

Analysis of Gender Narratives in Social Media Commentary: A Van Dijk Socio-Cognitive Study of Facebook and Instagram

Afifa Noor¹

Abstract

Using van Dijk's Socio-Cognitive Model (SCM) to analyze the interaction between discourse, cognition, and social ideology, this study explores how Facebook and Instagram users create gender narratives through comment-based discourse. Social media sites are become important venues for discussing gender implications. In particular, comment sections show how users respond to textual and visual information by articulating, reproducing, or challenging established gender stereotypes. The study examines how discourse patterns reflect underlying social cognitions—mental models, attitudes, and ideologies—that influence users' perceptions of gender, guided by van Dijk's SCM. Linguistic patterns, representational techniques, and cognitive frameworks were all examined using a qualitative critical discourse analysis (CDA). Digital scraping of publicly accessible articles pertaining to gendered content and methodical screenshot documenting were used to gather user feedback. From verified profiles and popular conversations on Facebook and Instagram, posts with high engagement and explicit gender relevance were chosen using purposeful sampling. Recurring stereotypes, polarization tactics, and ideological framing that upheld conventional gender norms were identified through analysis, although counter-narratives that opposed sexism and promoted gender inclusion also surfaced. The tone and complexity of these stories were influenced by platform affordances. Through community rules and educational initiatives, the study suggests enhancing platform moderation processes, developing digital gender literacy, and fostering inclusive discourse.

Keywords: Gender Discourse; Social Media; Facebook; Instagram; Socio-Cognitive Model; Van Dijk; Ideology; Critical Discourse Analysis; Online Comments; Digital Narratives

¹ Department of English Language and Literature, Superior University, Lahore – Pakistan

Introduction

Social media sites like Facebook and Instagram have become powerful public spaces where gender narratives are constantly created, shared, challenged, and accepted. Users co-create meanings about gender identities, femininity, and masculinity through regular interactions—likes, shares, and especially comment-based discourse—that mirror larger sociocultural ideas (Herring & Kapidzic, 2015; KhosraviNik & Zia, 2014). These platforms offer a rich environment for analyzing how gender is symbolically expressed and reproduced in digital environments since they offer both macro-level mass discourse and micro-level intimate exchanges. Users negotiate identities, police norms, confront prejudices, and participate in discursive conflicts that shape gendered social realities via comments on postings, which act as dialogic spaces (Lazar, 2017; Shaw, 2014).

Teun A. van Dijk's Socio-Cognitive Model provides an effective theoretical framework for examining these processes. According to Van Dijk (2014), social cognition—shared mental schemas, attitudes, and ideologies among group members—acts as a mediator in the creation and interpretation of speech. According to van Dijk (2013), online gender narratives are therefore cognitive expressions of society views that are enacted through language and interaction. Discourse, cognition, and society are the three interrelated components that this approach highlights. Discourse elements that show underlying cognitive frameworks that users engage while commenting on gender-related information include linguistic choices, narrative structures, and polarisation methods (van Dijk, 2016). In the meantime, processes of group membership, cultural norms, and ideological exposure socially change these individual cognitions (Thimm et al., 2018).

Social media users frequently employ common gender ideologies, such as postfeminist discourses, LGBTQ+ affirming narratives, or patriarchal standards, to express their opinions on gender-related topics. These beliefs are either upheld or challenged in comment threads, which turn into communal venues for meaning-making. According to earlier research, online discourse often reflects deeply ingrained gender norms, such as expectations of masculinity and femininity, while also offering chances for counter-narratives (Jane, 2017; Paasonen et al., 2020). The interactive nature of comments allows not only expression but also negotiation: users may challenge sexist remarks, mobilize feminist discourse, or reproduce hegemonic norms through humor, policing, or dismissal (Mantilla, 2015).

Despite being owned by Meta, Facebook and Instagram foster distinct interactional cultures that influence gender debate. While Instagram's interface and algorithmic curation promote affect-driven, image-based interactions that impact how users perceive and articulate gendered meanings, Facebook's comment sections frequently foster longer argumentative exchanges and intergenerational debates (Abidin, 2016; Highfield & Leaver, 2016). Comparing these platforms provides insight into how participation structures, community norms, and interface design influence the socio-cognitive processes that underlie the creation of gender narratives.

By using the Socio-Cognitive Model to analyse comment-based discourse, researchers may look at how users read postings, respond to others, and participate in larger cultural discussions in addition to what they say about gender. It underlines that gender discourse online is not only textual but fundamentally cognitive and socially contextual. Understanding these mechanisms is essential for mapping how gender norms are repeated, disputed, or modified in modern society, as digital communication becomes more and more vital to public discourse.

Review of the Literature

Social media platforms have become crucial digital arenas where gender meanings are formed, negotiated, and challenged through everyday interactions. Facebook and Instagram are two of the most well-known of these platforms, where users interact with postings through both visual content and comment-based discussion—an increasingly significant method of public communication (Highfield & Leaver, 2016). These platforms' comments function as dialogic spaces that mirror broader sociocultural conceptions of gender, enabling users to express, support, and contest prevailing or alternative gender narratives (Herring & Kapidzic, 2015). As a result, these comment threads provide a rich language resource for examining how people interpret gendered identities and social responsibilities in modern digital settings.

Social media gender discourse frequently reflects larger cultural trends, such as the upholding of gender norms, the maintenance of gender stereotypes, and the rise of counter-hegemonic narratives that challenge conventional wisdom. According to research, internet communication often perpetuates societal gendered notions while also offering chances for resistance and subversion (Lazar, 2017; Jane, 2017).

To understand how gender narratives are constructed cognitively and discursively in such environments, van Dijk's Socio-Cognitive Model (SCM) offers an especially valuable framework. The SCM posits that discourse production and comprehension are mediated by social cognition—mental schemas, attitudes, and ideologies that users draw upon when interpreting or producing text (van Dijk, 2014). Through this lens, comment-based discourse is not simply linguistic output but a manifestation of underlying socially shared knowledge structures that shape how gender is understood and talked about (van Dijk, 2013). The model emphasizes the interconnectedness of discourse, cognition, and society: discursive features such as lexical choices, argumentation patterns, and representational strategies reveal cognitive frames that both reflect and reinforce gender ideologies (van Dijk, 2016). At the same time, users' cognitive models are continually shaped by socio-cultural contexts, group memberships, historical norms, and ideological exposure.

A fuller understanding of how users activate and replicate gendered cognitive schemas in response to visual stimuli, public events, or interpersonal interactions may be gained by applying the SCM to Facebook and Instagram comments. For example, common societal assumptions ingrained in users' mental models might explain polarized representations, such as presenting women as emotional and males as rational (KhosraviNik & Zia, 2014). Similar to this, the use of humor, sarcasm, or moral judgement in comment sections frequently indexes socially accepted views, making them important markers of the spread and validity of gender narratives in online communities (Mantilla, 2015). Researchers can provide light on the narratives that form as well as how and why they resonate among specific social groups by looking at the cognitive and ideological aspects that underlie users' discursive choices.

The changing dynamics of gender discourse on social media platforms are highlighted by recent study, which also shows how digital surroundings influence the creation and challenge of gender norms. Research starting in 2018 demonstrates that platform architecture has a big impact on how gendered implications spread. For example, appearance-based assessments are amplified by Instagram's visual-centric design, which feeds conversations about body politics, femininity, and influencer culture (Duffy & Wissinger, 2020; Cotter, 2019). In the meanwhile, Facebook's comment sections encourage lengthier, contentious discussions that frequently propagate divisive gender beliefs, such as sexism and gendered moral judgment (Harmer & Lumsden, 2019). As platform recommendation algorithms

favor emotionally charged or stereotyped material, increasing gendered polarization, new study also shows the emergence of algorithmically reinforced gender narratives (Bishop, 2021). Researchers see a rise in the prominence of feminist and queer counter-discourse, in which users utilize humour, hashtags, and call-out tactics to oppose heteronormativity and sexism (Banet-Weiser, 2018; Thorson et al., 2021). Discursive intensity and inclusion vary amongst communities, according to cross-platform comparative research, with Facebook hosting more conflict-driven interactions and Instagram cultivating emotional support networks (Berryman & Kavka, 2021). In order to demonstrate how social media interactions, reinforce mental models of gender that are consistent with larger societal power systems, recent discourse-analytic research have focused on cognitive framing and ideological replication inside user comments (Mendelsohn et al., 2021). In general, recent scholarship emphasizes the intricate interactions that shape digital gender narratives between platform design, ideology, and user discourse.

Methodology

This study examined how Facebook and Instagram users create gender narratives through comment-based interactions using a qualitative research approach based on Critical Discourse Analysis (CDA). Van Dijk's Socio-Cognitive Model (SCM) was used as the main analytical framework since the study's goal was to investigate the ideological, cognitive, and discursive processes behind online gender conversation. This concept is useful for examining digital commentary where implicit gendered assumptions frequently appear since it connects discourse patterns to underlying mental models and larger socio-cultural ideologies. A qualitative CDA technique was adopted to enable in-depth investigation of language patterns, argumentation structures, representational tactics, and socio-cognitive frameworks encoded in user comments. The design valued interpretative depth above numerical generality, focusing on how meanings are formed, contested, and shared across social media contexts. Public Facebook and Instagram postings that directly sparked conversations about gender were used to gather data. Between 2023 and 2024, posts from verified accounts, public individuals, and popular subjects that had a significant amount of comment interaction were chosen via purposeful sampling. The selection of posts was focused on their clear connection to gender issues, including body politics, LGBTQ+ identification, gender roles, masculinity, femininity, and feminist discussions.

Data Analysis

In-Depth Analysis of Media Framing on Gender Issues (Comments)

1. Classification by Primary Gender Issue

Primary Gender Issue	Comment Count	Percentage of Total
Transgender & Non-Binary Identities	27	26.0%
Gender Roles, Equality & Feminism	25	24.0%
Men's Roles & Behaviour (Misogyny, Toxicity)	19	18.3%
Biological Sex vs. Social Gender	16	15.4%
Women's Rights & Victimization	13	12.5%
Intersex/DSD & Terminology	2	1.9%
Other/General	2	1.9%
Total	104	100%

2. Classification by Framing Perspective

Framing Perspective	Comment Count	Percentage of Total
Affirming/Progressive	35	33.7%
Critical/Traditional/Anti-Feminist	27	26.0%
Neutral/Definitional (Focus on Science/Sociology)	23	22.1%
Personal Experience/Supportive	10	9.6%
Focus on Men's Positive Roles/Struggles	9	8.7%
Total	104	100%

3. Word Frequency Analysis

This table lists the most frequent content words (excluding common stop words like 'the', 'a', 'is') related to the themes.

Word	Frequency	Associated Theme(s)
Gender	47	Trans, Roles, Sex vs. Gender
Men	43	Roles, Misogyny, Equality
Women	34	Roles, Victimization, Equality
Sex	18	Biological vs. Social Construct
Feminist/Feminism	14	Equality, Political Stance, Critique
Brain(s)	9	Trans, Biological Determinism
Born	8	Trans, Biological Determinism
Equality	7	Feminism, Rights
Masculine/Femininity	7	Roles, Balance
Trans	6	Transgender Identity

4. Collocation Analysis (Words Used Together)

This analysis highlights how key terms are frequently paired, revealing underlying arguments.

Collocation (Word Pair)	Frequency	Connotative Meaning/Framing
Social Construct	6	Used to frame Gender as non-biological (Neutral/Affirming).
Trans Brains	4	Used to frame Gender as biologically innate (Biological Determinism).
Gender Identity	4	Used in discussions about personal experience and scientific definition (Neutral/Affirming).

Gender War	3	Used by critics of feminism to frame equality efforts as conflict (Critical/Anti-Feminist).
Male/Female Brains	3	Used in scientific/biological arguments about difference (Neutral/Critical).
Misogynistic/Misogyny	3	Used when discussing harmful male behaviour (Affirming/Progressive).

5. Ideological Elements Analysis (Power, Ideology, Language)

This table isolates words and phrases that specifically relate to power structures, ideological positioning, and persuasive language tactics.

Element	Categories	Example Phrase/Context	Implied Ideology/Power Dynamic
Power/Control	Oppression, Superiority, Rights	"Oppressors class" (4), "Superior" (95, 102), "Human rights" (89), "Win the gender war" (91)	Conflict and hierarchy; Men as oppressors or superior; Women fighting for basic rights.
Biological Determinism	Sex, Innate, DNA	"Scientifically born with trans brains" (12), "Actual DNA" (68), "Sex is biological" (49), "Nature law" (51)	Gender/Sex is fixed, natural, and unchangeable, used to reject non-binary identities.
Language/Discourse	Labels, Identity, Norms	"Cancel WOMEN" (51), "Gender norms" (31), "Victim card" (90), "Warped/Brainwashed" (68)	Focus on changing language (e.g., 'birthing people'), criticism of identity politics, and use of extreme language to dismiss opposing views.
Emotional/Moral Appeal	Support, Virtue, Justice	"Deeply impacted me" (1), "Devils hidden" (3), "Kind and	Appeals to moral decency, personal empathy, and

		sensitive" (1), "Divine feminine" (60)	traditional virtues (both positive and negative).
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❖ **Data Analysis Using Van Dijk’s Socio-Cognitive Model**

The socio-cognitive model by Van Dijk focuses on the relationship between cognition, social structures, and discourse. Media texts exist outside themselves and are refracted, constructed and influenced by representations in the mind, social conventions and ideologies. Using this method to evaluate the comments about the gender matters on Facebook and Instagram enables us to study the way the users perceive gender, how they place themselves within the ideological context, and how these mental activities are expressed in words in their languages.

❖ **Classification by Primary Gender Issue**

Transgender and Non-Binary Identities

This genre is about a quarter of the total number of comments, and is a cognitive bargaining between fluidity of gender and fixed gender. Progressive commentators place transgender and non-binary identities in a positive light, and words used legitimize self-identification and inclusiveness. Critical commenters, on the contrary, use important mental frameworks, calling on biology or natural tendencies to argue against non-binary identities. This is evidenced by the fact that the frequency of discourse surrounding this issue is high, and social media represents the domain, in which controversial mental imagery of gender is discussed, and it is not isolated, but a part of broader social discourse around recognition, legitimacy, and rights.

Gender Roles, Equality, and Feminism

The gender roles, equality and feminism comments take nearly 25 percent of the data. More advanced users often use schemas of justice, equity and empowerment, placing a strong focus on breaking the patriarchal hierarchies. In the meantime, critical or anti-feminist commentators are operating on the basis of established constructs, by referring to social norms and moral authority to oppose change. The socio-cognitive approach as described by Van Dijk clarifies that these remarks are determined not only by the knowledge about society, but also by ideological mental

models, which direct not only the said but also the language strategies to express the said ideas.

Men's Roles and Behavior

About eighteen percent of mentions are about the role of men and their actions, which may be a misogynist or toxic masculinity comment. The mental representations of commentators portray men either as oppressors or as people who are going through the pressure of society. Moral judgments, criticism of harmful behavior or demands may often be made with the use of emotional and evaluative language. Such remarks demonstrate the influence of cognition and social knowledge on discourse: the mental models of male behavior that users have impact the discussion of gender norms and expectations that they are supposed to follow.

Biological Sex versus Social Gender

Approximately one-fifth of the comments take part in the debates between the view of biological sex and social gender, which signify discussions between the essentialist and constructivist views. The claim of scientific authority, often in the form of DNA, biology, or social theory is made by commenters to back up their arguments. Van Dijk states that these remarks show that knowledge formations in cognition, that people think are scientifically or socially true, determine interpretation as well as use of language and frame important controversial issues of gender.

Women's Rights and Victimization

The comments relating to women rights and victimization constitute about twelve percent of the dataset. These contributions engage moral and empathetic schemas, which illuminate the disparities, past oppression, and recognition fights. The discourse shows the way the ideology and cognition overlap: commentators think and support social orders and ask the readers to think about justice and moral duty.

Underrepresented Categories

Intersex/DSD problems and general or miscellaneous matters constituted a minimum of less than two percent respectively. Such categories have reduced

cognitive salience in discourse in the society. These areas had few comments which were largely definitional or explanatory in nature representing poorly developed mental models. According to Van Dijk, less salient issues are discussed in terms of neutral and informational discourse, as opposed to arguments that are ideologically charged.

❖ **Classification by Framing Perspective**

Affirming and Progressive Comments

Approximately, a third of the comments follow an affirming or progressive framing. The contributions are focused on inclusivity, empowerment, and equality. Commentators mobilize the schemas of social justice which rely on language that tends to favour the marginalized groups and affirm progressive conventions. This type of discourse shows how ideology, cognition, and language interact since constructive dialogue and advocacy are promoted through positive mental models.

Critical and Traditional Comments

About quarter of comments are critical, traditional or anti-feminist. Such commenters frequently invoke some moral or cultural authority to defend the traditional gender roles or oppose social change. Van Dijk says that this is indicative of ideological thinking whereby content and expression in discourse is directly influenced by mental elements of hierarchy, morality and normative behavior. Language employed usually focuses on conflict, power and social order, which strengthen social structures that exist in society.

Neutral or Definitional Comments

About twenty-two percent of the comments are neutral or definitional, which are concerned with scientific, sociological or conceptual explanations. These contributions are based on cognitive schemas which are knowledge oriented and which put preference on the clarity and understanding rather than the ideological standpoint. Such statements (even in the absence of overt bias) affect the discourse to the degree of cognitive scaffold, readers, in comprehending complicated gender ideas, and base arguments on the perceived objective knowledge.

Personal Experience and Supportive Comments

Only a small percent of comments, about ten percent, are based on personal experience or supportive stories. These comments engage empathetic schemas, which evidence depends on experience to describe or justify gender outlooks. Such discourse tends to fill the ideological gaps, humanizes theoretical arguments, and emphasizes the place of narrative cognition in social media conversations.

Comments Highlighting Men's Positive Roles

About nine percent of the comments highlight the struggles of men or their positive roles. These works provide other forms of thought, which outweighs a mainstream discourse of masculinity or gender struggle. This kind of framing offers corrective information, which is how complicated social cognition is and the complexity of mental model as it pertains to gender roles.

Integration of Gender Issue and Framing

In the analysis of how the topic of gender topics with the view of framing, one can point out clear patterns. Progressive framings are more likely to conform to trans/non-binary identities and feminist agendas, but critical framings prevail on the arguments of biological sex, social construction, or gender wars. These patterns can be described by Van Dijk as the interaction of mental models, ideological positions, and linguistic strategies. The commentators perceive the social realities based on an already existing cognitive frameworks that determine how they express their views on the internet.

On the whole, this discussion has revealed that the comments related to gender issues posted on social media are not opinionated. They are mental representations of cognition and ideology which are formed by mental models of gender, power, and social norms. Media discourse is both a reflector and a producer of social reality, which proves the fact that cognition, ideology, and language are closely intertwined as Van Dijk argues.

Lexical and Collocational Analysis Using van Dijk's Socio-Cognitive Model

The socio-cognitive approach of Van Dijk focuses on the fact that language is a representative of mental models and ideological positions. The content and language that commenters use does not only disclose the salient subjects but also uncovers the implicit beliefs, attitudes, and cognitive schemas commentators base their ideas on. Using lexical patterns and collocations in social media remarks about gender topics, we can find a way of revealing the influence of cognition and ideology on discourse.

❖ Word Frequency Analysis

One of the major characteristics of socio-cognitive analysis is the analysis of words that are most commonly used, as words that recur tend to be characteristic salient mental concepts and major points of discussion. Words such as gender, men, women, sex, feminist/feminism, brain(s), born and equality were the most common words in the dataset.

The fact that the word gender is so noticeable indicates the prominence that it has on the discourse of social identity as well as social roles. The fact that it is common means that the commenters are frequently triggering cognitive schema as regards to social constructs, identity formation, and cultural expectations. It was almost the same case with the word men, as over fifty percent of the results mentioned discourse centred on male behaviour, their role in society and discussions of misogyny or toxic masculinity. Similarly, the term women bring into focus the topic of victimization, rights, and equality, triggering the thinking patterns regarding the power struggles and past oppression.

The use of words like sex, brain and born clearly indicates exposure to biological determinism, and the commentators exploit scientific or naturalistic schemas to debate on the idea of the innate and socially constructed characteristics. The use of the terms feminist/feminism and equality places the emphasis on the ideological aspect of the discourse, bringing to the fore the mental frameworks pertaining to advocacy, equality, and political orientation.

❖ Collocation Analysis

The existence of collocations can tell us how the associations in the mind are formed and the way in which a particular ideology represents an idea. As an illustration, the combination of words, social construct, is used several times in approving or neutral conversations and this represents the schemas that gender is socially constructed as opposed to being biologically determined. Such collocation is an indication that commentators depend on constructivist cognitive models in putting arguments on identity.

On the other hand, the combination of trans brains indicates the use of biological determinism. Individuals applying this term suggest that transgender identity is biologically based and is a cognitive category where inborn characteristics delineate social groups. On the same note, such expressions as, male/female brains or actual DNA support the scientific power as a validating frame demonstrating how knowledge based mental models can be employed to shape discourse.

Gender war is another interesting collocation, which critical or anti-feminist commenters frequently use. Such a pairing positions the efforts of equality as being antagonistic, which triggers competence, threat, and hierarchy schemas. Similarly, misogynistic or misogyny is a word used in progressive speech in order to point out bad actions, which activates moral and evaluative cognitive schemes.

Lastly, such collocations like gender identity can be found in both neutral and affirming discourse, which indicates a tendency to define it, perceive it, and be recognized by society. The lexical associations depict the dependence of commentators on cognitive frameworks that systematize abstract ideas into significant language patterns.

❖ Lexical Framing and Ideological Significance

In addition to frequency and collocation, connotative meaning of words demonstrates the intersection of ideology and cognition. The use of such terms as oppressors, superior, rights, victim card, and cancel shows some hidden assumptions regarding the power relations and hierarchy, as well as the social justice. The example is that progressive commenters stress empowerment and safeguarding of marginalized groups, whereas critical commenters employ the

language that can be discussed as invoking threat or hierarchy where social change is a challenge to the established order.

Likewise, there is the use of vocabulary that pertains to biological aspects, like that a person was scientifically born, to be borne by nature, or to have DNA, which is used to justify non-binary or constructed identities. These terms put into action mental patterns where gender has become fixed and it expresses how scientific talk can be used rhetorically to advance ideological stances.

Motivated expressions and terms whose meaning is emotional or moral, e.g., deeply moved me, divine feminine, kind and sensitive, are examples of how the cognition of narratives and empathy are instigated in conversation. The commentators base on their personal experience or moral principles to support their opinions and address feelings and ethical considerations of people. This confirms the thought of Van Dijk that not only what is said is influenced by cognition, but also how it is argued and received.

❖ **Cognitive Patterns in Lexical Choices**

The lexical data also demonstrates patterns of consistent cognitive performance in comments. Positive remarks tend to include the words gender identity, social construct, and equality that refer to inclusivity and social justice schemas. Critical remarks, on the contrary, focus on such words as DNA, natural, gender war, which provokes the activation of schemas of hierarchy and natural order, and resistance towards social change. The neutral comments revolve around definition and clarity, resulting in the activation of the cognitive frameworks that are knowledge oriented and not ideological oriented.

The presence of collocations and similar patterns of repetitive lexis indicate that social media is a place where cognition, ideology and language interrelate. Words are not neutral and they have connotative meaning which indicates mental models, societal norms and persuasive tactics. The socio-cognitive approach points out that all lexical decisions are connected with the way in which people represent reality, define social roles and defend the stand points in the disputable gender questions.

Summary

Words frequency, collocation, and framing prove the extensive ideological and cognitive structures lexical analysis and collocational analysis confirm. The prevalence of gender-related terms demonstrates the predominance of the concept in mental representations, whereas collocations demonstrate the relationship between the concepts, which proves how users arrange knowledge and manifest ideology. Moral, emotional or scientific connotation of words illustrates the way discourse triggers several thought schemas at the same time, between moral reasoning and epistemic authority.

Essentially, this part indicates that the framework of examining words and collocations based on the socio-cognitive perspective of Van Dijk offers an understanding of how ideology, cognition, and language, in the context of social media discourses of gender, are interrelated. The lexical patterns are the cognitive systems and mental imagery driving the commenters to interpret gender, identity and social norms.

Ideological and Socio-Cognitive Analysis Using van Dijk's Model

The socio-cognitive model developed by Van Dijk focuses on the fact that discourse influences as well as determines mental representations, social structures, and ideologies. Within the context of comments on gender issues on social media, all linguistic decisions are based on the underlying beliefs, knowledge and ideological location. Segment 3 is the synthesis of the above analyses of classification, lexical patterns, and collocations to investigate the questions of power, ideology, and mental processes in online gender discourse.

❖ Power and Control in Gender Discourse

One of the main themes of the comments is the power relations. A lot of work is based on the conversations of oppression, hierarchy, and social control. Language and expressions like the power of oppressors and higher, and human rights indicate the opinions of the commentators to the gendered power relations. Progressive commentators tend to articulate men or dominant social groups as having historically had the power to control, which seemingly supports inequality and injustice schemas. Critical commentators, nevertheless, can frame the

empowerment movements as the challenge to the existing order, and make progressive gender programs sound as an imposition or opposition.

In terms of socio-cognitive approach, the discourses demonstrate that mental patterned interpretations are driven by mental model of social hierarchy and authority. The commentators evaluate situations depending on what they know or assume about the society and such assumptions are displayed in either challenging or defending power structures discourse practices. By making a space of debate available to the audience, the media enhances these cognitive and ideological processes, allowing the spread, confrontation, and strengthening of mental models.

❖ **Biological Determinism and Gender Ideology**

Biological determinism is used to put gender issues into perspective in many remarks. Such terms as sex, inborn, DNA, and born a certain way are used in the discourses which refer to gender being fix, natural and immutable. These are lexical options that have cognitive schemas that are more conducive to natural law, scientific authority, and essentialist thought.

Biological determinism is commonly used by commentators to oppose non-binary identities or social constructs as objective or beyond refutation. This proves the principle of Van Dijk, according to which ideology interacts with cognition: commenters express their views with the help of mental patterns with a biological and scientific nature that justify a specific position of power and reject other points of view.

On the other hand, confirming or supporting remarks decline deterministic schemas by referencing such phrases as social construct and gender identity, and these cognitive models of gender being fluid, socially mediated and subjective. This ideological opposition proves that social media is battleground of opposing mental frameworks and ideological models, all of which impact how users perceive and define gender issues.

❖ **Language, Labels, and Identity Politics**

The use of language and the labels to build gender discourse is another major theme. The mental and ideological intonation of identity politics can be found in terms like

cancel women, victim card, gender norms and warped/brainwashed. The validity of language evolution is often argued over by commentators, which is indicative of the mind models of associating language with social power.

Affirming statements tend to adopt an inclusive terminology, which is an indication of empathy, recognition, and social justice schemas. The linguistic changes are often presented in the form of critical commentary that constructs linguistic changes as something unnecessary, manipulative, or even threatening, by referring to the schemas of resistance and traditionalism. Van Dijk underlines that language is a medium of ideology: words we use trigger mental representation and lead the reader to perceive social reality.

❖ Emotional and Moral Appeals

Ideological positions are also empowered by appeals to emotion and morality by many commentators. Such expressions like deeply moved me, divine female or kind and sensitive express the notion of the mental structure based on individual experience, empathy or virtue. These emotional appeals are powerful because they address the cognitive and affective systems of the readers and create either support or contrast depending on the common moral systems.

Such appeals are commonly made by progressive commenters who point out the injustice, endorse marginalized identities, and encourage social change. The critical commenters can use moral arguments as a defence of traditional roles or as an attack on perceived extravagance in the equality movements. This is how Van Dijk describes the idea that cognitive and affective schemas are applied in both production and reception of discourse, which determines the way arguments are received and internalized.

❖ Ideology and Mental Models in Framing

Throughout the dataset, the influence of mental models, ideology and discourse is apparent. There is no such thing as comments that take place in a void, they are influenced by the beliefs of people with regard to gender, social norms, and authority. As an example, progressive commenters use schemas of fairness, justice, and inclusivity and critical commenters use schemas of hierarchy, natural order, and social stability. Neutral remarks are based on knowledge-based schemas, in which

emphasis is on the definitions, science, or sociological paradigms instead of the moral or ideological positioning.

The socio-cognitive approach explains that these mental models organize the perception as well as expression. The comments in social media serve as a reflection of the cognitive schemas, as well as maintaining them with the discourse. The collective mental representations of gender problems built through such repetitive interaction of commenters with specific words, collocations and frames form a loop of cognition-language-ideology.

❖ **Media as a Cognitive and Ideological Space**

Last but not least, this analysis brings up the significance of social media platforms as cognitive and ideological space. Facebook and Instagram allow users to project mental models, test ideologies, and endorse meaning. The interplay of word choice, framing perspective and power discourse is how media discourse is constructed by cognition and how cognition is constructed by media discourse. Users process content with ready-made schemas, but at the same time, they are also producers of the construction of social knowledge and ideological standards.

The socio-cognitive model of van Dijk enables us to appreciate the fact that online comments are not accidental but represent the organized patterns of thinking, belief, and social location. The interaction of language, ideology, and mental models contributes to establishing a dynamic discourse environment in which the gender issues are constantly discussed, argued, and negotiated on a social level.

Conclusion

Power dynamics, biological determinism, language politics, and moral appeals are all manifestations of some underlying mental models upon which interpretation and expression is based. Progressive and critical commentaries trigger alternative schemas, demonstrating that ideology influences the manner in which cognitive processes are produced, strategies of framing, and language decisions. The social media is a reflector and producer of social reality, facilitating the exchange of mental models, the strengthening of ideology, and meaning negotiation on gender concerns. The analysis of social media comments on gender issues in the socio-cognitive perspective of Van Dijk shows that the discourse is closely related to

cognition, ideology, and social situation. Throughout Facebook and Instagram, the comments people post can be used to understand that mental models, knowledge structures, and ideological frameworks play a role in explaining how gender issues are read, identified, and communicated.

The classification analysis reveals that the transgender and non-binary identities, gender roles, male behavior, gender-biological and gender-social, as well as the rights of women are the focus of discussions, which indicates that these issues are urgent in terms of collective cognition. The framing viewpoint emphasizes the way the user places themselves ideologically, progressive commentators invoke schemas of inclusion, equality, and social justice, whereas the critical commentators invoke traditional hierarchies, essentialist perceptions, and anti-change. The neutral remarks tend to be aimed at definition, science, or sociological explanations and are marked by knowledge based mental model and not on moral or political positions. These understandings are further supported by lexical and collocational analysis, which show that word choice, word repetition, and word pairs reflect thought and ideological organization. The common use of such words as gender, men, women, sex, and feminism, as well as such collocations as social construct, trans brains, and gender war, reveals how the mental model of identity, biology, power, social conflict, directs the discourse. The use of emotional and moral language also demonstrates the interaction between cognitive and affective schemas in putting arguments into perspective and perception shaping.

The ideological analysis demonstrates that power, control and authority are at the center of the debates. Progressive discourse focuses on empowerment, social justice and inclusion whereas the critical discourse uses equality efforts as a threat or conflict. The interaction between knowledge, cognition and ideology in the discursiveness of gender issues are brought to the fore through biological determinism, language politics and moral appeals. Mental models are projected and reinforced in a social media as a cognitive and ideological space and shows how individual cognition and collective discourse are dynamically interconnected.

In conclusion, the socio-cognitive approach demonstrates that the commentary on gender issues presented in social media is not a mere opinion, but a systematic manifestation of mental models, knowledge and ideology. The choice of language, framing, and discourse are heavily dependent on the way that the users consider gender, power, and social norms. This discussion affirms that cognition, ideology,

and language work in coordination to generate salient, contested, and socially important discourse, and social media is a significant location to comprehend the current discourse of gender debate.

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Correspondence:

Afifa Noor

affifa.noor@gmail.com
