

# Reinforcing or Resisting? A Study on the Influence of Internet Memes on Sexism Among University Students in Penang

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#### Abstract

The advancement of the Internet allows new forms of creative storytelling and information dissemination. Social media such as Facebook, Instagram and Twitter defy the linear flow of information as the users can actively participate in the process of content creation and circulation. Social media users are granted instant interactivity. One of the Internet contents favoured amongst Internet users is Internet memes. Creating and sharing Internet memes have not only become a trend on social media but also a cyberculture that is capable of shaping public opinions and social media behaviour of its users. As an alternate information source, Internet memes are actively shared from one to another to gain engagements and attention, especially among the younger generation as a form of expression and to relieve themselves. Being a digital storytelling tool, Internet memes are effective in conveying ideas, framing and providing interpretation on current issues, however not without the possibilities of discrimination and misrepresentations. As such, sexism continues to exist in the new media, particularly within Internet memes. The socalled humour in Internet memes often overshadows the sensitive and offensive remarks embedded in it. Based on the Cyberfeminist theory (Cyberfeminism), this paper aims to look into the influence of Internet memes on sexism among university students. Quantitative research was deployed through the distribution of online survey forms to 200 university students in Penang. The data collected were analysed in SPSS to test the reliability (Cronbach's Alpha) and correlations (Pearson's coefficient). The research concludes that ideology of sexism is heavily reinforced through Internet memes amongst university students in Penang, in which, knowledge on critical digital literacy significantly helps to negotiate or contest the sexist notions communicated in the Internet memes.

#### Keywords

Internet Memes; Cyberfeminism; Sexism; Cyberculture; University Students.

# 1. Introduction

Sexism is commonly defined as the prejudiced beliefs and attitudes in cultural and institutional practices that treat individuals negatively based on their sexes and/or gender (Zehnter et al., 2021). Women are more likely to be victims of sexism more than men as women are accustomed with notions of inequality or inferiority to men in the society - reflected predominantly in family, institutions and workplaces (Zehnter et al., 2021). These ideologies are commonly disseminated

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and reinforced through media contents. Though the awareness on sexism and gender discrimination in media have risen significantly after a notable number of Feminist social movements, completely eliminating sexism or gender inequality in contemporary society remains a difficult task (Siddiqi, Aleem & Bains, 2018).

The problems in gendered media have taken different forms across time especially after the emergence of the Internet and social networking sites. Statista (2021) states, close to 60% of the world population has Internet access and actively engages in online activities. The Internet thus provides an extended virtual environment for sexual cognitions to perpetuate from offline to online, increasing the possibilities of gender inequality and discriminations (Fox et al., 2015; Drakett et al., 2018). With the desensitisation of Internet contents, Feminist scholars are concerned by the new form of sexist humour embedded in Internet memes (Rentschler & Thrift, 2015; Isaac, 2018).

In 1976, biologist Richard Dawkins introduced the term 'meme' as small cultural units that transmit across people through replication and imitation, similar to how genes replicate and mutate (Mayer, 2018). Memes have since outgrown their roots in biology and became what we call 'Internet memes' today, incorporating the key features of new media artefacts, which include amateur culture, participation, self-organisation and virality (Cannizzaro, 2016). Basically, Internet memes are user-generated contents in visual format that are shared across Internet users with the potential of travelling across people eventually turning into a larger 'social phenomenon' (Yoon, 2016).

Internet memes have many variations ranging from still images to motion graphics, sometimes all of them combined. Internet memes are usually created to entertain, inform and persuade (Rieger, 2019). As the visual representation of humour, they became popular and trending aspects in online communications such as marketing, arts and politics (Milosavljević, 2020).

Another significant characteristic of Internet memes is 'virality' (originated from viruses). A content goes viral when the post trends due to active sharing among Internet users (Moreau, 2019).

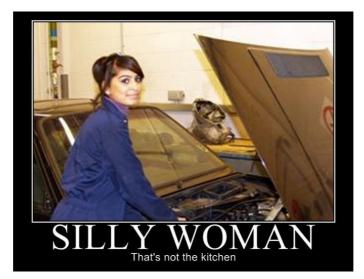
Not without its adversity, Internet memes can be a vehicle of hate speeches, racism, ableism and sexism capable of replicating and reinforcing sexism, gender stereotypes and discrimination (Morris, 2019).

Cyber harassment such as inappropriate remarks around pregnancy, rape and abortion are normalised in the form of humour conveying 'old jokes in new media' (Drakett et al., 2018). Sexist online memes such as 'get back in the kitchen' and 'overly attached girlfriend' (refer to Figure 1.1 & 1.2) are humour that reinforces gender stereotypes that demonstrates women as homemakers and the 'Mars and Venus statement' that claims female as complicated, irrational and unstable, in oppose to a rational and knowledgeable male (Etee, 2020).

Siddiq et al. (2018) added that the freedom of expression and online anonymity allows sexist contents to reinforce negative beliefs like gender stereotypes and patriarchal agenda amongst Internet users globally without contemplating the punitive reprisals or criticisms entailing their online behaviour.

Still, scholars have also acknowledged that Internet memes can be used to resist and counter such discriminations (Drakett et.al., 2018). Nowadays, the satire and humorous elements in Internet memes are capitalised to contest sexist remarks online, as well as raising awareness of various discourses, ideologies, political ideas including Feminism in a light-hearted manner (Srivastava, 2019; Chen, 2020). It is evident that online media, particularly Internet memes, carry strong impacts in modern society.

Hence, this paper studies the relationship between independent variables consisting of (i) content of Internet memes; (ii) digital media literacy; and (iii) cyberculture of Internet memes and sexism among university students in Penang. The following research questions and hypotheses are addressed in this paper.



Note: The idea of 'get back in the kitchen' in Internet memes is often used to discourage women from going out to work.

Source: https://knowyourmeme.com/photos/42449-get-back-in-the-kitchen Figure 1.1 The 'get back in the kitchen' Internet Meme



Note. The overly attached girlfriend template pictures women as irrational. Retrieved from: https://www.businessinsider.com/overly-attached-girlfriend-meme-originator-laina-morris-quitsyoutube-2019-7

Figure 1.2. The 'overly attached girlfriend' Internet Memes

# **Research Questions**

- 1. What is the relationship between the content of Internet memes and its influence on sexism among university students in Penang?
- 2. What is the relationship between digital media literacy towards Internet memes and its influence on sexism among university students in Penang?
- 3. What is the relationship between the cyberculture of Internet memes and its influence on sexism among university students in Penang?

## **Research Hypotheses**

- H1: There is a significant relationship between the content of Internet memes and sexism among university students in Penang.
- H2: There is a significant relationship between digital media literacy towards Internet memes and sexism among university students in Penang.
- H3: There is a significant relationship between the cyberculture of Internet memes and sexism among university students in Penang.

# 2. Literature Review

## **Internet Memes as a Cyberculture**

Cyberculture is a set of shared beliefs, values and norms practised by a group of people in the virtual space provided by digital technology (Sadiku et al., 2017). The production and sharing of Internet memes became a cyberculture since the turn of millennium with the advancement of social media networks smoothening the content circulation process across multiple channels (Rasheed et al., 2020).

Cuevas and Bermúdez (2019) argue that social media users adopt the meme sharing culture for entertainment and self-representation purposes as the memes provide a sense of belonging for individuals with common interests to form a cyber-community through the mutual understanding of a niche language. This cyber-community is a domain dominated by users of young age.

# University Students as Active Internet Users

Malaysians aged from 20 to 29 years old make up the largest and the most active group on social

media (Malaysian Communications and Multimedia Commission, 2018). Young adults aged between 18 to 24 years old are identified as 'digital natives' who adapt social networks into their routines and Malaysians within this age group are found to prefer the Internet as their source of information (Hashim et al., 2016).

Malaysian University students are actively involved in political participation on social media (Zainon, Hashim, Ismail & Annuar, 2017). The Internet changes the form of political participation among young Malaysians to be involved in politics through reading, watching, writing and sharing related stories, opinions, as well as harnessing collective power with online petitions (Zainon, Hashim & Zulkifli, 2017). Criticisms by Malaysian undergraduates on the issues of Malaysia Development Berhad (1MDB) scandal and the re-appointment of Noraini Ahmad as the Minister of Higher Education (Zainon, Hashim & Zulkifli, 2017; Free Malaysia Today, 2021) are some of the examples affirming the growing political participation and agitation of youngsters today.

Lee (2020) found that university students have a higher tendency of exposure to and participating in creating Internet memes. It has become a genre favoured by university students as there are many relatable themes for their age group, namely mental health issues, academic stress and financial difficulties (Holland, 2020). Internet memes are also effective in distracting students from their problems (Kariko & Anasih, 2019).

# **Digital Media Literacy and Internet Memes**

Media literacy is defined as the ability to access, understand, and create communication based on various contexts as well as to operate the tools in creating media content (Ligocki, 2017). Chan and Zanuddin (2019) argued that it is 'not holistic' to define the term from its functional perspective only as the critical aspect of media literacy that analyses, evaluates, and criticises information is vital. Combining the functionality and critical dimensions, media literacy teaches individuals to not only understand and produce information, but also to interpret and judge media content based on the social contexts, creators' intentions and how it affects the audience aside from just being an information consumer (Ligocki, 2017).

Digital (new) media literacy refers to the media literacy practised on new media technologies such as computers, mobile phones and the Internet (Zhang & Zhu, 2016). Digital media literacy plays a crucial role in helping Internet users identify falsehood, biases and misinformation (Raj, 2019). Educating students of media literacy is beneficial in identifying racial and gender discriminations and it is encouraged to start at basic school level (Zhang & Zhu, 2016).

As an effort to counter disinformation, Malaysia launched its national media literacy programme titled Media Education for All (ME4A) in 2021 to train educators on how to educate students on media literacy. According to ME4A's founder Aini Marina Ma'arof, Malaysia has yet to implement a standardised curricular or curriculum framework for education on media literacy (Malaysiakini, 2021).

## Sexism and Feminism

Sexism is the attitudes, behaviours and beliefs, as well as cultural and institutional practices that treat individuals negatively based on their genders and sexes, or promote inequality among men and women (Zehnter et al., 2021). In cultural practices, it is expressed through biased perceptions and prejudice in a set of rules that justify or prohibit a gender to do something as a way of strengthening patriarchal values (Brown & Stone, 2016). For example, the ban on women drivers in Saudi Arabia before it was lifted in 2018 (Specia, 2019) or a preconceived notion that women cannot be leaders because they are considered incompetent (Starmaski & Hing, 2015).

Feminism hence emerged as a global movement to empower women in upholding their rights to fight for the reformations in political, economic, social and personal issues created by the inequality between men and women (McAfee, 2018). Most scholarships generally acknowledge four waves of the Feminism movements. The first wave began in the United States around the late 19th century fighting for voting rights (Robertson, 2019). The second Feminism wave reached its peak between 1960s and 1980s to protesting gender inequality and discrimination within the sexist structure reflected in their personal lives. In the 1990s, the emergence of the third wave expanded the movement globally, addressing issues that women faced in terms of nationalities, races and religions (McAfee, 2018). It then proceeded into a phase called 'post-Feminism', seeking

improvements based on the backlashes and blind spots of the previous movements, especially the second and third waves. Even so, scholars later coined the emergence of the fourth wave of Feminism since the 2010s centering on social media by connecting participants virtually (Ranjan, 2019).

## Sexism in Media

Mass media exaggerates stereotypical characteristics that men should be the breadwinners, superior to women and sex aggressors while women are housewives, inferior and sexually objectified in their portrayal (Woods, 2013; Devi, 2018). These stereotypes misrepresent genders by creating underlying rules normalising patriarchal and sexist virtues.

In Internet memes, Huntington (2017) pointed out that people tend to share Internet memes that manifest their existing beliefs. Sexist and stereotypical contents masqueraded as humour are capable of reinforcing sexism. As Internet memes rely heavily on templates derived from popular culture elements across time, sexism can be recreated varyingly, but still conveying similar ideas (Drakett et al., 2018).

Etee (2020) asserted that women have higher chances to become the victims of sexist humour and false representations in Internet memes compared to men. Internet memes casually portray women as manipulative, cunning and complicated (Siddiqi et al., 2018). Although it might not be the creators' conscious intention to promote a negative idea, the content of Internet memes itself can be discriminative in nature and the audience interpretations are not always in line with the creators' intention (Yoon, 2016).

## Feminism in Malaysia

Social movements led by women within Malaysia can be traced back to the time before the country's independence. The Malay Women Teacher's Union founded in 1929 to advocating formal schooling for Malay women, followed by a few local movements by farmers and estates labours to protest sexual harassment during the late 1930s (Mohd Noor, 2020). The formation of Angkatan Wanita Sedar (AWAS), the women wing of Parti Kebangsaan Melayu Malaya (PKMM) with a radical outlook featured individuals like Shamsiah Fakeh who later became a guerrilla

fighter with the Communist Party of Malaya (Nelmawarni, 2017). *Kaum Ibu* was later established under the political party United Malays National Organisation (UMNO) in 1949 (Hirschman, 2016). However, scholars argued that the *Kaum Ibu* movement was seen as insignificant in empowering women as they were mostly responsible for gendered roles such as sewing, cooking, and preaching to women, which were only to support the men-dominated party. Then, the head of *Kaum Ibu*, Khadijah Sidek was expelled from UMNO in 1956 as she urged for more women's participation in the party's leadership and decision-making (Manderson, 1980; Dancz, 1987; Razali, 2018).

The participation of women in political scenarios remained slightly dormant largely due to the male domination, until the emergence of women's non-governmental organisations (NGOs) in the 1980s to advocate legislation, legal aids, shelter, and counselling for women who faced domestic abuse (Hirschman, 2016). Sisters in Islam (SIS) for example. In the 1990s, Malaysia observed a significant boost in women's movement when NGOs welcomed female professionals such as lawyers, journalists, academics, and artists, including a majority of Muslim women (Izharuddin, 2013).

However, being viewed as a western influence, the term 'Feminism' did not gain much acceptance in the early stage, especially among the Malays Muslims community because it was often used to discredit women's integrity and image (Xia, 2018). Local women organisations like All Women's Action Society (AWAM), Sisters in Islam and Joint Action Group for Gender Equality (JAG) had avoided calling themselves as Feminist groups until the early 2000s. (Xia, 2018).

# Feminist Discourse in Internet Memes

Cyberfeminism suggested that the nature of online media and Internet memes provided Feminists with opportunities to resist digitally. The emergence of Internet in the 90s helped establish the foundation of Cyberfeminism for Feminist expressions (Duarte & Romero, 2017, as cited in Ureta et.al., 2021). This rise of this digital social movement is sometimes referred to as the fourth wave of Feminism (Jain, 2020). The open access to Internet carves path for Feminist ideologies to negotiate and contest through memes the discriminative, oppressive, patriarchal and sexist Internet

memes (Kulkarni, 2017; Srivastava, 2019).

Drawing an example of the US presidential candidate Mitt Romney, his condescending statement towards women in a debate sparked an informative and impactful 'Binders Full of Women' online movement as a response to Romney's infamous phrase 'binders full of women' - triggering an explosion of trending Internet memes on social media (Breheny, 2017).

In Malaysia, the Women, Family and Community Development Ministry offered advice for couples during a nationwide lockdown to curb the COVID-19 pandemic deemed sexist by many. The ministry published a poster on household happiness, which advised women to not nag at their husbands and should use a 'Doraemon-like tone' and 'giggle coyly' voice while speaking to them (Tan, 2020). The poster received a huge backlash - Twitter, Facebook and Instagram were flooded by Internet memes surrounding Doraemon and women to address the issue (Indramalar, 2020). The poster was then removed, followed by an official apology issued by the ministry.

## **Cyberfeminist Theory (Cyberfeminism)**

In communication studies, Feminist theories cover a broad area of scholarships, but most of them seek to examine and explain gendered issues within communicative texts (Cuklanz, 2016). Though there are plenitudes of Feminist theories, this paper particularly draws its inspiration from the Cyberfeminist theory, also known as Cyberfeminism.

Haraway (1990) introduced the term 'cyborg Feminism' as a branch of the social movement which encouraged women in utilising new technologies to defy the patriarchal system. 'Cyborg' implies that humans are able to embrace identities beyond their genders and fleshes in technologies mediated communication. Haraway's interpretation of Feminism went beyond the dualisms in traditional gender politics where females are seen as the opposite of males, gay is seen as the opposite of straight (Senft, 2020). After Haraway, Plant (1998) also described cyberspace as a new platform of freedom and equality that enables women to surpass the previous boundaries of their identities. On the contrary, these exertions were challenged that sexism in virtual spheres are still subject to similar Feminist criticisms in offline spheres, rather than being a gender-neutral platform visualised by early Cyberfeminists.

Hawthorne and Klein (1999) also noted the three major aspects of Cyberfeminism that are connectivity, critique, and creativity. Internet oriented digital environments provided a linkage for Feminists to overcome space and time. The Internet helps women to be heard, informed, and actively involved in political processes instead of being passive victims in a male-dominated society (Jain, 2020). The second aspect coined by Hawthorne and Klein (1999) is critique, which means the ability to identify and criticise injustice, social norms and constructs. The development of critiques is highly associated with the understanding of forces shaping cyberspace and knowing the approaches to trace the movement of new political movements. Lastly, creativity refers to the fresh, unpredictable, and intriguing process of content creation with the use of electronic technologies to promote Feminism digitally (Hawthorne & Klein, 1999).

Based on the three components of Cyberfeminism proposed by Hawthorne and Klein (1999), the three independent variables are formulated. The first independent variable, 'content of Internet memes', is in line with the creativity aspect of Cyberfeminism which highlights the creative process of content creation for digital media. The second independent variable, 'digital media literacy towards Internet memes', is based on the critical aspect that suggests online users to evaluate and criticise the sexist norms and constructs within digital media contents. Thirdly, the last independent variable, 'cyberculture of Internet memes', is constructed according to the connectivity aspect that serves as a platform for Internet users to bond and achieve their common objectives together virtually. Moreover, the three independent variables are used as a fundamental framework to develop the items for the research instrument.

# 3. Methodology

A quantitative method with a sample size of 200 respondents is adopted as the research design in this paper. In alignment with the nature of this paper, quantitative design that collects huge data in numerical form which can be sorted by measurements, category or rank helps researchers to construct graphs and tables out of the raw data collected (Trochim, 2006; McLeod, 2019). It is suitable for this study, which seeks to quantify the data at hand through numbers and understand

how common it is by looking for projectable results to a large population. Besides, the quantitative approach is useful for studies with time constraints (Choy, 2014). It also helps the researchers discover relations and generalisation of statements about the subject of study through a series of tests according to the hypotheses set (McLeod, 2019). The data collected in the questionnaires will be tabulated in a descriptive manner to be further analysed in SPSS to draw inferences between the dependent and independent variables.

The research population of this study are university students aged from 18 to 23 years old studying in Penang. University students are chosen as samples because they are identified as active participants in the Internet memes culture (Lee, 2020). In Malaysia, students typically enter universities at 18 or 19 years old after graduating high school and it usually takes at least three years to complete an undergraduate programme. In addition, 18 to 23 years old is also the age cohort for tertiary education defined by the World Bank and UNESCO (Azam & Blom, 2008; Wan, Sirat & Razak, 2018). These students will serve as the primary source of data for this study. Units of analysis will be obtained through their personal experiences and thoughts on Internet memes. Due to limited time and resources, a sample size of 200 respondents, which is the absolute minimum for a Pearson Correlation analysis, is targeted for this research (Guilford, 1954, cited in Memon et al., 2020).

A total of 200 questionnaires will be distributed to the targeted respondents selected by using purposive and snowball sampling methods, based on the following criteria:

- 1. University students studying in any higher education institution in Penang.
- 2. Aged from 18 to 23 years old.
- 3. Equipped with English proficiency (Internet memes selected are in English).
- 4. Internet users who go online every day.
- 5. Understand what Internet memes are.

A combination of non-probability sampling methods consisted of purposive sampling and snowball sampling methods are utilised in this research. Firstly, the purposive sampling method is used in selecting compatible respondents amongst Penang university students who comprehend

Internet memes as well as its usage, reach and exposure. To further expand and strengthen the research's collected data, snowball sampling is also used.

In this process, the samples identified through purposive sampling will serve as the initial sample group which introduces other referrals befitting the criterion established in the research. As such, initial respondents who have completed the questionnaire would suggest other Penang university students. This process is continued until the sample size reaches the required number of subjects.

#### 4. Results

#### **Reliability Test**

Reliability refers to the consistency of results obtained in a study where researchers seek to achieve approximately the same outcomes each time the test is being conducted (Heale & Twycross, 2015). Cronbach's  $\alpha$  (Cronbach's Alpha) test that determines the average of all correlations within the combination of split-halves is used (Shuttleworth, 2015). In this test, the result ranges between 0 and 1, in which 0 means there is no relationship between the items placed on a specific scale, whereas 1 indicates an absolute internal consistency (Heale & Twycross, 2015). The closer the Alpha value is to 1, the higher the reliability of the study. The threshold to be considered as acceptable and satisfactory is set above the Alpha value of 0.7 (Mohajan, 2017).

#### **Correlation Analysis**

Based on Salkind's (2017) findings, Pearson's coefficient of correlation is commonly employed to test the strength of correlation between two given variables. The coefficient obtained is known as the r value, it falls between -1 to 1. The -1 means a perfect negative relationship while the 1 indicates a perfect positive relationship between the two variables (Schober et al., 2018). In this analysis, the coefficient values above 0.7 signifies a strong relationship, values between 0.4 and 0.69 means a moderate relationship while values below 0.39 indicate a weak correlation, vice versa for the negative values (Schober et al., 2018). The process also includes a p-value which tests on the null hypothesis, the closer it is to 0, the better the results are for proving the alternative hypotheses. Furthermore, a p-value below 0.05 (5%) is considered acceptable and statistically significant (Andrade, 2019). The reliability test and Pearson's correlation coefficient analysis will

be carried out in SPSS.

# **Descriptive Analysis**

Table 4.1 Data Collected in Section A of The Survey Questionnaire

Items	Responses	Number of respondents	Percentage (%)
Sex	Male	85	42.5
	Female	115	57.5
What programme are you studying?	Foundation	17	8.5
	Diploma	81	40.5
	Degree	102	51
I believe no one should be discriminated	Yes	198	99
because of their gender/ sex.	No	2	1
I believe men and women should not be equal	Yes	28	14
in society.	No	172	86
I think women are generally weaker than men.	Yes	28	14
	No	172	86
I think women are not supposed to be leaders	Yes	2	1
as men are more qualified.	No	198	99
I think women's role in a family is to be the	Yes	7	3.5
caretaker at home while men are working for a living.	No	193	96.5

# Table 4.2 Data Collected in Section B of The Survey Questionnaire

Items	Responses	Number of respondents	Percentage (%)
Are you following any Internet	Yes	171	85.5
memes page/ group on social media?	No	29	14.5
How many posts on your news feed	None	24	12
are about Internet memes?	At least 1 out 10	52	26
	At least 3 out 10	87	43.5
	Almost half of them	37	18.5
How often do you share Internet	Never	66	33
memes?	At least once a month	56	28
	At least once a week	56	28
	At least once a day	22	11
How often do you encounter	Never	70	35
Internet memes that discriminate	At least once a month	80	40
against a gender/ sex?	At least once a week	46	23

	At least once a day	4	2
Do you think university syllabus	Yes	178	89
should include teaching students on	No	22	11
how to evaluate the content on the			
Internet?			

## **Content of Internet Memes**

Table 4.3 Data collected in Section C (items 1 - 4) of the survey questionnaire

Items no.	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Mean ranking
1	10	17.5	0	40.5	6	3.15	3
2	5.5	12	28	36.5	18	3.50	2
3	10	21	28.5	29.5	11	3.11	4
4	3.5	8	24.5	34	30	3.79	1

Based on the responses, 'Item 4' has the highest mean of 3.79 among other items, in which 30% and 34% of them strongly agreed and agreed that the content of Internet memes can be sexist although the creator has no such intention, 24.5% were neutral, 8% disagreed and 3.5% of them strongly disagreed.

'Item 2' has the second highest mean of 3.50. For these items, 18% and 36.5% of the respondents felt that Internet memes provide an understanding to them of the normal/ acceptable behaviours of men and women in society. 28% stayed neutral while 12% and 5% of them responded with 'disagree' and 'strongly disagree' for this item.

The mean of 'Item 1' stands at 3.15. 6% and 40.5% of the respondents strongly agreed and agreed that Internet memes causes them to generalise individuals' attitudes and behaviours based on their sexes. 26% of the respondents were neutral, 17.5% disagreed and 10% of them strongly disagreed with the statement. 'Item 3' stated that people tend to differentiate the responsibilities of men and women in a relationship based on Internet memes. This item has the lowest mean of 3.11, where 11% of the respondents strongly agreed with it, 29.5% agreed, 28.5% remained neutral. Then, 21% and 10% of them disagreed and strongly disagreed with this statement.

# **Digital Media Literacy towards Internet Memes**

Items no.	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Mean ranking
5	6	12	21.5	34.5	26	3.63	1
6	6	18	36.5	29.5	10	3.20	3
7	3.5	7	35.5	32	22	3.62	2

Table 4.4 Data Collected in Section C (Items 5 - 7) of The Survey Questionnaire

'Item 5' has the highest mean of 3.63. It stated that the respondents do not evaluate and analyse the messages in Internet memes as they are humours, supposedly meant, for entertainment purposes only, which a majority of the respondents (26% and 34.5%) strongly agreed and agreed. Besides, 21.5% said they are neutral whereas 12% and 6% of them disagreed and strongly disagreed.

Following them, 'Item 7' with a mean of 3.62. 10% and 29.5% of the respondents strongly agreed and agreed that they would not question or call out the intentions of the creators of sexist Internet memes. Those who stayed neutral made up 35.5%, and those who disagreed and strongly disagreed made up 7% and 3.5% respectively.

The item with the lowest mean ranking is 'Item 6'. Less than half of the respondents (10% and 29.5%) strongly agreed and agreed that they do not see any problem in how men and women are portrayed in Internet memes as they are unaware of how sexism can be reinforced through Internet memes. Meanwhile, 36.5% of them were neutral, 18% and 6% disagreed and strongly disagreed with the statement in 'Item 6'.

# **Cyberculture of Internet Memes**

Table 4.5 Data Collected in Section C (Items 8 - 10) of The Survey Questionnaire

Items no.	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Mean ranking
8	36	23	26.5	13	1.5	2.21	1
9	52	28	14	5	1	1.75	3
10	44.5	29	17	8.5	1	1.93	2

'Item 8' has the highest mean ranking of 2.21. 1.5% and 13% of the respondents strongly agreed and agreed that it is normal for people of the same sex to form a social media group and make fun of the opposite sex with Internet memes. 26.5% stayed neutral, 23% disagreed and 36%strongly disagreed with the statement.

'Item 10' has a mean of 1.93. 1% and 8.5% of the respondents strongly agreed and agreed that they share sexist Internet memes because it would receive active engagement from other members in the virtual community. 17% were neutral, 29% disagreed and 44.5% of them strongly disagreed with the statement. 'Item 9' is ranked the lowest with the mean of 1.75, where 1% and 5% of the respondents strongly agreed and agreed that they would share sexist Internet memes to avoid being neglected by their friends. 14% stayed neutral whereas 28% and 52% disagreed and strongly disagreed that they would do so.

#### Sexism among University Students in Penang

Table 4.6 Data Collected in Section C (Items 11 - 13) of The Survey Questionnaire

Items no.	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Mean ranking
11	9.5	16.5	31	36	7	3.15	3
12	6.5	14.5	35.5	36.5	7	3.23	2
13	6	15.5	38.5	28.5	11.5	3.24	1

With the mean of 3.24, 'Item 13' is on top of the mean ranking. 11.5% of the respondents strongly agreed and 28.5% agreed sexist Internet memes become less sensitive and harmful when more people share it, eventually becoming socially acceptable. Yet, 38.5% remained neutral while 15.5% disagreed and 6% strongly disagreed.

Moving on to 'Item 12', ranked second with a mean of 3.23. 7% and 36.5% of the respondents strongly agreed and agreed that the inability to identify sexism in Internet memes has increased their tolerance towards sexist jokes and remarks. Meanwhile, 35.5% remained neutral, 14.5% disagreed and 6.5% of them strongly disagreed. 'Item 11' has the lowest mean of 3.15. 7% and

36% of the respondents strongly agreed and agreed that Internet memes make them think that men and women are unequal. 31% of them were neutral, 16.5% disagreed and 9.5% of them strongly disagreed with the statement.

## **Scale Measurement and Inferential Analysis**

Variables		Number of items	Cronba	ch's Alpha
			Pilot	Full
			test	study
Independent	Content of Internet memes	4	0.861	0.785
variables (IV)	Digital media literacy towards Internet memes	3	0.746	0.785
	Cyberculture of Internet memes	3	0.902	0.833
Dependent variable	Sexism among university	3	0.786	0.708
(DV)	students in Penang			
		( <b>D</b> !1	1	1 0.00

(Pilot test: n=15; Full study: n=200)

Table 4.7 shows the results of the reliability test on each variable in the survey questionnaire; values of Cronbach's Alpha are computed in SPSS. The values obtained for the pilot test (n=15) are 0.861 (content of Internet memes), 0.746 (digital media literacy towards Internet memes), 0.902 (cyberculture of Internet memes) and 0.786 (sexism among university students in Penang). A Cronbach's Alpha above the value of 0.700 indicates an acceptable and satisfactory level of reliability (Mohajan, 2017). Hence, the reliability test of the pilot test had fulfilled the requirement for the researcher to proceed to a larger scale of survey for the full study.

The reliability test for the full study (n=200) obtained the Cronbach's Alpha values of 0.785 (content of Internet memes), 0.785 (digital media literacy towards Internet memes), 0.833 (cyberculture of Internet memes) and 0.708 (sexism among university students in Penang). Since all of Cronbach's Alpha values are above 0.700, it is proven that the survey questionnaire is reliable as the results of the study are consistent.

## **Pearson Correlation Test**

Independent variables	Sexism among university students in Penang (dependent variable)		
	Pearson's coefficient	p-value [Sig (2-	
	(r)	tailed)]	
Content of Internet memes	0.584**	0.000	
Digital media literacy towards Internet	-0.516**	0.000	
memes			
Cyberculture of Internet memes	0.328**	0.000	
		(n=200, *p<.05, **p<.001)	

 Table 4.8 Pearson Correlation Test (Coefficient and p-value)

The results in Table 4.8 were obtained through a Pearson correlation test in SPSS to investigate the relationship between the independent variables and the dependent variable. According to Schober et al. (2018), the coefficient values above 0.7 signifies a strong relationship, values between 0.4 and 0.69 indicate a moderate relationship while values ranging from 0 to 0.39 indicate a weak correlation. Thus, content of Internet memes and digital media literacy have a moderate correlation with the dependent variable while cyberculture of Internet memes only demonstrates a weak correlation.

To prove a significant relationship between the variables, previous studies have established a threshold with the p-value below 0.05 to be considered acceptable (Andrade, 2019). According to Table 4.8 above, all p-values obtained for this research are 0.000. Since the p-values for each variable are below 0.05, all of the correlations established between the independent variables and dependent variables can be considered as statistically significant.

# **Hypotheses Testing**

The correlation coefficient (r) of independent variable 'content of Internet memes' is 0.584, which indicates a moderate and positive correlation with sexism among university students in Penang. With a level of significance of  $\alpha$ : 0.05, there is sufficient evidence to prove that there is a significant relationship between the content of Internet memes and sexism among university students in Penang as the p-value is less than the level of significance. Thus, the hypothesis (H1) is accepted.

The correlation coefficient (r) of independent variable 'digital media literacy toward Internet memes' is -0.516, indicating a moderate and negative correlation with sexism among university students in Penang.

With a level of significance of  $\alpha$ : 0.05, there is a significant relationship between digital media literacy towards Internet memes and sexism among university students in Penang as the p-value is less than the level of significance. Thus, the hypothesis (H2) is accepted.

The correlation coefficient (r) of independent variable 'cyberculture of Internet memes' is 0.328, which indicates a weak and positive correlation with sexism among university students in Penang. At the level of significance of  $\alpha$ : 0.05, the significant relationship between the cyberculture of Internet memes and sexism among university students in Penang is established as the p-value is less than the level of significance. Thus, the hypothesis (H3) proposed is accepted.

## 5. Discussion

This study found that the content of Internet memes promotes gender stereotypes and discrimination as 54.5% respondents agreed and strongly agreed that Internet memes influence their understanding of each 'sexes' normal and acceptable behaviour in society.

In cyberfeminism, Haraway (1990) envisioned digital technologies as a liberating force to empower women, but the findings of this research showed otherwise. The Internet memes do influence, to a certain extent, the understanding about sexism amongst Penang university students. Haraway's early notion on the 'machine' being neutral and benign might not be relevant anymore as the Internet did not offer a 'fresh start' for Feminists.

As described by Drakett et al. (2018), the sexist content of Internet memes are old jokes that persist in new media. With more than half of the respondents acknowledging the influence of Internet memes on gender roles and stereotypes, it showed that sexist discourses are rooted in the traditional media (and also in the society) continues to exist in the construction of the cyberspatial environment. Instead of serving as a tool of empowerment and liberation, the Internet might even be a threat to Feminism since it permeates patriarchal ideology.

The patriarchal ideologies in this case express conservative beliefs detrimental to the progress of an egalitarian society. For instance, Internet memes that rehashes content depicting women merely as homemakers, caring mothers and obedient wives or demanding them to "return to the kitchen" inadvertently undo the positive progress the society has achieved thus far. Many women in this epoch have successfully liberated themselves from the clutches of patriarchal terrains that have restricted them from exploring numerous aspects of life including education, employment and most importantly respect or dignity. Internet memes with its insensitive humour, or presuming sexism as a joke, jeopardises women's rights that have been sidelined for many decades.

The creative aspect of Cyberfeminism, by Hawthorne and Klein (1999), proposed that Feminists should embrace the possibilities for new forms of content creation in electronic media. Since the creation of Internet memes is not exclusive, hence it is important for Cyberfeminists to use this opening to create and promote Feminist discourses to Internet users while diminishing sexist contents.

This shall be useful only when regressive ideologies that work unconsciously in our minds are consciously eliminated. To understand the virtues of Feminism and promote them, one must be able to expose and experience themselves the intricacies as well as issues persisting for women. Without the clear efforts of conscientising the masses, it would be futile as the majority voices or views presented in social media appear contrary to the wellbeing of women or marginalised communities. Thus, this has to occur dialectically where the exposure to issues of women due to sexism must be parallel with the efforts of eliminating sexism through alternative discourses regardless of its form or platform.

Moreover, the influences of the political economy of the new media structures are critical in this aspect. Although new media in cohort with internet technology illustrates liberalness, political discourse, ruling elites and political structure combined with ownership patterns of new media fundamentally contributes to what and how contents are presented.

Analysing deeper into the independent variable of digital media literacy, most of the respondents (at least 86% and above) had positive perceptions and awareness towards Feminism. About 99% of the respondents believed that none should be discriminated based on their gender or sex, 86% of them believed that men and women should be equal in society while 96.5% did not agree that women should be a caretaker at home while men are working for a living. Nonetheless, the percentage of respondents who are against sexism decreased when it comes to their encounter with Internet memes.

Once again, this reflects the subtle sexism present and reproduced unconsciously due to the characteristic of internet memes which are fluid and camouflaged as jokes. The tendency to share 'jokes' in the form of memes are presumed to be harmless although its impact, as argued earlier, is severe.

As 60.5% of the respondents affirmed, they do not evaluate and analyse Internet memes as they are meant for entertainment only, this situation is line with Siddiqi et al. (2018) and Fielitz et al. (2021)'s findings, where some of the respondents appear to have a blind spot or developed higher tolerance towards the sexism in Internet memes when it is presented in a humorous manner to entertainment online users.

Besides that, the majority of the respondents' unwillingness to evaluate, analyse and criticise the sexist remark within Internet memes indicates a low digital media literacy, which leads to a higher level of acceptance towards sexism. The critical aspect of Cyberfeminism encourages Feminists to speak up against the sexism that occurs in the online spheres. Due to the lack of critical digital literacy, it is arguable that the critical aspect of Cyberfeminism, particularly to fight sexism in Internet memes, remains an unpopular concept among the university students in Penang. The challenge to eliminate gender stereotypes and discrimination online can be extremely difficult for victims of sexism, so Cyberfeminists depend heavily on the ability to identify and critique the oppression and prejudice online, and most importantly, to take actions and bring changes in these social norms and constructs.

While this study uncovered that a low digital media literacy would render university students in Penang vulnerable to the influence of sexism in Internet memes, several literatures have shown the positive outcomes of media literacy education for youths to defy stereotypes and discrimination in media (Scharrer & Ramasubramaniam, 2015). On the contrary, Malaysia is still lacking a standardised media literacy programme in the school curriculum (Ma'arof, 2021, as cited in Malaysiakini, 2021).

Information literacy is an essential component in Feminism as it sees education as 'a site of social change and transformation' to address and reduce the marginalisation of individuals in society (Accardi, 2013, cited in Tarango, 2014:17; Bali, 2019). To support this, 89% of the respondents in this study also agreed that universities should teach students on how to evaluate the content on the Internet.

University students in Penang who are more involved in the cyberculture of Internet memes are more likely to be influenced by the sexism in Internet memes. More than half of the respondents are not active Internet memes sharers, as 33% of them had never shared any Internet meme and 28% only shared it at least once in a month. With that being said, there are a significant number of respondents who were not active participants of the cyberculture of Internet memes.

Even though a majority of the respondents did not condone the cyberculture of forming groups online to ridicule the opposite sex and sharing sexist Internet memes to gain engagement on social media, the data interpretation in SPSS still indicated a positive and weak correlation that is statistically significant. This relationship established is consistent with the phenomenon observed by Nagle (2017) where the participatory culture of Internet memes community desensitises offensive contents when people share them for engagement and pleasure.

Similar to cyberculture, the connectivity aspect of Cyberfeminism seeks to bring people with the same interests together virtually to harness collective power in influencing changes. Although the data collected showed that the cyberculture of Internet memes is on the opposite of the principle

of Cyberfeminism, it does not indicate that the cyberculture itself is sexist in nature. It could imply that Internet users are not actively involved in creating Feminist discourses in Internet memes, allowing sexism to have a dominant position within this cyberculture. Across time, Cyberfeminists around the world have formed alliance as organisations to disseminate their messages through various media such as online forums, publications and blogs. With Internet memes being an influential medium and popular culture online, Cyberfeminists today should consider building an Internet memes community on cyberspace to not only challenge the existing sexist norms but also cultivate ideas on gender equality and Feminism through the cyberculture of Internet memes.

Hypothetically speaking, Internet memes can be used to counter sexism by combining the three aspects of Cyberfeminism, namely creativity, critique and connectivity. The idea is for Feminists to forge an online network in the Internet memes community, create content in favour of Feminism and critique those that are sexist and inappropriate

## 6. Conclusion

This research's implications, despite many, primarily can be separated into threefold. Within the context of our research, the findings and arguments presented possess the ability to expose the extent and depth of sexism or subtle sexism embedded in the human consciousness regardless of their awareness.

Secondly, the objective of the paper reinforcing the significance of media literacy further affirms that efforts of media literacy shall be fortified as it could prevent the growth of sexism or casual sexism through internet memes, mostly perceived as humorous.

Lastly, it is also believed that a research of this manner may impart an awareness that sexism in an oppressive ideology needs to be uprooted since transmitting them is problematic. Therefore, this research could contribute to minimising (if not eliminating) the impact of subtle or direct sexism enunciated through internet memes. One of the shortcomings of this research is the small number of items in its survey questionnaire. While Sharma (2021) argued that three items are sufficient for a factor analysis, there are also scholars who recommended that more than five items should be formulated to provide a better inferential analysis (Zeynivandnezhad et al., 2019). Hence, the recommendation for future studies is to improve the research instrument by formulating more items for each variable to improve the outcome of the inferential correlation analysis.

Time constraints faced by the researchers, undoubtedly, in addition to the restrictions of the COVID-19 lockdown prevented the researcher from meeting face to face with the respondents of the study. These constraints definitely impacted the data collection process. Due to the limited time period and resources, the achievable sample size for this study was 200 respondents, which might be insufficient to represent the entire population of university students in Penang. To address these limitations, it is suggested that the future researchers increase the sample size to suit the actual number of the research population in order to achieve a more accurate representation of data.

With a quantitative survey, there are still many questions that remain unanswered. To further enhance the findings in this area of study, a mixed method or qualitative research can be employed to look deeper into the influence of Internet memes on sexism among university students in Penang. A more interactive interview filled with more open-ended questions can be carried out to allow for an in-depth data collection. Apart from the fact that empiricist research enhances the reliability of the research, the subjective conditions consisting of institutions such as family, religion or education that may or may not influence sexist ideologies amongst individuals can be explored as well. Most certainly, expanding the focus of the research to a wider target population is recommended to analyse whether sexism is present all over the country, and probably if there are any counter-resistance to the growth of sexism in our society or country.

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