quantitatively calculated by the researcher. To find thematic and framing patterns in the language (problem definitions, causal attributions, evaluations, and solutions), the study qualitatively examined concordance contexts. This combination is like Baker's (2006) suggested methodology for corpus-driven discourse analysis, which involves interpreting patterns in context after using hard data to determine where the discourse is concentrated. In accordance with Entman's 1993 model of problem definition, cause, moral evaluation, and remedy, it specifically coded instances of frames in the concordance samples. To understand how language creates meaning in the media, the method balances rigorous count-based analysis with discourse-level interpretation, which is consistent with precedents in applied corpus linguistics (Baker, 2006).

3.1 Theoretical Framework

Media framing theory provides the primary lens for this study. Entman's seminal definition highlights that *to frame is to select aspects of perceived reality and make them more salient in a communicative text* to promote problem definitions, causal interpretations, moral judgments, and remedies. In mental health coverage, for example, a frame might emphasize individual pathology or violence, thereby attributing blame or danger (a stigmatizing stance), while downplaying systemic factors or recovery narratives. Conceptual metaphor theory further explains how abstract concepts, such as mental illness, are understood through concrete schemas. Lakoff and Johnson show that metaphors effectively let us *conceive one thing in terms of another*. In discourse on depression, metaphors such as DEPRESSION IS A CONTAINER of negative emotions literally cast sufferers as being trapped by their illness. Such metaphors carry cultural values and affective loading, for instance, depicting patients as *confine*' and isolated and reinforcing a view of helplessness. A social semiotic perspective supplements this by stressing that every word choice is a social *semiotic resource*. Language options (e.g., describing someone as mentally *unwell* versus *broken*) are historically and culturally loaded. In this view, the vocabulary and imagery that Pakistani newspapers employ are not neutral: they draw on shared signs and idioms of shame, morality or science to make mental health intelligible, thereby enacting particular ideologies of stigma or support.

To operationalize these theories, this research adopts a Corpus-Assisted Discourse Studies (CADS) approach. To find patterned framing in media language, CADS combines discourse analysis and quantitative corpus methods. For example, concordance analysis enables us to see how key terms like *mental health* and *depression* are used in context. According to Baker (2006), concordance analysis aims to determine how a word is used in a particular context, thereby exposing subtleties that frequency counts alone cannot capture. Semantic prosodies and central themes can also be identified by examining collocates and keyword frequencies; high-frequency terms often indicate the corpus's dominant *aboutness* or frame. In practice, building a corpus of English-language Pakistani newspapers will allow us to generate concordance lines, collocation profiles, keyness lists, and metaphor analyses (e.g., via MIPVU). These techniques will reveal lexical clusters and metaphoric patterns that align with social meanings and Entman's frame functions (problem definition, cause, value, remedy). In this sense, CADS provides empirical proof of how language in newspapers enacts support or stigma. Frequent collocates around *mental illness*, for instance, may reveal a punitive or sympathetic frame, and the identification of metaphors in Pakistani media discourse will reveal underlying conceptualizations (e.g., ILLNESS IS WAR vs. ILLNESS IS CARE).

4. Data Analysis

4.1 Corpus Data and Word Frequencies

Figure 1

This Word List, Generated via Sketch Engine

Word	Frequency ? ↓	Word	Frequency ? ↓	Word	Frequency ? ↓	Word	Frequency ? ↓
1 the	177 ***	14 on	29 ***	27 an	17 ***	40 children	13 ***
2 and	144 ***	15 can	29 ***	28 at	17 ***	41 work	12 ***
3 of	118 ***	16 for	28 ***	29 was	17 ***	42 be	12 ***
4 mental	99 ***	17 as	28 ***	30 more	16 ***	43 has	12 ***
5 to	86 ***	18 social	26 ***	31 we	16 ***	44 published	12 ***
6 health	78 ***	19 it	25 ***	32 they	16 ***	45 help	11 ***
7 in	74 ***	20 with	21 ***	33 people	16 ***	46 stress	11 ***
8 a	73 ***	21 from	20 ***	34 by	15 ***	47 issues	11 ***
9 is	47 ***	22 this	20 ***	35 newspaper	15 ***	48 but	11 ***
10 that	35 ***	23 their	20 ***	36 dawn.com	14 ***	49 youth	11 ***
11 media	31 ***	24 pakistan	19 ***	37 our	14 ***	50 illness	10 ***
12 are	30 ***	25 am	19 ***	38 or	13 ***		
13 have	29 ***	26 not	18 ***	39 about	13 ***		

Common function words predominate in a word-frequency list (Figure 1), but *mental* (99 occurrences) and *health* (78) rank

among the most frequent items. As a matter of fact, the fourth most common word in the corpus is *mental*. In actuality, *mental* is the fourth most frequent word in the corpus. For instance, the bigram *mental health* appears 63 times, which is significantly more than a typical rare phrase and suggests a focused discussion of *mental health*. Although frequency by itself does not reveal tone or framing, this quantitative prominence indicates media attention to the subject.

4.2 Keywords and Collocational Patterns

Figure 2

N-GRAMS Showing 2-6 Word Sequences Along with Their Frequency Counts

N-gram	Frequency ?	N-gram	Frequency ?
1 mental health	63 ...	26 our mental health	3 ...
2 and mental health	9 ...	27 must prioritise our mental health	3 ...
3 mental health crisis	8 ...	28 health in the	3 ...
4 health crisis	8 ...	29 prioritise our mental health	3 ...
5 Emerging mental health	7 ...	30 mental health in the workplace	2 ...
6 Emerging mental health crisis	7 ...	31 mental health experts	2 ...
7 mental health issues	6 ...	32 mental health awareness	2 ...
8 Youth mental health	6 ...	33 mental health will have	2 ...
9 health issues	6 ...	34 mental health will	2 ...
10 health professionals	6 ...	35 mental health will have a	2 ...
11 mental health professionals	6 ...	36 of mental health	2 ...
12 AM Youth mental health	5 ...	37 health in the workplace	2 ...
13 Media and mental health	4 ...	38 health experts	2 ...

Context is further clarified through N-gram analysis (2–6 word sequences). With 63 instances, *mental health* is the most common n-gram. In addition, terms such as *mental health crisis* (8 instances), *health crisis* (8), *emerging mental health* (7), and *emerging mental health crisis* (7) are frequently used (Figure 2). These collocates effectively present mental health as a pressing, new problem. Other terms that are frequently used to discuss issues and specialists are *mental health issues* and *health professionals*. *Mental health awareness* and *hope of recovery* are less common but revealing n-grams that allude to themes of resilience and public education. The quantitative patterns thus suggest that the Pakistani press often links mental health to crisis (Entman’s problem definition) and to attention by professionals or policymakers.

Figure 3

Lemma-Based Word List Showing Individual (single-word) Lemmas

Lemma	Lemma	Lemma	Lemma	Lemma
1 E-PAPER ...	11 psychiatrist ...	21 Udaari ...	31 BLOGS ...	41 vaccinator ...
2 WHATSAPP ...	12 rewire ...	22 re-traumatised ...	32 glamorise ...	42 well-considered ...
3 Haidt ...	13 T-MAGAZINE ...	23 Pinjra ...	33 Taboola ...	43 Awan ...
4 Crossout ...	14 Zheala ...	24 associa ...	34 Nahin ...	44 on-topic ...
5 Newspaper ...	15 EPAPER ...	25 Umeed ...	35 decriminalise ...	45 humanise ...
6 prioritise ...	16 Self-metering ...	26 Lums ...	36 Qayyum ...	46 unvarnished ...
7 EOBI ...	17 Organi-sation ...	27 international-level ...	37 over-looked ...	47 under-resourced ...
8 stigmatise ...	18 popu-lation ...	28 Milioti ...	38 Cristin ...	48 judgemental ...
9 mental ...	19 Kandhkot ...	29 off-neglected ...	39 Moin ...	49 Iver ...
10 MMO ...	20 over-protect ...	30 reformative ...	40 Ramazan ...	50 pandemic-related ...

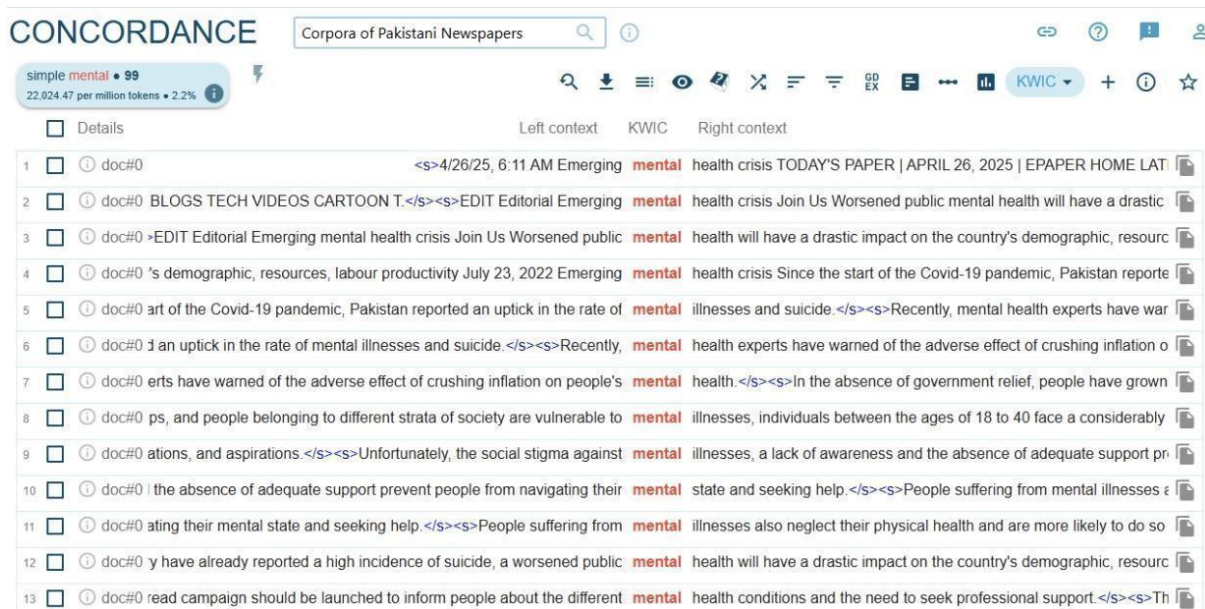
A keyword analysis (compared to the general enTenTen21 web corpus) identifies lexemes unusually salient in Pakistani news. The single-word keywords include psychiatrist (#11), stigmatise (#8), judgemental (#48), and under-resourced (#47) (Figure 3).

This shows the press is explicitly using the vocabulary of stigma and resource scarcity. The presence of humanise (#45) and decriminalise (#35) suggests some effort to frame mental illness sympathetically or as a matter of legal reform. Among multi-word keywords (Figure 3), the top terms are *emerging mental health crisis*, *mental health crisis*, *health crisis*, and *mental health awareness*. Also notable are *public mental health*, *mental health experts*, and *mental illness among...*, highlighting the public/community and expert dimensions. These keyword patterns confirm that crisis, awareness, professional support, and stigmatization are salient frames.

4.3 Concordance Examples

Figure 4

Concordance Lines Illustrating the Occurrences and Contexts of the Word Mental in the Corpus.

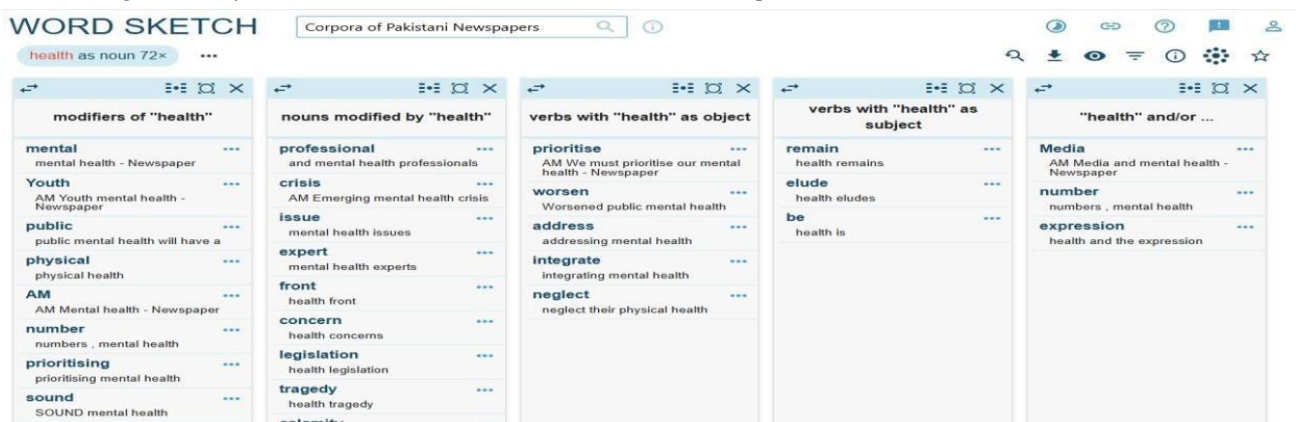


Concordance lines (Figure 4) provide a concrete context. Many instances show the phrase *mental health crisis* in headlines or editorials, emphasizing problem definition. For example, *Join Us: Worsened public mental health will have a drastic impact on the country's ...* or *Emerging mental health crisis* illustrates framing as an epidemic. Frequent collocates include illnesses, suicide, experts, and crushing inflation. One typical line warns of *the adverse effect of crushing inflation on people's mental health*, linking economic conditions to psychological problems. Other lines mention *social stigma against mental illnesses*, *lack of awareness*, and *absence of adequate support*, pointing to societal causes or barriers. Finally, phrases like *'seek professional support'* and *'campaign' should be launched to inform people* about available remedies. These concordances show that the language of crisis, risk factors, stigma, and solutions is woven throughout the corpus.

4.4 Collocational Sketch of Health

Figure 5

Word Sketch Showing the Modifiers Associated with the Noun Health in the Corpus.



A word sketch for health summarizes collocations by grammatical role. As a noun, health is most often modified by mental (e.g., *mental health*), followed by Youth, public, and physical. This underscores the dominance of mental health, specifically, and attention to youth and public health. In noun-noun phrases, health commonly modifies professional, crisis, issues, and experts. For example, *mental health professionals*, *emerging mental health crises*, and *mental health experts* appear, linking health to authority figures and problems. Verbs taking health as an object include prioritise, worsening, address, integrate, and neglect. We find lines like *We must prioritise our mental health* and *Worsened public mental health*, commands to act and warnings of decline. This verb collocates highlight decline (worsen, neglect) and demand action (prioritize, address). Overall, the sketch data support the idea that health is both under threat (a worsening crisis) and something that society should prioritize (address).

4.5 Quantitative Observations

The quantitative data highlight specific lexical frequencies across the corpus. The term *mental health* (63) is used far more frequently than related terms: *mental illness* (9) and *mental illnesses* (4) are comparatively uncommon, indicating that *mental health* is the preferred catch-all. The term *crisis* is often used to indicate urgency (as in a *health crisis*). Awareness is notably evident in collocations such as *mental health awareness* and *health awareness*, reflecting public health campaigns. In terms of raw numbers, mental health occurs 177 times (the sum of their individual counts), while mental illness occurs only nine times. Instead of pathologizing specific people (illness), this lexical choice might frame the problem more broadly (health). These counts, along with the keywords and n-grams, verify that explicitly negative labels (such as *mentally ill person*) are rare, while crisis and awareness predominate in quantitative usage.

4.6 Entman's Problem Definition

According to Entman's definition of the problem function, the corpus consistently characterises mental health as a societal crisis. The frequent co-occurrence of mental health with words like crisis, issues, emergency, tragedy, and calamity, as seen in n-grams and the sketch, constructs a narrative of urgency. For instance, *emerging mental health crisis* (7 hits) and *health crisis* highlight that the press frames mental health as a significant problem needing attention. This resonates with Wahl's (2003) finding that the media often focus on the dangerousness of mental illness. Though Wahl discussed Western media, our data show Pakistani newspapers similarly prioritize crisis language. The press informs readers that mental health is a critical social issue by characterizing the problem as widespread and urgent (Entman, 1993).

4.7 Causal Attribution

Frames also identify the root causes of the issue. Economic and social factors are often mentioned in the corpus. Economic hardship is directly blamed in a concordance line that describes *the adverse effect of crushing inflation on people's mental health*. The phrases *crushing inflation* and *absence of government relief* highlight outside influences. Social factors also show up: *lack of awareness* and *social stigma against mental illnesses* are mentioned as barriers in several lines. As a result, the media attributes mental health crises to both structural (inflation, underfunded health system) and cultural (stigma, ignorance) factors. This aligns with Entman's theory of a framing function diagnosing the cause: the narrative frequently assigns blame to social attitudes and economic policy failures. The media emphasizes stigma, inflation, and a lack of support, implying that addressing these issues could lessen the mental health issue.

4.8 Moral Evaluation

Additionally, the corpus expresses moral opinions regarding mental health. Normative commentary is revealed through terms such as '*stigmatize*,' '*judgmental*,' and '*humanize*.' The media's awareness of negative labelling is evident in the use of the word '*stigmatize*'. On the other hand, the phrases '*humanize*' and '*decriminalize*' indicate a demand for compassion and change. This dual moral framing draws attention to a conflict: prejudice is acknowledged in some discourses, while in others it is criticized.

Articles assign collective responsibility by framing mental health as a public health issue, which implies moral evaluation. Editorial language thus conveys values by criticizing societal apathy and praising initiatives (such as awareness campaigns) to alter norms. This framing pattern is consistent with Corrigan's (2004) finding that stigma in the media can either increase or decrease care barriers.

4.9 Remedies and Solutions

The media makes recommendations for solutions. The sketch's verbs, like prioritize, address, and integrate, are examples of

calls to action. N-grams like mental health awareness and hope of recovery imply preventive measures and positive outcomes. Several articles explicitly recommend campaigns or services: concordance lines mention a read campaign ... to inform people about mental health conditions and the need to seek professional support. These textual items function as Entman's treatment recommendations. In other words, after defining problems and causes, the discourse typically ends with a moral imperative to act (campaigns, reforms) – reinforcing the framing of mental health as remediable. This constructive framing, emphasizing awareness and support, contrasts with sensational reporting and aligns with international norms calling for greater mental health literacy.

4.10 Synthesis of Framing Patterns

The combined evidence shows a complex framing. Quantitatively, crisis language dominates, but discourse also includes awareness and care frames. Crisis-related collocates (e.g., crisis, issues, suicide) signal urgency, consistent with Wahl's finding that news often highlights danger. Meanwhile, verbs like 'prioritise' and nouns like 'professionals' suggest solutions. Social attitudes receive mixed coverage: stigma is explicitly named and criticized, but the individuals accused are rarely named. Instead, responsibility is often assigned to broad factors (e.g., economy, policy, media). Thus, the press frames mental health less as an individual moral failing and more as a structural challenge – echoing Zehra (2023), who found Pakistani media often label and marginalize mental illness yet also call for systemic change. Overall, the corpus of this research supports Entman's model: specific lexical fields construct the problem (a mental health crisis), causes (economic stress, stigma), moral evaluation (stigma is wrong, awareness is good), and remedies (education, policy action) in predictable ways.

4.11 Implications for Public Perception

The linguistic frames have a real-world impact on public understanding. As Wahl (2003) warns, if the media overrepresent crisis and dangerousness, they risk reinforcing stigma. In Pakistan, frequent mentions of crisis and suicide might alarm readers, but could also perpetuate fear. Corrigan (2004) notes that stigmatizing news can discourage help-seeking; the Pakistani press's mention of stigma and judgmental attitudes may heighten public awareness of prejudice, yet also inadvertently underscore it. However, the presence of mental health awareness and professional perspectives may normalize conversation and promote assistance. Zehra (2023) contends that the media can shape perceptions and found that, to lessen stigma, responsible framing is required.

The results also point to conflicting signals: humanizing narratives must be balanced with the "crisis" frame, which can mobilize resources and urgency. Journalists may steer clear of sensationalist language that associates mental illness with violence or inevitability. Still, the lexical emphasis on collective remedies (campaigns, policy) rather than individual blame could promote empathy.

5. Discussion

Critical discourse analysis (CDA) examines authentic language use to critically evaluate how language contributes to the production and replication of social inequalities. CDA believes that linguistic expressions reflect speakers' and writers' conscious or unconscious perceptions or opinions about phenomena. The use of CDA in mental health research is based on the belief that the language people use reflects their mental illness experiences. This belief emphasizes the importance of analyzing various types of textual expression, including first-person narratives and other linguistic representations. CDA can provide profound insights into personal experiences of cognitive resilience as well as societal perceptions of specific mental illnesses. The analysis of Pakistani newspaper coverage of mental health revealed several significant lexical patterns. Quantitatively, terms like *depression*, *disorder*, *suicide*, and *anxiety* were the most often used keywords, indicating a focus on clinical and crisis aspects. Collocations support this. For instance, *depression* frequently appears with verbs like *suffer from* or adjectives like *severe* or *chronic*, which frame it as a personal illness. Words like *awareness*, *support*, and *counseling*, as well as expressions such as *mental health awareness* or seeking *help*, are commonly used in campaigns and opinion pieces, according to the findings. There is a conflict between stigmatizing and sympathetic depictions in these conflicting word sets.

Additionally, CDA studies have evaluated naturally occurring narratives, such as the examination accounts of depression. CDA research on naturally occurring narratives highlights the importance of lived-experience insights in gaining a more nuanced understanding of living with a mental health condition, both from individual and social perspectives. According to Corrigan (2004), the prevalence of stigmatizing terms is concerning because stigma can discourage people from seeking help; according to one study, those who avoid the *label of mental illness* frequently have lower self-esteem. Wahl's work similarly warns that negative media frames reinforce public prejudice. Thus, the frequency data suggest that some articles may inadvertently reinforce stigma, while others promote a public health awareness frame. A tenet of CDA is that *discourse is ideological*. In studying

narratives of psychological illness and cognitive resilience, this involves examining how dominant discourses around identity (e.g., gender, ethnicity) can influence the experience of illness, potentially affecting treatment and recovery (e.g., normative ideologies of masculinity may underpin an individual's experience of mental health).

Moreover, Entman's framing theory aided the interpretation of the results by providing a lens on framing as *the selection and salience* of aspects of reality. In the given corpus, certain aspects of mental health are repeatedly made salient. For instance, many reports define the problem in medical or individual terms (*psychiatric disorder, patient suffering*), while fewer emphasize systemic causes (poverty, conflict) or recovery narratives. These choices align with Entman's components: a dominant frame appears to problematize mental illness as a health crisis requiring treatment, often highlighting individual suffering. Meanwhile, solution frames focus on government or NGO interventions (*more funding, counselling services*), and moral evaluations sometimes attribute blame (e.g., *overworked families*). Consistent with Wahl (2003), we see that when media primarily select threat-related language (e.g., danger, tragedy), it likely cultivates fear and misunderstanding.

The data also show a smaller but expanding *support* frame in the press alongside these predominant crisis-oriented patterns. Words like *community help, breaking the silence, and seeking support* demonstrate a growing effort by some journalists to dispel stigma and portray mental health in a more positive light. These differences align with Entman's framing model: newspapers not only describe what constitutes a mental health *problem* but also allude to potential remedies, often focusing on societal failures or biological explanations. By doing this, they quietly influence readers' perceptions of what mental illness is and how it ought to be treated.

The conflict between awareness and stigma permeates Pakistani media coverage. Some articles use words that promote empathy and understanding, such as *rights, equality, and education*. However, some people still use derogatory terms like *madness, weakness, or suffering*, which subtly support negative stereotypes. This duality is consistent with Halliday's notion of language as a tool for meaning-making and with Fairclough's contention that language does not merely reflect the world but actively shapes it. Different interpretations of mental illness are actively constructed by the words used in headlines and reports; at times, the patient is depicted as dangerous, at other times as vulnerable, and at other times as someone deserving of respect and care.

In this case, Baker's observation regarding the *cumulative effect* of repeated linguistic patterns is particularly pertinent. Even seemingly insignificant decisions, like which verbs or adjectives go with *depression* or *mental illness*, add up over hundreds of articles and gradually shape public opinion. When considered collectively, the results indicate that Pakistani English newspapers are at a difficult crossroads. While they are beginning to recognize mental health as a legitimate public concern, they are also perpetuating stereotypes that may deter people from seeking help (Corrigan, 2004). Research indicates that public attitudes could improve if supportive and empowering frames were used more frequently (Wahl, 2003; Corrigan, 2004).

In this way, the study emphasizes a straightforward but potent point: press language is not neutral. It may strengthen stigma or contribute to its eradication. For journalists, editors, and legislators who want to promote better, more informed discussions about mental health in Pakistan, acknowledging this obligation is essential.

6. Conclusion

The way Pakistani English newspapers portray mental health as an urgent public issue tells us a lot about how language affects how the public views identity, stigma, and psychological well-being. A closer examination of the corpus reveals that the press regularly uses crisis-related terminology, such as illness, emergency, and suffering, while occasionally incorporating terms related to awareness or support. These patterns are explained by Entman's (1993, 2007) framing theory, which accounts for how specific elements of reality are chosen and emphasized to shape interpretation. Pakistani newspapers frequently recycle cultural narratives that portray mental illness as a moral failing, a burden on families, or, at most, an emerging policy issue. Recurring metaphors, headlines, and lexical choices all contribute. Zehra, Khan, and Naureen (2023) argue that Pakistani newspaper headlines frequently rely on labelling and stereotyping strategies when reporting on mental illness. Their research demonstrates how newspapers frequently use medicalized labels and stigmatizing metaphors that separate people from their social identities. Even during the COVID-19 pandemic, mental health was positioned within broader narratives of fear, national resilience, and religious obligation. These patterns support the ideas of Gamson and Modigliani (1989) and Reese et al. (2001) that framing is a negotiated process influenced by editorial judgments and cultural values and is never neutral.

Tracing these frames is made feasible and methodical by a corpus-driven approach. According to researchers like Baker (2006), Partington, Duguid, and Taylor (2013), corpus linguistics enables the identification of recurrent lexical and semantic patterns that serve as the foundation for ideological meanings in news discourse. Researchers can determine the frequency of specific collocations, such as *mentally ill* combined with *dangerous* or *violent*, and how these associations reinforce stigma by examining vast amounts of newspaper text. By measuring broader linguistic tendencies, this approach goes beyond isolated

instances while still allowing for qualitative insights through critical discourse analysis (Hardt-Mautner, 1995; Hunt & Brookes, 2020). By doing this, the analysis of how mental health is framed in Pakistani newspapers illuminates the relationship between language, media, and cultural ideologies. More significantly, it shows how corpus-driven discourse analysis can help decipher the nuanced linguistic clues that shape public perceptions of mental illness.

Cognitive narratives are diverse and multidimensional. They may be non-linear and reject coherence. To a greater extent than psychological narratives, they incorporate social, political and rights aspects. Approaches to support the development of narratives of mental health should expand rather than reduce available choices. Research into the narratives of more diverse populations is needed. Current scholarship advocates for the institutionalization of trauma-responsive care models and highlights the need to understand and support redemptive models and developmental growth for people experiencing mental health issues.

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