



Research Article

``Girl Math, Boy Math": The Presence of Toxic Masculinity in TikTok and X Jargon

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Abstract.

Jargon or slang words have become a norm in everyday online discourses and conversations, with a recent emergence of gendered terminology classifying activities and fashion aesthetics into a type of "girl" or "boy", both heavily popularized thanks to social media. A notable example is seen in the recent rise of gendered-specific jokes called "girl math", which is a comedy created by women on the justification of impulse shopping. This phenomenon began to give way to its counterpart called "boy math". Initially, mockery on male behavior began to expand into the areas of critiquing toxic masculinity and misogyny in society as a whole. Through sampling data from accounts that receive high traction from using such terms on the platforms of X and TikTok, the researcher is interested in conducting an intertextual research using the framework of appraisal and feminist theory in order to elucidate the linguistic nuances and cultural influences stored within these gender-specific terms, ultimately unveiling how they critique male hegemony. This research is hoped to contribute to furthering the understanding of how technology, social media, and language intersect, shaping both learning environments and societal perceptions of gender roles.

Keywords: X, TikTok, appraisal theory, language evaluation, misogyny, toxic masculinity

1. Introduction

The definition of social media is not set in stone; rather it encompasses numerous definitions from various authors and scholars. Boyd and Ellison [1] state social media as a "platform to create profiles, make explicit and traverse relationships", which in the following years expand further on the idea of it being a place for the people to create content, as seen in Kaplan and Haenlein [2] statement:

Social media is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content [2] (page 61).

Other definitions include social media as a source or set of information technologies which facilitate interactions and networking [3], or sites that provide humans with

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pervasive network connectivity [4], or as web-based applications that function primarily for the sharing of information, relationships, group, conversations and profiles [5]. Kaplan and Haenlein [2] have further elaborated on including the "taxonomy of social media" as a means of defining what it is, which they constitute into 6 distinct categories of Blogs, Social Networking Sites, Collaboration Projects, Content Communities, Virtual Social Worlds, and Virtual Game Worlds (2010). With such high interest in regards to defining social media, subsequently research on the content and phenomenon occurring within and surrounding social media is in high demand. Some examples of research about social media are application of critical theories and content analysis of social media [6, 7], with the latter encompassing a vast field of study such as linguistics and feminist critical analyses to phenomena occurring specifically online [8-10], with data sources taken from a plethora of major social media apps such as Facebook, Instagram, Linkedin, and Twitter/X to name a few [11-14].

Of these aforementioned cases of research conducted on the topic of social media, a prevalent issue found by the researcher discusses the issue of 'viral' and 'trending' topics spread through social media. A phenomenon can trend on social media in part due to community engagement which is heavily aided by the manner of online interaction. With features such as likes, dislikes, comment sections, reposting of content and more, the manner in which online communities engage in the exchange and transfer of information allows them to be propagated and spread at a high rate and ultimately reach a wider demographic of audiences, upon which they synchronise or capture the attention of the masses; hence such information or content can result as a social media trend [15, 16]. The interconnectivity of the Internet and social media have brought about a fundamental change towards the diffusion patterns of social networks [17].

According to social media management tool SocialBee [18], social media trends can vary in form, ranging from hashtags, discussion topics, short-form videos, memes, and challenges. In consideration of the speed at which social media trends occur, the researcher has a specific interest in the latest discussion trend occurring on the platforms of TikTok and X which is the recent emergence of a trend called 'girl math' and 'boy math' in the period of August–October 2023. According to the website Know Your Meme [19], both terms are a group of slang/jargon popularised on TikTok and X which contained humorous content regarding spending habits or the misvaluation of goods by the female and male sex, with 'girl math' being the initial trend. The original 'girl math' post was first created on TikTok on August 2nd as a continuation of the gendered terms trend popular on the app (@samjamesssss, 2023) [20]. The post contained humorous content on the justification of purchases done by women by way of illogical mathematics,



such as stating that "Anything under five dollars feels like it's pretty much free", followed by saying the trend tagline "girl math" (@samjamesssss, 2023). As of October 2023 the original video itself has accumulated over 630 thousand likes and 3.6 million views on the app. This rising trend soon gained traction and popularity particularly among the female demographic on TikTok, resulting in numerous recreations of other women's own version of 'girl math', eventually spreading to other platforms, notably X (formerly known as Twitter prior to rebranding in July 2023). Disability rights activist Imani Barbarin writes on X that 'girl math' is "essentially the recognition that time, convenience, and money are interchangeable currencies," [21].

Despite the initial positive response of the trend, it gained backlash for feeding into the narrative that women were incapable and inferior in terms of producing logical decisions, or criticise the trend as a way to further push the idea that women were very seriously financially illiterate or as written in an article by CNN (2023) [22], this trend facilitates the idea "that the circuitous logic women admit to very occasionally using affects every serious decision of their lives" [22]. Girl math in itself became a target of misogynistic sentiment from male users on either platform, with some users going so far as to deem it "delusional" and "wrong" [23], with the trend reminding women of the ingrained stereotype where "girls aren't mathematically capable" [24]. The 'girl math' trend itself was not limited to female users and topics of money only however. On X, one user posted in September a critical tweet regarding female friendships using the format of the 'girl math' trend, saying "Girl math is going on vacation with 8 friends and coming back with 3," [25]. The tweet itself gained over 6 million views and 34.7 likes, thus creating a shift in the trend where it was no longer pertaining to jokes on maths and the way women spend their money, but became inclusive on wider topics surrounding womanhood. Cohen [23] also states that the negativity directed towards the 'girl math' trend is unfounded, stating that "there's no need to be a grinch about what is ultimately a joke". Regardless, the uptick of negativity resulted in the creation of a response, which was hypothesised as 'boy math'. Instead of critiquing and making satire of male spending habits, 'boy math' is aimed at addressing the hypocrisy of male behaviour, particularly in the area of romantic and sexual relationships, and addressing male behaviour pertaining to toxic masculinity and acts deemed misogynistic to women. Leishman [26] describes that "when girls are having too good a time, here come boys ready to ruin it", further justifying the use of the 'boy math' trend in retaliation.

Addressing male behaviour that is perceived as misogynistic and toxic towards women is not a newly minted online phenomena. Some examples of prior research



on evaluations of online misogyny and toxic masculinity is seen in a study by Alison MacKenzie [27] titled "A Feminist Postdigital Analysis of Misogyny, Patriarchy and Violence Against Women and Girls Online". Their study investigates the systemic and structural publication of gender-based violence against women conducted on the digital sphere, through a qualitative study using the framework of epistemic injustice and postdigital research.

Another study is by Frejsjö and Birgersson [28] titled "Unpacking Representations of Masculinity in the Digital Age: A Case Study of Andrew Tate's TikTok Presence", pertains to the issue of masculinity, stereotypes and social media, in particular how influencers affect the representation of masculinity online. Their study utilises the framework of multimodal critical discourse analysis along with the concept of denotations and connotations in semiotics. The results of the study were significant contributions to the fields of gender studies.

The third and final example of research addressing misogyny or toxic masculinity is seen in a study by Tranchese and Sugiura [29] titled, "I Don't Hate All Women, Just Those Stuck-Up Bitches': How Incels and Mainstream Pornography Speak the Same Extreme Language of Misogyny". Their study focuses on shared discourse of an online phenomena, and utilises an interdisciplinary framework of corpus linguistics and feminist critique. The results of this particular study contributed towards the field of language and linguistics. All of these sample research were provided to situate the context and relevance research on misogyny and masculinity in the field of gender and feminist studies.

In understanding the scope of research on the topics of misogyny online, the researcher has identified a point of interest of conducting research on the connection between language, misogyny and toxic masculinity. This results from the interest of analysing the language used on popular social media trends as demonstrated in the 'girl math, boy math' debacle. These trends were majorly initiated and propagated by the demographic of female users online on either social media platform. Its popularity can be attributed to its use of humour aimed at a particular demographic; thus heightening its 'relatability' to anyone, particularly women, who watch the original and remixed takes on the trend. But upon receiving unwarranted criticism from users of the male sex on either platform who not only used the trend as a way to ridicule women but also elevated the notion that the female sex as incompetent, the response in the form of 'boy math' was a sharper satire on toxic male behaviour. Eve Ng, an associate professor of women's, gender and sexuality studies at Ohio University, states that the manner in which the trend reflects a gender binary "reflect longstanding assumptions about the





propensity of women towards smaller-scale, perhaps frivolous consumption, and men towards more planned, functional consumption," [30].

This change in the satire's direction is of interest to the researcher as it presents the notion of language as a tool for criticism and retaliation, expressing the latent toxicity of male behaviour against women. Rather than outright condemning the male population for their poor behaviour, the 'boy math' trend allows women to weaponize language as a means to shame the male sex for behaviour that is a disservice to women. This contrasts sharply with the language used in the 'girl math' trend, of which the majority is constructed purely for humour. This construction and enactment of human experience through language serves as the focal point of utilising the appraisal system.

Martin and White [31] were known for their work in the creation of appraisal theory, which in itself was an extension of interpersonal meaning in Halliday's Systemic Functional Linguistics [32]. The theory functioned as a way for systematically investigating the construction of interpersonal meaning and the behaviour of language irrespective of grammatical boundaries, categories or metaphors [32]. The three main categories and their subsections of appraisal by Martin and White [31] can be seen in the following as summarised by the researcher:

Attitude: attuned to expression of human feelings

Affect: the registering of positive or negative emotions

Judgement: the attitude formed as a response to the behaviour of others

Appreciation: consideration and evaluation of phenomena

Engagement: how the writer construed their point of views by way of drawing upon resources

Monogloss: the writer's utterance does not refer to an external point of view

Heterogloss: writer's utterance does refer to another point of view

Graduation: pertains to altering the strength of the writer's/speaker's evaluation

Force: communicates intensity and shift in attitude

Focus: either sharpens of blur distinction

The objective of this research hence is to appraise the use of satire by X and TikTok users participating in the "girl math" and "boy math" trend by way of language evaluation. The research will be conducted using the framework of linguistic appraisal theory and feminist theory. These frameworks were used as appraisal theory can provide insight on how the writer/speaker attitude to an issue, either in approval and disapproval, like and dislike, applaud and criticise, measure the intensity of emotions



produced and see the ways in which their readers/listeners are positioned [31]. Whereas feminist critique is positioned as the lens in which we are able to see the latent forms of toxic male behaviour and hegemonic masculinity embedded in the online content.

2. Toxic Masculinity

The origins of the term 'toxic masculinity' was coined by Shepard Bliss, emerging from the mythopoetic men's movement of the 1980s, where Bliss himself used the term to characterise his father's masculinity that was described as militarised and authoritarian [33]. The usage of the term itself however started later, where it merged into popular feminist discourse and evident by its increasing prevalence in both academic texts and non-academic from the 1990s and onwards [33]. Harrington further describes toxic masculinity as the leading terminology in "newly 'post-feminist' popular feminist vernacular, treating sexism as a character flaw of some men" [33]. Because of its prevalent usage both in popular work and academia, in spite of the given fact that toxic masculinity was originally coined by Bliss, there are still differences in defining what it is. Waling [34] posits their findings that toxic masculinity appears only as "a reiteration of other types of masculinity", such as hegemonic masculinity by Connell [35], orthodox masculinity by Anderson [36] and traditional masculinity that in credited to no one [34]. They further argue that utilisation of a term such as 'toxic masculinity' and other categorisation of masculinity would instead further reproduce gender inequalities and exempt the reality of men holding agency in masculinity reproduction [34].

The elasticity of the label has permeated the online space and gave way to new definitions of the term as described by McGlashan and Mercer [37], who describe toxic masculinity as a 'vogue word', in the sense that the terminology has been adopted into popular online vernacular to describe negative behaviours related to masculinity–a catch-all term that is neither too abstract nor too narrow (page 9). This idea of toxic masculinity as an evaluative vernacular on male behaviour is described by Kupers's article [38] titled Toxic Masculinity as a Barrier to Mental Health Treatment in Prison, stating it as a "constellation of socially regressive male traits that serve to foster domination, the devaluation of women, homo-phobia, and wanton violence" (page 713-714), with the specific category of devaluation of women serving as the overlap between toxic masculinity as a perpetrator of misogyny. The essence of toxic masculinity is further explained by Kuper [38] as a product of



hegemonic masculinity, but only aspects that foster domination and are enacted in socially destructive ways, which include "extreme competition and greed, insensitivity to the experiences and feelings of others, a strong need to dominate and control others, an incapacity to nurture, a dread of dependency, (and) a readiness to resort to violence" among others (page 717). This in of itself has been critiqued however, as it positions toxic behaviour to be only applicable to men who possess such character flaws as an individual case-by-case situation, rather than recognizing toxic masculinity as a result of the systemic social conditions where said masculinity is formed.

Even the syntax of the phrase 'toxic masculinity' is up for debate, in that there is ambiguity as to whether or not the inherent notion of masculinity is toxic. This means it been argued that to be a man is to be built on fear of emasculation, a fear against other men discovering one's incompetence to measuring up as a man and the fear of being shamed and revealed as a fraud, all which subsequently lead to the overperformance of masculinity as compensation [39]. Allan [39] further elaborates the dysfunction relationship of men and masculinity as follows:

Masculinity has become a site of perpetual desire, but also, and importantly failure. To strive for masculinity is manly; to fail is not. And so, in admitting failure, we admit that we are even less masculine than we had previously imagined before acknowledging the failure, and the cycle continues, we perpetually spiral out of masculinity[39] (page 8).

This suggestion was based on the concept of 'cruel optimism' voiced earlier by American scholar and cultural theorist Lauren Berlant [40], who states it as "the condition of maintaining attachment to a significantly problematic object" (page 24), which Allan [39] equates the object as masculinity. The cycle of attaining the desired level of masculinity is as unattainable as it is inescapable, as the promised ideal ironically becomes the very obstacle that hinders it all.

3. Material and Methods

This research will employ the intertextual framework of appraisal theory on two different social networking sites, X and TikTok. A purposeful qualitative sampling is used to investigate 8 sample posts from TikTok and X of both text and video format, with the latter form having been transcribed from audio to text. All transcribed data is seen in the Table 1:



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TABLE 1: All transcribed of	data in this study.
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No.	Data transcription	Account	Media platform
1.	Boy math is when he slept with at least 30 girls, but if you've slept with more than two, you're a slut [41].	@brennaberg	TikTok
2.	Boy Math is you asking for one little thing and him going the whole nine yards. You're like "I don't love that you liked that girl's bikini photo on Instagram". "I'll just delete the whole Instagram app?!". Oh if you wanna take it there. Okay. Boy math [42].		
3.	I know we've been talking a lot about girl dinner. But I really think we should focus our attention on girl math. I got a Starbucks today that was 4.90, anything under \$5 feels like it's pretty much free. Girl math. Return something at Zara for \$50, bought something else that was \$100, it only cost me \$50. Girl math. Even like tickets that I buy months in advance, I show to the concert and I'm like, this was like a free concert right. Girl math [43].	@samjamessssss	
4.	I love that we're all loving girl math so much. If you're still confused it's essentially fun logic. Here's a few more examples. If you buy something with cash, especially if it was found in a pocket and you didn't know you had it, it's free. Girl math. If you return something and the money gets put on a gift card and then you spend the gift card later, also free. Girl math. This is especially fun. If you pay for trips in advance, by the time you go on the trip it's free. Girl math. This even applies when you are calculating a per use. So for like a purse or a shirt, if you buy a \$50 T-shirt and you wear that 50 times, it's only a dollar per use. Girl math. We get to make the rules [20].		
5.	Boy math is saying "I don't need a woman with a career" but then holding her lack of finances over her head amidst any argument [44].	@pravdapolina	x
6.	Boy math is also saying how men are greatest friends to each other unlike those nasty catty female friendships, but then asking women to solve male loneliness epidemic [45].		
7.	girl math is getting ready at 7 so I can be out by 10 pm [46]	@XileniaM	
8.	girl math is going to the gym before getting ur hair done only to have to shower again [47]		

The data will be segmented according to the categories of words, phrases, clauses and sentences into a matrix based on the transitivity system [32], followed by a textorient analysis using the appraisal theory's three domains: attitude, engagement and graduation [31]. The combined use is for the purpose of understanding the underlying ideational and interpersonal metafunctions present in the text, specifically evaluating the stance of online users as they address their personal relationships with gender roles and behaviours pertaining to toxic masculinity.



4. Results and Discussion

Table 2 presents the distribution of the process types from four accounts of which the 8 samples were taken from. The data consists of 4 'girl math' trend posts and 4 'boy math' trend posts, from X and TikTok respectively, from the accounts of @brennaberg and @samjamesssss on TikTok, and @pravdapolina and @XileniaM from X. The most dominant process type identified were the material process for accounts @brennaberg, @samjamesssss and @XileniaM, while account @pravdapolina's dominant process type was the verbal process (respectively, 38.5%, 57.1%, 57.1% and 42.8%). The dominant use of material process in these posts from those 3 users depict the action of the 'girl math' and 'boy math' satire trend that demonstrate or comply with actions pertaining to gender roles. In the case of 'girl math' posts, the users represent in the text a thorough explanation of female behaviour that is typical of the ascribed female gender role, which is consumerism and hedonism on a basis of emotion. On the other hand, the 'boy math' posts represent or describe performances of toxic masculinity, which include aggressive expressions of anger, lack of emotional maturity and slutshaming, the latter exemplifying suppression on the female sex. The use of these material processes also demonstrate the dispositions of each user. As for @pravdapolina, the dominant use of verbal processes demonstrates how they construct symbolic relationships constructed in human consciousness (women as a victim of male domination) and enacted in the form of language (women criticise such behaviour by using their platform online).

Process Type	@brennaberg (boy math)	@samjamessssss (girl math)	@pravdapolina (boy math)	@XileniaM (girl math)
Material	5 (38.5%)	20 (57.1%)	1 (14.3%)	4 (57.1%)
Mental	1 (7.7%)	7 (20%)	_	_
Relational	2 (15.4%)	6 (17.1%)	1 (14.3%)	1 (14.3%)
Verbal	1 (7.7%)	1 (2.9%)	3 (42.8%)	_
Behavioural	1 (7.7%)	_	_	_
Existential	3 (23%)	1 (2.9%)	2 (28.6%)	2 (28.6%)
Clauses	13 (100%)	35 (100%)	7 (100%)	7 (100%)

TABLE 2: Percentage of process types derived from 8 online sample posts from X and TikTok.

Source: Author's own work

Table 3 presents data on the total number of appraised items and its distribution taken from the TikTok and X posts. The table affirms where the majority focus of each appraisal domain can be found. Across all categories irrespective of which trend used, it can be surmised that the nature of the trend falls under the judgement subcategory



for attitude appraisal, is monoglossic in their style of engagement, and tends to fall in the focus subcategory in the domain of graduation.

Interacting Appraisal	Domains of	Social Media Accounts (TikTok and X)			
		@brennaberg (boy math)	@samjamessssss (girl math)	@pravdapolina (boy math)	@XileniaM (girl math)
Attitude	Affect	2 (–)	3 (+)	1(—)	0
	Judgement	10 (—)	11 (+)	4 (—)	2 (+)
	Appreciation	0	6 (+)	0	0
Engagement	Monogloss	6	15	4	2
	Heterogloss	0	0	0	0
Graduation	Focus	4	19	3	5
	Force	1	5	2	0
		23	59	14	9
То	Total 105 Appraising Items				

TABLE 3: Appraising items as identified in the data sources.

Source: Author's own work

On the closer level of analysis, there are differences in positive and negative attitude appraisal categories which were influenced by which trend the user participated in. Table 3 presents this data in the form of a plus/minus sign for the respective category found. For accounts @brennaberg and @pravdapolina, they gave examples of 'boy math' trends on TikTok and X respectively. It was found that the usage of the 'boy math' trend utilised negative language of displeasure and negative judgements in reference to behaviours that aligned with toxic masculinity. Both users predominantly delivered negative assessments that shamed toxic masculinity, which included slutshaming women, lack of emotional empathy, and denying women agency in the workplace through enforcement of traditional gender roles while simultaneously demanding women adhere to the concept of the modern working-class female. The last category also presents the fallibility and hypocrisy of the current manner in which masculinity is performed, as either users use the 'boy math' trend to reveal that modern men do not withhold the same standards of traditional gender roles to themselves, i.e., modern men do not commit themselves as the breadwinner and protector of the family, yet unjustly demand women perform traditional femininity as the caretaker of the family. These negative assessments contrast sharply to that of the results obtained from users @samjamesssss and @XileniaM, who participated in the 'girl math' trend. From the 'girl math' accounts, the majority were judged in a positive manner, with @samjamesssss being the only account to also present positive appreciation. Positive appraisal dominated the sphere of uplifting femininity, where women's actions of justifying the humour



around consumerism in the 'girl math' trend were seen truly as a 'fun' bonding moment for female users across either platform. 'Girl math' as presented through the accounts purposely did not interact or appraise male behaviour unlike the 'boy math' trend, and instead focused solely on the creation of jokes/satire aimed for women, by women.

In engagement, it can be seen that all accounts delivered their version of the 'girl math' and 'boy math' trend through monoglossic utterances, characterised by high subjectivity, predominant use of first-person pronouns without acknowledgment of outside perspectives or discourses. Hence, the monoglossic engagement demonstrates that the level of reliability and objectivity of the utterances and posts pertaining to the trend is low. As for graduation, the appraised items were mostly of the focus subcategory at 31 items, compared to 8 of the force subcategory. This alludes to the intensity of the investment of the authorial voice, that is the 4 social media accounts from which the data was taken.

4.1. Analysis of TikTok and X jargon

Freedom of expression both on TikTok and X are shared values that either company aims to consistently uphold as part of their community guidelines. This presents opportunities for users of either platform to create, watch and intersect with a variety of topicspersonal opinions are shared, lifestyles are sold from brands to consumers and real world information is distributed. On X, a single tweet it's limited to 280 characters, while the micro video blogging platform of TikTok has a range from 3 seconds to 10 minutes for uploaded content. As such users are free to consume all manners of content. In the current research, there lies an overlap between the actual human interactions being brought into the digital sphere. With this, content produced for example on the North American contingent can be consumed by a global audience irrespective of physical geographical boundaries.

Four accounts used in this research are used to demonstrate how a certain societal phenomenon is not as isolated as one might think. A deconstruction of each account portrays the reality of the user's interaction with gender roles, masculinity or femininity, how they are subjugated to them, or how they subconsciously perpetuate the production of them. This is especially important as all four accounts based on their published content all portray different variations. First, user @brennaberg's TikTok platform markets themselves with the following phrases taken from their account biography: "your hype woman", "your breakup sponsor", and "your big sis". Their content is predominantly formatted in face-to-face interactions from @brennaberg to the audience, where they



are talking and directly addressing their followers, usually on the topics of advice for other women surrounding relationships and dating. Second, user @samjamessssss on TikTok similarly formats their content by directly talking to the camera and audience about content showing their personal life. On X, users @pravdapolina and @XileniaM

TikTok similarly formats their content by directly talking to the camera and audience about content showing their personal life. On X, users @pravdapolina and @XileniaM are only able to be identified on the basis of what tweets they make, like and repost. The third user, @pravdapolina, is identified by their nationality on their account biography. The researcher in obtaining the sample tweets has collected a general framework wherein this user is active in engaging with topics pertaining to feminism, gender and popular media. Finally the fourth user @XileniaM presents engagement and posting content that is highly feminine, such as fashion, modelling and female-centric popular media.

Despite the differences, the 'girl math' and 'boy math' trends are enacted by the chosen sample accounts irrespective of their personal performance of masculinity or femininity. In the lens of appraisal theory, the trends primarily demonstrate the domains of judgement (attitude) and engagement, or the manners in which the given phenomenon or issue is evaluated and how much does the author either partake or distance themselves from it.

Such domains are particularly prevalent in the trend of 'boy math'. Users partaking in the trend use it as a means to judge and 'call out' the character, behaviour and actions of men that fall in the category of toxic masculinity. The account @brennaberg on TikTok first presents their judgement of toxic masculinity in 2 posts. From these posts they describe 2 behaviours, which is men are quick to praise and boast about partaking in promiscuity yet shame and devalue women's authority of the same freedom in partaking in sexual activity ("you're a slut"). Their first post alludes to the subcategory of social esteem in the domain of judgement, specifically evaluating that the glorification of male promiscuity as 'normal' yet policing the normality of the same phenomenon when it is done by the female sex. Next, the second post by the same account presents evaluation/judgement on aggressive male behaviour. In the post, @brennaberg confronts male aggression with negative judgement-falling under the umbrella of social sanction. They police male aggression through the use of sarcasm, allowing the hypothetical male to continue indulging their aggressive behaviour ("Oh if you wanna take it there. Okay."). As it is through TikTok, user @brennaberg conveys both facial expressions alluding to displeasure alongside their judgement that was presented through oral culture.

On X, the 'boy math' trend presented by user @pravdapolina also demonstrates the domain of judgement in appraisal theory. In the selected 2 posts, their judgement of toxic masculinity is based on evaluation of the normalisation of again female domination



(rejecting the modern female to pursue careers as opposed to the traditional gender role of female subservience as the main caregiver in the family only) and a new category which is repression of emotion among male friendships to align with the performative ideal of masculinity that is self-sufficient and not emotional, as it is seen as weak and not truly living up to the standards of hegemonic masculinity. But this overcompensation of masculinity instead has backfired and perpetrated the toxicity of attaining masculinity, and instead of solidifying a positive view on masculinity, it backfires by harming not only the female sex but also men themselves ("male loneliness epidemic").

Moving to the counterpart of 'boy math' is 'girl math'. There is a distinct polar opposite in both the use and analysis of the trend. Unlike 'boy math' that contends with negative performative masculinity, 'girl math' appears to promote ideals of femininity that are in direct opposition to masculinity. For example, user @samjamesssss proceeds to give various examples of 'girl math' that are founded on the basis of emotion, where deliberate action is justified on the basis of feeling ("it's essentially fun logic", "feels like it's pretty much free"). Femininity is often equated to emotion, the polar opposite of logic that serves hegemonic masculinity. In 'girl math', the types of examples given by the users are subjective, but they serve to seek responses of support or relatability from other women on either social media platform. These include references to fashion, makeup, consumerism and other 'girly' activities. A key takeaway from the 'girl math' trend is that it does not seek to abuse women, rather it is a style of online jargon and humour that aims to exclusively appeal to the humour of women by appealing to elements pertaining to femininity. Judgement falls under the further subcategory of social esteem, and to conclude the 'girl math' trend is seen in a positive light, as women using the format of the trend do not address the performance of femininity as weak. Femininity is praised, laughed at, and shared communally among the female users on TikTok and X through the 'girl math' trends, for instance user @XileniaM on X gained traction on their 'girl math' tweets by using the trend to joke about how women will begin planning in advance when it comes to styling of hair, makeup and clothing for an event that is hours away, and the routine hair care that women go through on the daily. It is notable that once again unlike the 'boy math' trends, performance of femininity is not deemed toxic and thus shamed for it, since unlike toxic masculinity there are no parties on the gender spectrum that receive negative backlash.

The specific linguistic nuances in this trend are clearly defined by use of each respective trends' catchphrase. For 'boy math', users would always preface the trend by establishing the existential process found in the trend, i.e., online posts or videos would always start by saying "boy math is...", before continuing it with either negative assessment of



a certain behaviour conducted by men or proclaim displeasure/disapproval towards a given example of male behaviour that falls within the aforementioned characteristics of toxic masculinity. For 'girl math', the same formula is used initially, however after establishing the linguistic existential process found in the utterance, it instead contains positive assessments or endorsement of female behaviour. In both cases, the majority of these trends were produced by the female demographic on X and TikTok, with a small portion being male.

The propagation of the trend as being overtly critical to men and their performances of masculinity cannot be simply attributed an act of misandry or the hatred of men [48]. Rather, the wider context of the trends initial creation must be put into considerationthe trends aim to serve women by providing a means of both raising awareness and retaliating against the microaggression of misogyny by way of condemning the performance of toxic masculinity.

5. Conclusion

The flow of information on the internet is ever evolving and transforming thanks to the increasing rate at which the transfer of knowledge occurs and the prevalent use of online platforms where they occur. One of the current demands of the 21st century pertains to social media, subsequently research on and about social media is also in high regard. As landscapes change from the physical to the digital, it is impertinent to monitor how issues trending in society make their way online and the manner in which it manifests. A recent emergence of a popular online trend named 'girl math' and 'boy math' on the platforms of TikTok and X draws attention by way of highlighting an aspect of gender studies, which is masculinity, particularly the surge of toxic masculinity.

Through this trend mostly created by women for women, users on either platform make various statements describing behaviour unique to the respective gendered term. Through analysis of the ideational and interpersonal aspects of selected data using appraisal theory, it is found that users who partake in the 'girl math' trend primarily use it as a form of internet humour that uplifts and celebrates behaviour pertaining to femininity, such as making jokes on makeovers and shopping, as well as expression of emotion. On the other hand, the 'boy math' trends are predominantly used as a form of critique and satire aimed towards men. Users who partake in the 'boy math' trend utilise it as a means of unveiling directly or indirectly their experiences with men who behave in accordance to toxic masculinity. The trend weaponises language as a means of enacting negative judgement on toxic male behaviour, both for the intention of



drawing attention to the specific phenomenon that closely overlaps with misogyny and serves as part of the efforts going into fighting against gender inequality that has now transmigrated from the physical space to the digital one. The increasing use of genderspecific trends online is of interest as it adds to the growing body of research in the fields of gender studies, that is the manner in which people interact, engage and enact behaviour aligning with the concepts of masculinity. In highlighting the prevalence of toxic masculinity experienced and condemned by the online community, this research reveals that efforts in retaliating against misogyny and seeking equity for women on all grounds are still underway. Such efforts are manifested in both latent and obvious linguistic phrasing, which the researcher surmises as critiquing the performance of toxic masculinity and uplifting and celebrating the traditional feminine.

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