RELATIONSHIP OF OPINION CLIMATE AND OPINION EXPRESSION: TESTING THE SPIRAL OF SILENCE THEORY IN THE NEW MEDIA ENVIRONMENT

PhD Thesis

Researcher: **Supervisor:**
Nadira Khanum   **Prof. Dr. Fazal Rahim Khan**
Reg. No. 2-FSS/PhDMC/F16

Department of Media and Communication Studies

Faculty of Social Sciences

INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD

INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD

Faculty of Social Sciences

Department of Media and Communication Studies

Dated: July 15, 2024

CERTIFICATE OF APPROVAL

It is certified that we have read this PhD thesis entitled "Relationship of Opinion Climate and Opinion Expression: Testing the Spiral of Silence Theory in the New Media Environment" submitted by Ms. Nadira Khanum under registration number 2-FSS/PHDMC/F16. It is our judgement that this thesis is of sufficient standard to warrant its acceptance by the International Islamic University Islamabad for the award of PhD degree in Media and Communication Studies.

VIVA VOCE COMMITTEE

Supervisor
Prof. Dr. Fazal Rahim Khan   …………………………………

External Examiner
Prof. Dr. Syed Abdul Siraj   …………………………………

External Examiner
Prof. Dr. Saqib Riaz   …………………………………

Internal Examiner
Dr. Qurrat ul Ain Malik   …………………………………

Chairperson DMCS, IIUI
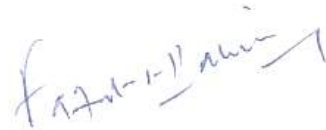Dr. Qurrat ul Ain Malik   …………………………………

Dean FSS, IIUI
Prof. Dr. Zafar Iqbal   …………………………………

CERTIFICATE

It is certified that this PhD Media and Communication thesis titled, *Relationship of Opinion Climate And Opinion Expression: Testing The Spiral Of Silence Theory In The New Media Environment*, submitted by Ms. Nadira Khanum (Reg.No. 2-FSS/PhDMC/F16) has been approved for submission to Department of Media and Communication, International Islamic University Islamabad.

_____

Prof. Dr. Fazal Rahim Khan

(Supervisor)

DEDICATION

Dedicated to
My Dear Father "Sardar Umar Hayat Khan"
and
Mother "Khalida Begum"

ACKNOWLEDGMENTS

TABLE OF CONTENTS

<div align="center">**Contents**   **Page**</div>

List of Tables

List of Figures

ABSTRACT

The Spiral of Silence (SOS) theory of Noelle-Neumann has been very popular over decades, but computer-mediated communication has brought new challenges for the theory application. Many different arguments and questions have been seen in the new literature while testing the Spiral of Silence in the online setting. The purpose of this exploratory research is to examine the differences if any, in the climate of opinion in the presence of a new media environment, moreover, to study the relationship between the perceived climate of opinion and opinion expression for both online and offline environments. As media was viewed as having an impact on people's assessment of dominant opinions, and online media these days is also playing an important role in opinion formation. To access the tenability of Spiral of Silence in Pakistani online opinion environment, the theory was examined across two issue types i.e., emerging and enduring, to check susceptibility of the assumptions across two issue types. A survey methodology was adopted to collect data from university students via probability sampling -multistage cluster sampling with a sample size of 909. Multiple hierarchal regression analyses were employed to test main hypotheses of the study. Findings suggested the validity of spiral of silence theory in the presence of new media environment and opinion climate predicts opinion expression, also fear of isolation moderated the relationship, and other psychographic, demographic attributes and issue characteristics also contributed towards predicting opinion expression. New media environment also introduced new variables like cyberbullying and anonymity which refrain or appreciates people to express the opinion. Future researchers can test the theory in only new media climate to get more in dept detail, keeping the cyber laws in picture as well and sample of the study limited to general public to control the effect of

level of education. It was found that the majority perception favored the emerging issue and enduring issues. Own opinion was congruent with both traditional and social media opinions for both issue types. The study also revealed a significant relationship between the new media environment and the climate of opinion for both issues. Furthermore, the perception of media opinion was related to interpersonal opinion climate. Fear of social isolation moderated the relationship between the perceived climate of opinion and opinion expression for both issues. Cyberbullying also acted as a moderator for both offline and online expression of opinion. Psychographic attributes such as fear of issue certainty, fear of social isolation, and communication apprehension were significant predictors of opinion expression offline, while issue importance was a significant predictor for both offline and online expression, contrasting with issue obtrusiveness, which did not significantly predict opinion expression for either issue type or social media. Hence, the study found Spiral of Silence's assumptions are still valid for opinion formation.

CHAPTER 1

INTRODUCTION

With the passage of time and advent of new technologies, media has also been evolving its functions in the lives of people. Nowadays, it not only serves as a source of entertainment but has proved itself to act as a watchdog. Social media has become the most relevant tool for the masses to get access to instant news and happenings around the world. Although social media has a key role in giving information to people, it also enables identity expression, exploration, and experimentation.

Media, at present, is the ultimate tool for communication as well as having the responsibility for the provision of facts to be better informed. It is a very challenging task to transform the attitude of people in the media to be more restrictive, compassionate, and informative. The actual force exerted by media is to influence its audience, their perceptions and belief system.

However, the degree of media influence varies and signals from the media reality aren't viewed equally by all viewers.

1.1. Background of the Study

Media's role concerning shaping one's social, and political identity has been under debate since long ago and is still one of the most argued areas (Spitzer, 1993; Wilson & Wilson, 2001). There is a general agreement that regardless of the first-hand knowledge of what we hear, learn and believe about the happenings of the world is largely influenced by how it is broadcasted in the media. Some even argue that people are

manipulated by the manner, these incidents are recorded in newspapers and transmitted via radio and television. However, since the early 21st century the new media, particularly platforms for social media, have been quite important as they provide an alternative atmosphere in the absence of complementary political groups and civil organizations to political involvement (Benrazek, 2022).

Contrary to traditional media, new media is deemed as a substitute not just for expressing diverse political viewpoints but being influenced by public perception rather than influencing the public. On the other hand, it was rather the public sphere that had an impact on all aspects of society. Moreover, the implications of new media can be seen in the broadening of the purpose of political engagement, or in the political reinterpretation of politics to include all daily contacts aimed at affecting the distribution of power in society. By creating an enabling environment between the affluent and the general public, they dismantle the social class divide. Instead of merely one point to many points, as it is in mass communication, the new medium permits communication from many points to many other points as a feature of interconnectedness. It is one of the most widely used forms of media, making it simpler for people to engage in their roles as senders, recipients, and creators. However, the persistence of c views in mainstream media is the fundamental tenet of spiral of silence (SOS) in digital. One could claim that online environments offer numerous subjective majority climates based on selective exposure rather than a single consensus opinion. This would greatly reduce the likelihood of a quiet spiral (Schulz & Roessler, 2012; Ho & McLeod, 2008)

The public sphere, according to Habermas (1991), is an imagined or simulated society that need not be in a well-known or recognizable area. However, it also consists

of a group of people with similar characteristics that band together as a public, setting and defining the demands of society with the statutes. For Habermas (1991), the political public sphere "developed from public sphere in the world of letters, and through conduit of public opinion, brought the state into contact with the demands of the community. The liberalism of public opinion depends on free flow of information and ideas among citizens. Comparing internet to the traditional media, new alternatives are available because of new communication technologies. The public debate sparked by new media influences public concerns and affects the current administration. Many online gatherings work as public spheres where individuals talk about, babble, and express their thoughts (Woong & Park, 2011). The Internet has been distinguished as an undeniably imperative part in fortifying people in a general circle through the intervention of political debate, which can open opportunities as well (Bennett, 2003).

For examining shifts in public opinions, Spiral of Silence theory developed by Noelle-Neuman (1984) is mostly used. Fundamental principles of the theory say, when people assume that they have majority approval for their point of view there would be more chances of them expressing their opinion and if they consider their viewpoint to be an anomaly, they withdraw from sharing it openly out of a fear of being socially excluded. Thus, following the climate of opinion. As the dominant viewpoint gets voiced more frequently, dissenting opinion holders become increasingly quiet, causing the spiraling effect (Neumann, 1974). Noelle-Neumann 's theory, both in political science and in communication, already gained a lot of coverage from the research community. In various scenarios, the Spiral of Silence has indeed been tested, primarily for opinion expressions on contentious political or social problems including abortion (Salmon &

Neuwirth, 1990), opinion over smoking (Shanahan et al, 2004), euthanasia (Haddock et. al., 1999), or laws of affirmative action (Moy et al, 2001) and also more innovatively in tracking political opinions and results of elections (McDonald et al, 2001; Neuwirth et al, 2007). Research was generally helpful in Noelle-Neumann's (1974) innovative hypothesis, even though there was difference in effect size across population (Glyn & McLeod, 1984; Mutz, 1992, Neuworth, 2000; Schufele, 1999; Shanhan et al, 2004).

The spiral of silence theory suggests that, if a person's opinion differs from how they perceive the opinion climate, this can hinder their inclination to speak up in front of others (Noelle-Neumann, 1974). People carefully observe social environment through media to gauge the current state of opinion (Matthes et al, 2017; Porten-Cheé & Eilders, 2015). The spiral of silence can be divided into two components, first is how media content affects people's perception of political climate. The other component is presumption that political climate can affect the people's tendency to express their opinion. People cannot determine the extent of discrepancy between their own opinions and the projected climate of opinion if they are unable to assess the later. Just for the reason that opinion of the majority public is spoken openly and that of minority is not, a spiraling process starts where the purported majority opinion acquires momentum further dropping the momentum of claimed minority opinion. It can also change the atmosphere of factual opinion, meaning that the spiral can cause a factual minority opinion to be spoken freely in public without the fear of exclusion if media outlets portray it as majority opinion (Noelle-Neuman, 1974). The theory highlights the importance of small-scale personal action, like speaking in public under specific circumstances, which greatly affect the development of public opinion at macro-level (Proten-Chee & Eilders, 2015).

The spiral of silence (SOS) theory by Noelle-Neumann (1974) has been very popular over decades in understanding opinion expression, but computer mediated communication has brought new challenges and concerns towards its understanding and scope. The theory was developed in 1970s and since then it's been used throughout the globe for various political researches with a number of methodologies (Hayes & Matthes, 2014; Matthes & Hayes, 2013; Scheufele & Moy, 2000). Though SOS a highly debated theory, its foundations were built considering classical media as frame of reference. Now with the advent of social media, opinion climates have been drastically changed. For instance, pressures suppressing minority opinions may be reduced challenging the central tenets of the theory (Moy & Hussain, 2014; Schulz & Roessler, 2012). Also, anonymity is weakening the link between fear of isolation and opinion expression online (Kushin et al, 2019).

The most crucial idea and primary variable in SOS theory is the willingness of an individual to voice their opinion. Previous studies on the SOS theory have taken a different approach by measuring how much people's desire to share their opinions with friends, strangers, or those who hold opposing views is influenced by the perceived environment of opinion (Cabrera et al, 2021; Porten-Cheé & Eilders, 2015). It applies to contentious matters where there are two opposing points of view, considering that people's readiness to speak out in favor or against a certain issue is influenced by attitudes of people around them. The expression of one's perspective becomes more likely if one thinks its shared among the peers, and the opposite is true if they don't. According to this hypothesis, this behavior can eventually lead to a situation in which one

of the two positions is supported by a resounding majority of publicly declared opinions, and a consensus is reached (Cabrera et, al. 2021).

1.2. Defining Public Opinion

Before discussing the media's part in development and evolution of public opinion, it's important to consider 2 basic principles for public opinion. (1) public opinion as rationality, rendering it 'instrumental in the process of opinion-forming and decision-making in democracy'; and (2) public opinion as social control, where 'its role is to foster societal unity and to guarantee that there is a reasonable degree of agreement on where decisions and opinions can be based.

1.2.1. Public Opinion as Rationality

The rational model for public opinion suggests that public sentiments are derived from political thinking in public domain (Habermas, 1962). Public opinion as rationality, in its purest sense,' is the conscious social decision made after a thorough reasoned public debate on an issue of general or political discussion (King, 1928). Likewise, when all or most of the citizens vote for the conclusions, people have derived either from contemplation or experience with the topic, logical creation of popular opinion takes place (Palmer, 1936). The model is grounded in the idea of informed and knowledgeable population who are eager to engage in democratic system and is worthy of doing so (Childs, 1965; Wilson, 1933). Thus, logical notion of popular opinion is essential condition for social change. According to Fatas-Villafranca et al. (2011), public opinion is formed in a method where logic, intuition, reasoning, and rationality are used to generate opinions on contentious subjects.

1.2.2. Public Opinion as Social Control

Viewing popular opinion to be informal social control or as unwritten legislation means the public is united by logical debate. The number of others an individual believes to have held the same opinion has a significant impact on how strong his opinion is and how it affects his behavior (Salmon & Glynn, 2008). The homogeneity of the population is a necessary prerequisite for public opinion to function as a social control mechanism. Democracies have resisted the entrance of large numbers of vastly dissimilar racial groups because they recognize the necessity of homogeneity as the foundation for popular governance and the public opinion on which it depends (Waltersdorf, 1927). Public opinion as social control is the principle which is linked with the spiral of silence theory (Bentham,1962). Since effective social structures 'need to provide forms of institutionalizing agreement' (Csikszentmihalyi, 1991), to maintain these required levels of stability, they risk individuals with social alienation (Noelle-Neumann, 1995). Concomitantly, individuals are scanning the world around them for current and political representations of public opinion in an attempt to determine the views and modes gaining society's acceptance or might threat alienation. The model therefore, characterized public opinion as views that can be conveyed without the fear of penalties or social exclusion and is supported by SOS theory (Noelle-Neumann, 1983).

1.3. Media's Role in Shaping Public Opinion

Mass Media, whether written/spoken or broadcast, is communication. It has the power to reach a larger audience within the blink of an eye. Lowenstein (2020) the organizing of massive volumes of information into comprehensible and interpretative units, termed as 'media frames' is media's primary function. When viewers lack clear

understanding or awareness of a certain issue, such circumstances enhance people's dependency on media to educate them. It does not suggest that we are actually told by media what to think but people should not unquestioningly consume media messages (Philo, 2008). However, they are essential to setting priorities and concentrating the interests of the public on specific issues and narrowing the variety of viewpoints and insights that shape public discussion. While the emergence of new media has demonstrated that the world is comprised of a pool of material which is distributed, unfocused, and sometimes conflicting; public opinion and the media have long been interconnected. And now it is easier for people to learn about the viewpoints of most of their community members (Beckers, 2002). Mass media has traditionally maintained an efficient flow of information among various independent classes in the public domain by routinely editing and interpretation of mass information. When some information has been favored over the other, the advantage of being authoritative and, in some cases, honest has been essentially granted to them (Fairclough, 2003). As media is deemed as a crucial source of information on the climate of opinion since it provides a variety of clues to other people's opinions (Zerback, et al., 2015).

In terms of content formation, it is claimed that a variety of privileged classes comprising social and political organizations as well as other pressure groups (e.g., legislatures, public relations sector) contribute to the development of media reports (Miller & Dinan, 2000, Miller & Dinan, 2009). Both explicit and implicit manifestations of public opinion exist. Explicit cues are pieces of information that directly allude to the proportions or distributions of prevailing opinion in society. Audiences must determine the political climate for themselves when responding to implicit indications like marches

and news shows (Zerback et al., 2015). These multiple organizations converge to influence the topics that are available to debate, but the effect may also heavily restrict the knowledge that people have access to. The media will exclude topics from public debate efficiently.

The news media can also strengthen and "trigger" unconscious behaviors and encourage people to act. As the media can motivate an individual, who previously had a little affinity for a political party of the candidate, to take not only the trouble of voting but also donate cash or support the party in some other way (Dennis, 2013). By making people know what other people think and by bringing elected leaders massive crowds, the news media plays another significant role. In this way, the media causes vast numbers of people and diverse geographical regions to be reached by public opinion. Media organizations are one of the most significant sources of media for the mass audience, who tend to watch news on TV more than on any other platform (Yuan, 2011).

1.3.1. Channel Reliance

Around the globe, people watch TV for entertainment and education and particularly it is watched for news channels, to keep one informed on recent events and occurrences 24/7. News outlets provide viewers with more than just news. In recent years, it has instead arisen as a mainstream source of infotainment. Different television sources provide audiences with thorough coverage of recent affairs from a range of viewpoints of the modern century.

Whereas Chaffe and Schleuder (2006) find that news outlets within their target audience develop their distinctive reputation and brand perception over time. Since they reflect their point of view, the viewer feels related to those outlets. Simple access to a

wide range of news outlets, on the other hand, allows the viewer more flexibility and leads to a reduced viewer span through regular channel browsing and snapping patterns. It is perhaps attributed to inadequate program content or presentation. However, researchers have also suggested another aspect called selective perception suggesting that news audience audiences do not link up with outlets that do not comply with their views and desires (Anke & Jung, 2017). News channel audiences have emerged as highly polarized in the Pakistani sense, mostly choosing the news channels that support their favorite political parties and ideologies. Yousuf (2012) was right in saying that viewers continue to build their alliance to the platforms which give voice to their thoughts with their political views. In addition, several other components that lead to viewer loyalty to a news channel are also established. The identity and reputation of news anchors attached to a channel is one such factor. News anchors are media figures with large followers and their thought processes and political and social beliefs also influence the opinion of the viewer on every subject.

Therefore, "the combination of a famous news anchor and influential material that appeals to the viewer's mind keeps the audience loyal to a news channel" (Roel, 2008). Just like members of an extended social network, a strong anchor affects the political and social beliefs of the viewers. This condition is called para-social contact (Laken, 2009). These TV anchors also use social media outlets in the new modern world to reflect public opinions on important issues.

On the other hand, Nielsen and Sambrook (2016) believed that television consumption has decreased tremendously in recent years due to a wide range of competing perspectives on social media, personalized according to viewer preference.

Due to exaggerated and sensationalized reporting, news channels sometimes lose their place among the public, frequently trying to get higher ratings. News outlets rarely care to verify the authenticity of news and its origin in their race to break news first, which also contributes to viewer reaction. News is sensationalized several times purposefully to cause viewer interest so that they stay stuck on a single news source. Despite the fact that television outlets are sensationalizing news and compromising integrity, viewers have relied on TV channels to access the information they need (Sinha, 2013).

1.4. Mainstream Pakistani News Channels

Press freedom is one of the most fundamental pillars of democratic countries; therefore, it has always been crucial for the media to report on public opinion. To enable citizens to make educated decisions, the news should ideally reflect the variety of viewpoints that are present in the public arena (Beckers, 2020). Nowadays, media is by far the most critical aspect of society and its key duty is to play a part as a watchdog in order to formulate, mold and reshape public opinion, communities and economies, they try to fulfil their positions efficiently. Media thus is important, and they have the potential to affect society and culture. The more hours invested in TV, the more it becomes part of the family. The dynamic role of television is well understood; it has the potential to transform attitudes, principles and habits. Viewers learn much when they spend time in the television world (Gerbner & Signorielli,1986).

Digital and mass media knows no boundaries and therefore it is quite evident that all barriers have thus been crossed. From the last two decades, like all over the world, there has been a bloom in private TV channels in Pakistan as well. Post 2001, new information technology penetrated Pakistani electronic media included numerous news

channels and was not prohibited. News grew more popular among the public with the reporters 'distinct way of covering news and important talk shows. Due to this, the viewer continued to focus mostly on private news outlets.

Mir Shakeel ur Rehman, who owns the Jang newspaper media, company founded the Geo news channel in 2002. Geo launched its first news broadcast on October 1, 2002 and was the first Pakistani news channel to raise the voice for freedom of speech and free news media rewards. The existence of independent news media has given space to a variety of new news outlets, one of them is ARY. ARY is Pakistan's first world news station and has a wide variety of worldwide reporters. There are 500 media reporters working with foreign media organizations in Pakistan with the capacity to share news information.

1.5. New Media Environment

Public opinion, a collective opinion, is an intensely debated and extremely complex idea. Therefore, it occupies a significant place in democracy as the democratic government derives its power from it. The way audiences can participate in public discourse has substantially changed because of developments in communication technologies. The old passive and disengaged audiences of traditional media such as television are gradually changing into Internet users who participate actively in public/political discourse and communicate with others. People are reading more news about public affairs online (Eilders & Porten-Cheé, 2022). How individuals now learn about current events has altered as a result of the spread of online media. The expansion of the available content is one aspect of change. The only information source that could approach a big audience in the past was conventional journalism, but since anyone may

now exchange information with an indefinite audience, alternative sources have appeared. The evolution of media exposure parallels the evolution of media content. Selective exposure is made possible by the amount and heterogeneity of online interaction: It requires little effort to choose media content that supports one's personal beliefs (Porten-Cheé & Eilders, 2015).

Moreover, people continually assess their social situations and environments to understand and follow popular sentiment because of an avoid social isolation, according to the SOS theory. Therefore, in a digital world, user comments published under news stories are used to infer public opinion, which influences the opinions expressed by audiences (Neubaum & Krämer, 2016). Porten-Cheé and Eilders (2015) investigated perceived climate of opinion between online and conventional media users. The findings show that those who followed the climate change discussion via UGC had varying perspectives of the subject than those who followed it through coverage in the media. Moreover, the lack of a silencing impact in online conditions is backed up by empirical findings of prior studies (Rheingold, 2000; McDevitt et al., 2003; LaRose & Eastin, 2004) which likewise revealed no silencing effect when there was a discrepancy across people's views and conceptions of climate of opinion.

1.6. Issue Characteristics in Public Opinion

According to Neumann (1993) the spiral of silence can only happen where the subject of conversation includes a strong moral aspect, which means that the subject should be controversial and emotionally charged. She concluded that in the absence of moral component, there would be no clear social incentive to silence one's opinion in public circumstances. In short, sharing one's dissenting opinion on moral subjects makes

13

them insecure about the prospect of excluding from morally correct majority. Another issue characteristic addressed in spiral of silence literature is obtrusiveness, described as sum of personal experiences with the issue (Winter, 1981). We have more first-hand awareness of problems for obtrude issues in our lives and are less focused on the news media compared to unobtrusive issues, this makes media effects less likely (Zucker, 1978).

For present study, scholars took controversial issues because the media play an important role in forming public opinion related to controversial issues.

The two issues that have been selected to test SOS theory in Social Networking Environment (with focus on Facebook) for this research in the Pakistani context, they are 1. 'Military's Involvement in Political Affairs of Pakistan' and 2. 'COVID 19 vaccination'. Enduring issues persist in news or media for longer time-period so, Military's Involvement in Political Affairs of Pakistan has been taken as an enduring issue. Conversely, emerging issues are comparatively new and tend to remain in forefront eventually develop into emerging issues. Thus, COVID 19 vaccination has been considered as an emerging issue. (Geahart & Zhang, 2015; Salmon & Glynn, 2009; Yeric & Todd, 1989).

Since spiral of silence theory is more suitable for morally controversial issues. Thus, the central issues of any investigation involving this theory are critical (Scheufele, 2007). Both the issues ensure the fulfillment of basic requirements of spiral of silence phenomenon. First, the researcher is concerned with the moral- laden issue and this moral element threatens isolation. Second, both the issues are controversial and third, the

individuals are able to judge climate of opinion for these topics through interpersonal and mass media.

1.6.1. Military's Involvement in Political Affairs of Pakistan (as enduring issue-controversial issue)

As stated in the definition of a controversial subject, which is one that "problems which provoke strong feelings and split communities and societies" (Hammer, 2021). Its foundation is the cognitive parameter, and it might be too accepting. One of such issue in Pakistan is the military's involvement in political affairs. However, the military's involvement in politics appears to be far more evident in developing nations, where it has turned into a common occurrence. Whereas political crises were the main reason for military coups (Alam & Alam, 2014).

In the context of Pakistan, the military directly interferes in political affairs. Four times, the military completely intervened and imposed martial law in the country: in 1958, 1969, 1977, and 1999. During these periods military controlled all the administrative affairs and justified in the sense that the political system destabilized the county on the ground. From the independence of the Pakistani state in 1947 until now the Pakistani military has played an important role within the Pakistani political structure. For around 32 years (1958-1971,1977-1988 and 1999 to 2008), Pakistan remained under military domination. One way or another the civilians became overshadowed by the perpetual presence of the military.

From the point of view of general public there are two groups one who thinks that military involvement in politics is justified because our democratic system is weak and the other group want military to stick with the borders and not involved in politics, in one

way or the other public express their views or prefer to remain silent on this controversial issue according to the climate of opinion which keeps on changing time to time and from group to group. Hence, this issue has been chosen as enduring issue for the study.

1.6.2. Covid 19 Vaccination (as emerging issue- controversial issue)

Vaccination against the new coronavirus (COVID-19) is controversial in several countries, including Pakistan. The race to destroy and wipe out the Novel coronavirus has resulted in the remarkably quick development of vaccines borne of the immense study of professionals and authorities. Nonetheless, despite the stated scientific rationale and quick solution to the world.

Like all other countries in the world, Pakistan also got seriously affected by Noval COVID-19. In countries like Pakistan, the health system is already in poor condition, so awareness and the importance of vaccines is crucial. Pakistan Covid 19 immunization took place on February 3rd, as the country continues to combat the virus. On Monday, the first shipment of COVID-19 vaccinations from China landed in Pakistan on a Pakistan Air Force jet (February 1, 2021). China has contributed 500,000 doses of the Sinopharm vaccine, which has a 79.3 percent efficiency rate. The second batch of vaccinations had been delivered to the provinces by the National Command and Control Centre (NCOC). All health workers and persons over the age of 40 will be vaccinated as a matter of priority by the government, while others will be immunized privately. According to NCOC data, as of May 23rd, 2021,631,873 persons were partially vaccinated, while 1,193,441 were completely vaccinated (these figures were very high, as of April 12, 2022, 133,528,662 were partially vaccinated 119,771,164 were fully vaccinated and

6,505,852 were given booster dose), while in Pakistan, it remains a contentious matter for many individuals who do not believe vaccinations.

The Public's doubt or ambivalence regarding vaccination is termed as vaccine hesitance. It reduces the effectiveness of public health messages. The most prominent public apprehensions include a lack of faith regarding the effectiveness of the vaccine, and concerns regarding side effects and long-term health impacts. Some have used these fears to propagate disinformation (Mills et al, 2020). In addition to that, the public's distrust on government and health agencies, racism and discrimination, underrepresentation of minorities in health research, and last but not least, negative experiences with culturally insensitive healthcare systems contribute to eroding trust in vaccines. Segregation is increasing throughout Europe, and the Bangladeshi and Pakistani populations in the United Kingdom are the most separated. The impacts are amplified when ethnicity intersects with socioeconomic position and educational attainment. Access constraints, such as vaccination delivery site and timing, are other factors that might exacerbate differences in uptake. The current study selected the covid 19 vaccination as an emerging controversial issue to test the process of opinion formation.

The present study aims to bring to light the latest concerns and challenges to Spiral of Silence (SOS) concerning offline and online media environments. The SOS theory by Noelle-Neumann (1974) has been very popular over decades in understanding opinion expression, but computer-mediated communication has brought new challenges and concerns towards its understanding and scope. The theory was developed in 1970s and since then it's been used throughout the globe for various political research with several methodologies (Hayes & Matthes, 2014; Matthes & Hayes, 2013; Scheufele &

Moy, 2000). Though SOS is a highly debated theory, its usefulness has been questioned even in the current time due to the online media environment as its foundations were built considering classical media as a frame of reference. Now with the advent of social media, opinion climates have been drastically changed. For instance, pressures suppressing minority opinions may be reduced by challenging the central tenets of the theory (Moy & Hussain, 2014; Schulz & Roessler, 2012).

1.7. Rationale of the Study

The status of knowledge on the role of mass media in Pakistan is largely presumptive and is rarely, if at all, based on documented social scientific explorations. This questionable epistemology characterizes not just mass communication scholarship but more generally the entire gamut of social science fields in Pakistan. The present study, in particular, tries to generate theoretically informed empirical data on the relationship between use of public affairs media by the audience, adopting the SOS theory. Issues of national importance satisfy the requirements of the theory because SOS theory works only in environments where discussion revolves around morally loaded and controversial issues (Scheufele, 2007). People always judge the atmosphere of feeling through their own personal connections and through the media to keep up a higher state of awareness concerning the social context. (Moreno-Riaño, 2002). The study will be of use to government and non-government institutions involved in public policy making in as much as it shall statistically describe and explain the role that the media of mass communication play in the formation of public opinion on issues of national importance and sensitivity. The study highlights the dynamics of the development and evolution of public opinion.

1.8. Problem Statement

The Internet, since its beginning, has essentially altered the strategies utilized by individuals for opinion expression, interacting openly with friends and even unknowns and executing different strategies leading to an online sphere. An extraordinary change has been witnessed in the communication industry especially in the past few years due to social networking sites. A close observation of the opinion expression of online users of different social media at. different social networking sites and their surroundings, discloses an interest of opinion formation. The increase in expression of views on social media among these online users has pleaded the question about the challenges faced by the perception of public opinions on social networking sites i.e. Facebook, especially the concept of Spiral of Silence presented by Noelle-Neumann. It also questions the presence of new media environment and its effect on the nature of climate of opinion, the tenability of SOS theory to Facebook environment of Pakistani online users and how and at what rate it varies across issue types?

1.9. Significance of the Study

As Noelle-Neumann anticipated that media was viewed as practicing an impact on people's assessment of dominant opinions, and the online media these days is also playing an important role in opinion formation. SOS theory may work in both online and offline settings (Liu & Fahmy, 2011). The logic behind the discrepant findings of SOS theory research, regarding the web and disconnected researches may lie in the situations or environments that were utilized. As the online environment and conditions are different from the traditional media, applying the SOS theory online will help appreciate the concept and what additions it requires. Furthermore, the study would also provide a

Pakistani perspective as the opinion environment might be different for a society like Pakistan. The culture and freedom of expression here is different than most of the countries where the SOS research was conducted and might lead to some new findings for the theory in a different cultural perspective.

The morally loaded and controversial issues selected in this study are also unique in nature as the testing of SOS theory has been applied not only to election campaigns (Glynn & McLeod, 1984) but to many other dissimilar issues like genetically modified food (Kim, 2012), environment activism (Hayes, 2007), gay marriages (Ho & McLeod, 2008), interracial marriages (Lee et al., 2004), abortion (Woong & Park, 2011), membership in European union (Mathes et al., 2010) and capital punishment (Hayes, 2007) etc. In this study the nature of issues (enduring and emerging) as well as the cultural context (Pakistani) of the issues is diverse and it is expected that the research will help in testing the scope of Spiral of Silence towards these issues. This will provide the link with the academic contribution of the study by adding into the body of knowledge. Furthermore, the conclusions linking mass communication with other social structural and cultural entities of the society (i.e., issue types selected) will help in institutional and nation building as the study will bring in light how the message system of mass media is affecting perception of the distribution of opinion in society.

1.10. Objective of the Study

The present study had the following objectives:

1. To examine the difference if any, in the perceived climate of opinion in the presence of a new media environment.

2. To examine the relationship between the perceived climate of opinion and opinion expression for both online and offline environments.

3. To examine how demographic and psychographic factors may affect the distribution of opinions

4. To observe differences, if any, in the susceptibility to the Spiral of Silence across different issues.

CHAPTER 2

LITERATURE REVIEW

Media and literature are two inseparable cogs yet are concretely distinct from each other; therefore, both complement each other and leave a strong impact. Literature on media shaping the public opinion, is majorly grounded on the influence of print media or social media. However, the role of media, especially the audience's reliance on TV channels, is the least explored and addressed area in literature. In contemporary times, people are more inclined to collective opinion through a trusted source rather than relying on a solo/individual opinion and too from an untrusted source. With respect to the collective public opinion, this literature at hand explored the assumption and proposition of the spiral of silence and people's willingness to express opinions on national contentions topics. These topics include themes, public opinion, nature of society, nature of issues, media exposure reliance of audience on different TV news channels and the political affiliation of news channels. Subsequently, the present review also explored issues of national importance and public opinion in Pakistani society.

2.1. Public Opinion

In contemporary times, public opinion and information are considered the foremost apparatus for stimulating political as well as social change (David, 2021). Moreover, it also supports the notion of collective actions (Kimet al., 2019). According to Shamir and Shamir (2000), public opinion is a multidimensional phenomenon (Fisher, 1950). However, the aforementioned definition of public opinion focuses only on one aspect of the said phenomenon due to which the meaning it depicts is considered as

obscure or vague. Whereas these multidimensional phenomena comprise: (1) the

attitudinal aspect, as seen in people's opinions in censuses; (2) the second dimension is s

a normative aspect, as seen in conceptions of public opinion; (3) the third dimension is

the public's behavioral elements which can be observed through activities like protests;

and (4) fourth dimension is a speculative informative aspect, as seen in publicity (e.g.,

media coverage).

A more erudite definition of public opinion can differentiate between individual

opinion and publicity of opinion by depicting publicity as a crucial part of a more

accumulated phenomenon that is public opinion (Allport, 1937). Thus, exposure is

critical as visibility is required to transform collective individual opinion into a public

opinion. One can estimate support for a certain political opinion based on its visibility

and attention (Wouters, 2019). Thus, one's perception of majority opinion can be

influenced by publicity and visibility of issue. ' At the interlink of structure and

transience, the attitudinal aspect of public opinion can be influenced by daily events. The

normative aspect is reliant on social structures, and major shifts in this dimension are

uncommon and difficult to detect. In general, one-of-a-kind occurrences have been

required for a dramatic shift in public perception of majority support regarding certain

political topic.

David (2021) in his studies emphasizes the significance of exploring the multiple

facets of public opinion including its normative and attitudinal dimensions to discern the

underlying mechanisms of political engagement and activity. Media use and public

opinion were found to be major determinants of collective actions participation (Perrin &

McFarland, 2011; Rosenberg, 2015) and the emergence of social movements. In the

understanding of dynamics of these social movements digital and social media play a key role as public opinion is shaped by publicity and its perception greatly impacts individual opinion and political participation. Thus, public opinion is a collective result of social, psychological, political, cultural, economic, and historical elements. In a nutshell, it is an element of social life (Fisher, 1950).

According to the prevailing viewpoint, the public is a collection of individual people, and opinion is made up of beliefs that are subjectively connected with an individual's attitude. E. Noelle-Neumann (2016) in her study is of view that the concept of public opinion is debatable and is based on two fundamental pillars (Fatas-Villafranca et al., 2011). Formation of public opinions can be identified with two perspectives. The first perspective view public opinion formation in a way where the usage of logics, intuitions, reasoning (Fatas-Villafranca et al., 2011), and rationality comes as a pervading force on prevailing issues. While the second perspective constitutes formation of public opinion as a degree with which public feel connected with prevailing issues related knowledge. People may be reluctant to share their views with the public for a variety of reasons, particularly when the subject is contentious (Tang et al., 2021). Moreover, it is a process whose power originates in our social nature, an individual's dread of solitude and society's propensity to risk isolation in response to prohibited ideas and behaviors. This anxiety induces individuals to continuously look for any switch in society's approval through a "quasi-statistical sense," together with voicing out agreement with increases in approval and keeping silence upon decreases, causing a further drop in popularity of the originally held opinion (Noelle-Neumann, 2016).

Opinion dynamics is a prominent and well-established domain of society (Chan et al., 2022). It is considered as the pervading force in society. The models of opinion dynamics explain macro-level phenomena of society such as group polarization and group consensus among interacting people by simulating microlevel flow of opinions across individuals. Most models of opinion dynamics ignore the possibility that people might conceal their beliefs assuming that opinions are honest and can be observed readily (Mitsutsuji &Yamakage, 2020). Probably, the assumption is impractical in situations where opinions are not totally evident, or where persons wish to conceal their opinions in order to prevent embarrassment or to protect their privacy in general. In recent years a few models proposed opinion hiding phenomenon in the opinion dynamic literature. Mostly grounded in SOS theory which proposed that people prefer to stay silent when think that they are in minority owing to the fear of isolation. The choice between remaining silent and expressing one's opinion on SOS models is governed by the individual's assessment of others' opinions. Chan et al. (2022) in their research designed a 'relative opinion' model which uses linear updating rule to demonstrate desired large-scale phenomenon. This model allows the investigation of polarization, consensus development and periodicity. It identifies the trends in opinion formation over a longer time frame. Longer-term alterations may occur as a result of changing society standards on certain problems. for example, models that simply express absolute opinions are unable to trace the pattern which remain constant despite these shifts.

2.2. Nature of Society and Formation of Public Opinion

There are two types of societies one is idiocentric (individualism) and the other is allocentric(collectivistic) (Bond & Smith, 1996; Hofstede, 1980; Hui & Triandis,

1986). Both societies have people with differing views and ideals, because they have different processes of forming opinions. The relationship between individualism/collectivism and the actions of conformity was observed by researchers. A review of these studies by Bond and Smith (1996) concluded that people appear to show greater conformity in collectivist countries than they do in individualistic countries.

Most people's social activity in individualist societies is primarily dictated by personal interests that only marginally overlap with collective goals, such as families, job group, party political alliances, coreligionists, fellow countrymen, and the state. It allows an individual to give preference to personal goals rather than team goals in case of conflict between the two. On the other hand, social behavior in collectivist societies is primarily dictated by priorities agreed with some collectives. And where there is a discrepancy between personal and group interests, society expects individuals to put collective goals before personal goals (Triandis, 1990).

In individualistic and collectivist societies, multiple self-other relationships are connected to various concepts of 'self' and other' (Hofstede, 1980). The self is considered a different body in individualistic communities such as some western countries like United States, independent from society and status is defined by ego accomplishment (Hofstede, 1980). In these societies, individuals appear to illustrate T-identity and T-assertion over We-identity and group assertion respectively. The self is perceived as an object in collectivistic cultures like Chinese society that involves man himself and his immediate social environment. Individuals put emphasis on We-identity and are more emotionally dependent on organizations and institutions (Ting, 1989; Triandis, 1990).

They may also be more likely than individuals in individualistic societies to adhere to the groups they belong to.

Pakistan, on the other hand, is a collectivist country where decisions and views are taken in groups and people find it more advantageous to go along with the majority, therefore in Pakistan popular opinion is very important because people prefer to talk on issues with a majority consensus. And in collectivist cultures, the media play a very active role in shaping public sentiment.

2.3. Media Exposure and Opinion Formation

The idea of abusing media to distort information and effect public opinion is not new with early references such as Ogden (1913), Berneys (1928), Farnsworth (1936) highlighting such concerns in literature. Media Influence on the masses is the actual force exerted by media and thus was the main attraction for researchers to study the literature on the subject. As debated earlier, it is an undoubted fact that media affects a person's perception, attitudes, and behaviors. The effect of media attention on people can either be immediate and protracted or can be permanent or temporary. As the media tends to serve a key role in shaping attitudes and perspectives of people. This section will focus on news media and its effects on formation of public opinion.

Noelle-Neumann argued in the early 1970s, after much research on the limited impact of the media in the 1940s, 50s and 60s, that the media had powerful effects, particularly on the creation of opinions. Most of the media impact research, she says, was inadequate because it was conducted under laboratory conditions, not in the region. In SOS hypothesis, the role of media use is considered crucial. Noelle-Neuman (1981), in

their estimation of public opinion, used each person's proximity to mass media like newspaper and tv. A person's view of propagation of public opinion on a certain topic effect their ability to express his or her own opinion (Glyn et al. 1997). More importantly, a person's actual stance on a specific topic is distinct from their point of view in the climate of opinion.

Some academic circles are again taking interest in the influence of mass media on the view of the public and perceptions of communities such as the police (Newman 1990; Yanich 2004), the disabled (Bogdan, 1982), medicine (Peruzzi, 2006). Dowler and Zawilski (2007) found in their analysis that public portrayals of the police and the justice system create unreal expectations about the speed of crime resolution, leading to frustration where real-world police are unable to fulfill the successes of their popular media counterparts. Moreover, Paletz and Entman (1981) concluded in their study that relatively little (ten percent) of the population was attentive to and educated about political issues, and these persons are more likely to rely on specialized or prestigious newspapers. Other sections, which tend to be less politically oriented, differently use various types of media. Tuchman (1978) argued in his study that media, as conglomerates and companies themselves, have ignored concern about maintaining the status quo. Wright (1960) claimed that the mass media increases people's cultural control by bringing deviant behavior into public view.

On the other hand, a substantial body of literature indicates that the media is not the only means of creating popular opinion. Paletz and Entman (1981) conclude that the representatives of society crystallize and perceive challenges and have a significant effect on public opinion. This agreement is represented by the media when elites agree on a

topic. This tension is expressed in the media when elites clash and help reallocate authority between elite groups. But most of the time, in their own right, the media are "unwitting handmaidens" of the wealthy, and not "agents" In comparison, Tichenor et al. (1980) have also shown that the media do not act as the only independent agent at all in the broader social structure in which they operate but instead are an essential subsystem.

Noelle-Neumann's research examined the impact of fear of isolation when speaking up in the potential company of strangers (Noelle-Neumann, 2016). However, the following research has revealed that the influence of isolation fear differs depending on the nature of the reference group in which one is voicing a dissenting opinion. Fear of isolation has a distinct influence when speaking to an important group, such as family and friends, then when speaking to a less significant group, such as strangers. Other research has found that the influence of fear of isolation varies depending on the nature of the problem being discussed. Willingness to express opinions varies depending on whether the issue is obtrusive or not, as well as if it is long-lasting, transitory, or emergent (Matthes et al.,2018). When individuals attach themselves to an issue, their thoughts and facts mingle, and the problem is amended, negotiated, or extremized as a result of interactions both inside the same side and between different sides (Kim et al., 2019). Whereas exposure refers to audiences' encounters with certain messages, message classes, or media content. The term "exposure" refers to just coming into contact with communications. Other variables such as involvement with the issue or prior knowledge that may predict attention to the message's substance are also employed as part of exposure. Any possibility for a listener, viewer, or reader to hear or see a message in a certain medium is also referred to as media exposure. However, Individuals' exposure to

diverse messages from numerous media platforms and sources has made measuring

media exposure more difficult in today's media world (Idid et al., 2019).

In the spiral of silence process, the media is also considered to play an important

part. (Noelle-Neumann, 1974, Noelle-Neumann, 1977; Shanahan et al., 2004) clarified

that only when they reinforce a clear consonant perception of a topic can the media create

a spiral of silence. However, where multiple views are similarly present in the media," all

proponents and opponents of a problem can find mainstream sympathy for their own

positions and should not therefore be prevented from sharing their opinions '(Kim, 2004).

The media will set the national agenda (McCombs & Shaw, 1972; Wanta & Ghanem,

2007), and evidence shows that the media can affect the public's views of the climate of

opinion (Eveland, McLeod, & Signorielli, 1995; Shamir, 1997; Shanahan, 2004).

Therefore, if the media offers a consistent view of a contentious topic, this could cause

the audience to perceive that the view is often shared by others.

In recent years, public opinion and information in democratic society constructs

political activities (Huang et al., 2021) and brings social change (David, 2022). The news

media and public opinion have long been inextricably linked. With the advent of mass

media, it became easier than ever for people to become aware of the views of others in

their demographic (Beckers, 2020). In one of their research, Huang et al. (2021) argue

that public opinion formation origins from states and institutions and then is transmitted

into media organizations and agencies which in turn indulge citizens in the process.

Media exposure and usage impacted the dynamics of public opinion. (David, 2022;

Neubaum & Krämer, 2016). Moreover, significant proportions of respondents' views on

contentious topics and issues are consistent with those of the media outlets from which

they acquire information. (Roncarolo & Mancini, 2018). It has become the point of how journalists work in societies. However, media is the single source for both elites and citizens to learn about public opinion. On one hand, political elites use public opinion to validate and align their policies with what the public wants. An integrated study of public opinion depictions will also give a better grasp of the variety of opinions covered in the news media. (Beckers & Moy, 2021). Journalists' public opinion portraits are intended to inform citizens about what the rest of their population thinks about issues. Some depict the majority opinion such as public polls, but also general inferences about the majority viewpoint, whereas others are used primarily to depict the various opinions present in the population for example, references to protests or, occasionally, media interviews with the general public. Media depictions of public opinion are generally always socially created and restricted by the methods utilized and the journalists who interpret them (Beckers, 2020).

In addition, the principle of SOS has been extended as social media has developed new venues for political dialogue and interaction. In one of their studies, Dijck and Poell (2013) argue that social media, because of technological advancement and the digital information revolution, has become a significant contributor to the creation of an individual's mentality in society as well as the molding of public opinion in society. As a result, once it became a foremost media outlet for news and information seeking and dissemination, the aforesaid means we're capable of enticing a significant number of more sophisticated groups particularly after it played a key role in distributing the news, influencing the feelings of the masses and forming public opinion. Users on social media can analyze how people react to a dilemma by reviewing the number of tweets, shares,

interactions, or related posts; social media offers spaces for individuals to gauge common public sentiment. Therefore, some earlier studies postulated that online communities can become more carefree environments than offline spaces where individuals can share their views with less fear of isolation (Yun & Park, 2011). An analysis found that the continuity of public opinion can be a significant indicator of opinion on the topic of gay bullying (Gearhart & Zhang, 2013). Social media is the most significant source of intelligence at present, and other media often tend to track the social media problems and developments under consideration.

Nowadays, social media play an important part in informing public (Kozitsina, 2021) about the opinion prevailing in the news media. The repeated exposure and dissemination of a subject gets it out of obscurity and into the sphere where the citizen lives, compelling their mind to think, express an opinion, and interact with it. Local regional or global public opinions can be changed effectively by repeatedly exposing public to a certain subject via social media (Shiyab & Geraghty, 2021). All allusions to public opinion made through social media are considered social media references. Journalists may now measure and reflect popular opinion via social media. Journalists are increasingly using social media to report on not only horse racing coverage, but also citizen reactions to events and politicians (Beckers & Moy, 2021). Social media platforms like Twitter and Facebook make it easier than ever for citizens to express themselves and for others to access them. Along with increasing options for citizens to communicate directly with elites, it also expands opportunities for media to report on citizen viewpoints. Social media references to public opinion overlap with the other

representations to some extent; "outrage on Twitter" is analogous to traditional conclusions.

Online media has offered people with alternate channels for expressing their thoughts while avoiding the tight social constraints of offline settings (Al-Kandari et al., 2022). Several characteristics of computer-mediated environments complicate the claims and assumptions of the SOS theory. For example, anonymity may make people more willing to speak up. On the other hand, because people are more uncertain about the majority opinion inside these networks, the social connections enabled among different audiences may make them more prone to self-censor political communication (Fox & Holt, 2018). As it has helped conversion of audiences from receiver to active participants of message creation process as it thought to be a connection between societal mechanisms and state institutions (Shiyab & Geraghty, 2021).

Other research has found that the influence of fear of isolation varies depending on the nature of the problem being discussed. Willingness to express opinions differs depending on whether the issue is obtrusive or not, as well as if it is long-lasting, transitory, or emergent (Matthes et al., 2018). According to Kim et al. (2019) Online attitudes tend to be more polarized than traditional ones. This polarization thesis is supported by two theoretical arguments. For starters, people on the internet actively expose themselves to homogeneous viewpoints while avoiding varied ones. Second, the public is fragmented as a result of this homophile's sorting. As a result, members inside a fractured group strengthen their views, which eventually grow more radical than before. The competitiveness of discourse in the public opinion process represents how publics compete in a society. In this sense, assessing which side of an issue's perspective

becomes dominant indicates which part of the public wields discursive power, so exerting political will on society. As a result, the influence of closely linked opinions are more than the one which is not closely linked throughout the process.

In the past decade, studies have advocated for a mechanism in which individuals infer public sentiment from their impressions of general media bias and from the perceived impact of media reports, dubbed " persuasive press inference " (Gunther, 1998). Three basic propositions back the concept. First, individuals appear to deduce general news content from the news reports they are subjected to. People judge general news reporting to be slanted in one way or another depending on the limited amount of news reports they see. Second, individuals conclude that slanted news coverage has a wide spectrum that reaches most other individuals. Third, people perceive press reports to have a big persuasive impact on others' views and beliefs. As a result, people appear to assume an atmosphere of public opinion that not only expresses their own personal values i.e., prediction influence, (Field & Schuman, 1976; Christen & Gunther, 2003) but also their general news material experiences. The views of popular opinion in the public opinion process can be split into perceptions of the present environment of opinion and perceptions of potential developments of opinion.

2.4. Perceived Climate of Opinion

Noelle-Neumann (1974) discusses public sentiment and the perceived climate of opinion in the theory of SOS. She described public opinion as views on contentious topics that without fear of alienation can be openly shared. Since public opinion is seen as a general opinion reshaped by the interpretation of the climate of opinion (Noelle-Neumann, 1974), the shift in public opinion is attributed to people's perception process

and their opinions impact their willingness to speak out (Taylor, 1982). People respond carefully to their social environment, according to the SOS theory, where they get clues (lack of disapproving expressions) about the prevailing climate of opinion and determine whether to speak up for their opinion (Noelle-Neumann, 1977; Nekmat & Gonzenbach, 2013). Taylor (1982) identified four variables implicit in the theory, which are a) one's opinion on a subject, (b) one's view of the prevailing public opinion, (c) one's estimation of the probable future pattern of public opinion, and (d) one's willingness to express opinion.

In their research, Moy and Scheufele (2000) summarized that the perception of reality by people is created by their surveillance of the world of view, and this observation includes interpersonal conversation, media attention or direct observation of their environment. The theory has been evaluated in several contexts on the basis of these theoretical foundations showing that the expression of thoughts by people is important for debate and political participation (Valenzuela et al., 2011). We will first discuss perceived public opinion through interpersonal communication and then examine media effects and opinion expression.

Numerous studies adopted the SOS concept on political issues that are vulnerable and polarized (Fox & Holt, 2018). For example, in the sense of national dialogue on affirmative action policies a study validated the hypothesis that fear of isolation prohibits people from speaking out when they experience inconsistency with their view of peers or families (Moy et al., 2001). Glynn and McLeod (1984) found expectations of election results (such as seeing one's position as receiving support) affected the ability of people to speak about or demonstrate their preference for a candidate.

Perceptions of the present climate of opinion correspond to the rough expectations of the relative proportion held by contending views, whereas perceptions of potential developments of opinion refer to the assumptions of individuals as to what the dominant view will be in the future (Petric & Pinter, 2002; Taylor, 1982). Previous surveys of convincing press inference show that people not only predict public sentiment based on the news slant they also expect public opinion to shift in the course of the news slant (Gunther, 1998; Gunther & Christen, 1999). It is fair to assume that the existing opinion circulation forecasts of people and their projections of potential opinion patterns will lead to their individual news coverage impressions. In his research, Kim (2004) investigated the notion that mass media can play a function as a source of knowledge on which people evaluate evidence and discovered that respondents who perceived favorable media attention continued to see public sentiment as a policy supporter whereas negative public sentiment was most likely to be inferred by people who considered unfavorable news.

Neumann (1984) stated that there are two primary reasons for our quasi-statistical sense, or our ability to track the spread of opinions: the interpersonal atmosphere and the mass media. Noelle-Neumann clarified the claim that the media manipulate public opinion views in terms of media reliance (Neumann, 1974; Mutz, 1998). Individuals rely heavily on media outlets while compiling public sentiment in a mass culture in which person to person connections no longer coordinate political existence. "Noelle-Neumann did not explain in depth the psychological process by which news influence's opinion attitudes, but she concluded that it is not simply opinion polls that shape climate-of-opinion perceptions, but also indicators such as" camera angles "or" crowd reactions (Neumann 1984), which imply the spreading of opinion in society to viewers.

2.5. News Channel Reliance and Opinion Formation

Media reliance can be defined as a connection in which one's ability to meet needs or achieve goals is dependent on the information resources or the media system. In addition to that, the credibility of media is directly proportional to its reliance and thus paving the way for greater exposure. It is therefore concluded that media reliance is deeply intertwined with media exposure. As the effects of a medium's exposure are amplified by relying on that media/medium for political information. Since, exposure depends on the frequency of using certain mediums for information, while reliance is relying upon a certain medium for information on specific issue (Zhao, 2015). People grow reliant on the media to gather information since the media controls access to a wide range of information. As, the acknowledged credibility of the media is considered to be related to reliance on the media (Idid et al., 2019). When audience members believe a particular medium is extremely reputable, they will rely on it for information based on their inclination towards that medium (Rousseau, 2022). If the media is credible, it will be used and relied on more frequently and being reliant on a media actually effect on their political and social participation including their willingness to share out their opinion in public.

Likewise, people like to select and respond to the media messages they find consistent with their existing attitudes and ideas. This, in turn, will pave the path for more audience exposure to that media. In addition to that individuals' perceptions of media credibility influence their reliance on media, and hence credibility is generated from media dependence. Moreover, the concept of media dependence describes how people acquire a reliance on specific channels to meet their communication demands. According

to prior study, people rely more on the digital news media, particularly information-rich news sources, for getting political knowledge as it is a supplement of traditional sources (Chan & Leung, 2005; Idid et al., 2019; Rousseau, 2022; Salaudeen & Onyechi, 2020; Zhang & Guo, 2021). Further, in recent times, new media may hypothetically offer the public an infinite amount of current information that is available when the public wants it, much of it in raw form and unprocessed by journalists. Those who are already interested in politics are turning to the internet for more detailed information than television can provide.

To explain media use or exposure and its impact on society one must accept the media's credibility (Idid et al., 2019). In addition to this, media exposure is directly linked with audiences' trust on media content. Prior to the advent of digital media, research on this topic revealed that demographic factors such as age, gender, education and media literacy influence media credibility perception. With the emergence of digital media, public perception of media trustworthiness has been influenced by elements such as interpersonal conversation, media use, media exposure (Zhao, 2015), political ideology and partisanship and religious predisposition. Moreover, this increased media exposure has accidentally raised audience awareness of the nature and qualities of the media, which has influenced their opinions of the media. In multiple studies participants has expressed their concerns of owners' bias and a lack of press freedom in regards to mainstream media, also inaccuracy and a lack of professional standards were cited as flaws in digital media (Salaudeen & Onyechi, 2020; Apejoye, 2015).

The ownership arrangement of mass media industry in the country has been ascribed to mass media credibility. On the one hand, government-controlled media are

viewed as propaganda tools, while privately held media are thought to be working to serve the interests of their owners (Apejoye, 2015). However, people tend to trust privately owned media channels or sources as government owned channels are regarded as the government's mouthpiece. However, people perceive social media platforms as more credible source for entertainment information and knowledge gain because of the participatory aspect of it while considering traditional media as a reliable source for stern news and issues prevailing in the country. Consequently, people who rely more on traditional medium tend to perceive the congruent opinion shared through the medium as the dominant ideology of public dynamics are more willing to speak out publicly. However, the more individuals rely on the Internet for information and opinions, the more willing they are to express themselves online, but not necessarily offline. Internet use did not predict opinion expression in a public seminar, most likely because respondents are fearful of having their names revealed (Zhao, 2015).

In accordance with Apejoye (2015), people tend to expose themselves to different media after exposing their favorite media choice in order to determine the authenticity and veracity of a news item. However, audience's reliance on various media forms for a certain topic may have varying consequences on their perceptions of that issue and engagement in activities related to that particular issue (Zhao, 2015). According to Jenn M. Jackson (2019), "Cross-media sources" provide traditional news outlets with a path into the 24-hour news cycle. The use of both traditional and internet information sources appears to be a better indicator of credibility. The reliance on conventional media predicted better credibility for online newspapers and television than their online counterparts (Salaudeen & Onyechi, 2020). But the use of traditional and online media is

thought to be a better predictor of the credibility of both mainstream and digital sources.

Both venues have the potential to bring contentious societal topics and opinions to the

public's attention. (Idid et al., 2019; Salaudeen & Onyechi, 2020; Zhang & Guo, 2021).

2.6. News Channels and Political Affiliation

The most critical aspect that guides the assumed legitimacy of the news channels

is its relationship with the people and their political affiliation. Audiences find those

outlets trustworthy that serve their political views. Lee (2010) points out to the U.S.

public that the entire legitimacy of the news outlets is focused purely on the fact that the

outlet reports the politics of the moment. If the new channel meets the public's instincts

on the political topic it is covering, it eventually ends up as a trustworthy and reliable

source of news. The researcher took up the nationwide review of the American audiences

and standards of reputation to figure out this. Consequently, the analysis proved the

theory that the U.S. audience on the overall news channel was distrustful merely because

they did not perceive the reporting of political issues as an impartial and a fair one.

However, Morris (2007) observed that the media's reputation is viewed negatively by

diverse viewers. Based on their political arrangements, they do so. The study took the

secondary review approach and obtained information from the Pew Research Center

(2004). The analysis based on American news media and examined how and what they

felt about the assigned news source was decided by the viewers' already holding political

attitudes. The analysis concluded that not only did the viewers of Fox News Channels

view this channel as a biased way, but also had a different position on the country's

politics relative to the other public.

The media has the potential to shape the political views and opinions of people by focusing on specific topics (Chandrappa, 2014). Gerber et al. (2009) discovered that media attention tends to impact voting behavior. If more media networks implement a narrowcasting approach, it is likely that the number of situations where voters are likely to have firm prior views about ideological outlet orientation will rise (Baum & Gussin 2005). When reporting political campaigns, the media highlights those topics and frame events in various ways that inevitably influence the political views and behaviors of voters (Druckman & Parkin, 2005). Safdar, et al (2015) found that the media played a major role in increasing the participation of voters in Pakistan's 2013 general elections.

In order to investigate why the demand for the news correlates with the amount of sympathy the viewer has for the news networks, Iyengar and Hahn (2009) did cross-sectional research. The study concluded that conservatives and republicans considered FOX News to be more reliable relative to CNN and NPR and relied on it for nearly all sorts of news, with the help of analyzing different communities. This is so because in their minds they form the impressions of certain channels as trustworthy. Their value system or their political dispositions are at the back of it, driving these perceptions. The political affiliation recommended by Iyengar and Hahn (2009) plays an important role in the creation of the provisions and opinions of a given news. Different news channels in Pakistan are associated with different political parties and serve their narrative, which essentially helps create a common atmosphere of opinion for the viewers of that channel against that specific political party.

2.7. New Media Environment and Spiral of Silence- Threats and Opportunities

Communication technology advancements have significantly altered and evolved in how audiences can participate in a public dialogue. People are increasingly consuming news about public affairs online, and traditionally passive and disengaged audiences of traditional mass media are gradually becoming Internet users who actively participate in public dialogue and interact with others (Eilders & Porten-Cheé, 2022). Moreover, persons' views of the ideas of other opinions impact their expressive behaviors and personal opinions, which directly impact public opinion. According to SOS theory, people continuously analyze their social surroundings and environment and adhere to public opinion due to a fear of social isolation. So, in a digital context, public opinion is inferred through the comments users make under the news articles, which has an impact on audiences' opinion expressions. This trend suggests that user-generated responses may be useful indications for individuals who desire to understand other users' viewpoints and, as a result, which opinion may be more often accepted (Neubaum & Krämer, 2016). Jörg, Johannes and Christian (2017) have emphasized on the fact that people's perception of public opinion affects their willingness to speak out their opinion in public even in the context of online settings. It is therefore considered as one of the key assumptions of SOS theory (Fox & Holt, 2018).

Wu (2021) explains opinion expression as an obvious form of self-presentation. Users can utilize social media platforms to share information, discuss concerns, understand and learn about issues like civic and political. In this way, social media platforms aid in the creation of a safe space for people to express themselves, which adds to a more democratic process. However, social media platforms empower

governments and institutions with new mechanisms for social monitoring and
surveillance. Because of the prevalence of surveillance from government, people's
willingness to speak up may be limited on social media platforms (Oz & Yanik, 2022).
Noelle- Neumann (1974) is of view that audiences' observe opinion climate in order to
verify whether their perception of opinions is aligned with majority opinion climate, and
if it is not in accordance with majority opinion, will most probably result to minority
opinions being self-censored out of a sense of isolation (Fox & Holt, 2018). People's
willingness to self-censor is a demonstration of their disposition to recede from
presenting and expressing their views and beliefs to fear over conflicts and differences in
their social encounters. Wu (2021) points out, that social anxiety, self-presentation, and
social avoidance as the major elements that inspire a self-purpose censor to prohibit
opinion expression. Social media's influence on public opinion was evident due to its
constant presentation, re-publication, and emphasis on societal issues (Shiyab &
Geraghty, 2021).

2.8. Willingness to Speak Out

Opinion expression is a low-barrier, high-prevalence type of political participation
that both expresses and contributes to the formulation of personal and societal opinions.
Additionally, as a key element in the "spiral of silence," it flows back into views of the
climate of opinion. "Willingness to speak up," which exclusively includes public
behavior, is one particularly well-known and significant idea (Geißa et al., 2021). The
most important principle and the central dependent variable of the SOS theory is the
ability to share an opinion. Previous researchers have disclosed when the viewpoint is
common, individuals appear to speak and share that opinion. Noelle-Neumann's spiral of

silence theory offers the most important reason for the connection between views of

public sentiment and expression of opinion (1993). The spiral of the silence theory starts

with the belief that public opinion plays the position of a " public eye " unmanifested that

exerts pressure on people to adhere. Fearful of being socially alienated, people are using

their " quasi-statistical sense " to determine public opinion's present and future

environment. They are courageous and able to share their views if people feel that their

own opinions are compatible with the voice of the majority or with the popular view (Fox

& Holt, 2018). In the other hand, once people find out their views are in the minority or

are losing ground, they feel confused and stop openly voicing their opinions (Noelle-

Neumann, 1993).

There are several aspects that impact the ability of individuals to voice an opinion.

One of the key reasons is an individual character who also plays a major role in the desire

to speak out. In his study on the effect of identity on the Spiral of Silence process, Nam

(2000) analyzed two personality systems: independent/interdependent, self-constructive

and right-wing authoritarian personality to see how they affect an individual's capacity to

speak out. Three issues which were defined as especially controversial in the preliminary

study were included in the final sample: abortion, affirmative action, and capital

punishment. The study results showed that individuals' autonomous self-construction had

a positive effect on their desire to speak out on matters like abortion and capital

punishment but not on affirmative action. Significant correlations between individual

self-construction and hard coarseness have been identified on all three issues. The

beneficial correlation between authoritarian personality and hard coarseness was also

identified for the issues of affirmative action and capital punishment.

In relation to two contentious topics: interracial marriage and gay rights, Willnat, et al. (2002) have tested the spiral of silence theory in Singapore. For the topic of inter-racial marriage, they struggled to see any connection between viewpoint consistency and outspokenness. For gay rights, potential congruence of thought tended to be favorably related to outspokenness, which aligned with the silence spiral. In spite of that, outspokenness was also observed in the environments with low opinion congruency. In addition, Chia (2013) showed that the spiral of silence theory is partly validated by their research. They did not find reasons to suggest that existing opinion accuracy is correlated with the ability of people to share opinions. However, future congruence of opinion was favorably correlated with the ability of individuals to share views in public. One possible reason might reside in expectations: assuming that the majority will actually agree with them makes people more confidence in what they will now talk about. As future victory, in this case, future support for one's opinion seems guaranteed, as Taylor (1982) argued, individuals do not appear to take social alienation seriously in voicing their beliefs.

In comparison, Glynn and McLeod (1984) and Willnats (1995) showed that when they saw a trend of support for their views, non-hardcore individuals were more likely to voice their point of view than hardcore individuals. The degree of mistrust of the socially marginalized was also negatively related to views being shared. In short people who were more likely to fear being isolated were less likely to share their opinions.

Researchers have revealed that people tend to speak and express their opinion when their opinion is popular and media play an important role in making the climate of popular opinion. Glynn and McLeod (1984) researched the willingness of people to express their views on candidates during the U.S. Presidential election in 1980. They

evaluated both the expectation of the result of the vote by the voters and their real voting

behavior. Participants were divided into three groups: hardcore, no hardcore, and leaners.

The findings found that both classes of participants were much more likely to share their

views in a coherent political debate than in a non-congruent one. Furthermore,

respondents who found a candidate to be a winner continued to show a preference for that

candidate. The assumptions of participants regarding their voting performance impacted

both voting intentions and real results. Instead, the idea that one's opinion was

disseminating somewhat promptly was positively correlated with the inclination to speak

up (Cavazzaa & Roccatob, 2021).

However, Willnat (1995) explored the ability of participants to share their

political views about the political future of Hong Kong. Willnat researched the ability of

people to share their views on the topics of Sino-British political disagreement and the

election of the Legislative Council in Hong Kong in 1995. Participants were more likely

to voice their political viewpoint, consistent with the spiral of silence theory, when they

considered their views to be the majority opinion and believed their views to be

supported (Willnat, 1995). Moreover, McDonald et al. (2001) carried out a secondary

study of the 1948 Presidential election by using the data gathered in Elmira, New York,

to investigate the spiral of silence theory. In the spiral of silence, they learned many

topics such as opinion communication, social alienation, opinion setting, and hardcore

people. The studies have generally supported the spiral of ideas of silence. Glynn and

McLeod (1984) and Willnats (1995) observed that, non-hardcore people were more likely

to voice their viewpoint when they saw a pattern of support for their views than hardcore

people. The degree of distrust of the socially excluded was also adversely associated with the voicing of opinions.

In short, it was less probable for people who were more likely to risk being alone to voice their views. In the context of prevailing COVID 19 pandemic, public health campaigns, urging people to follow COVID-19 preventive measures, has become the most discussed topic and have caused controversy among the general public. As political philosophies influenced attitudes regarding COVID-19 preventative behaviors, public reactions became more divisive. Dam et al., (2021), consequently, reported that the technologies for better gear for this unbreakable relationship between healthcare and politics is social media. However, this platform serves as the means for exposing people with circulating misinformation on the said topic. People may feel alone while expressing their thoughts on a divisive public health issue due to polarizing societal attitudes and inconsistent compliance with COVID-19 preventive measures. Additionally, a person's perspective of difficult circumstances can have an impact on how they express their opinions. Additionally, the use of preventive behaviors is a moral decision because COVID-19 preventative measures, such as social isolation, can stop the virus from spreading to other people. The incentives for practicing were positively correlated with moral judgement. However, people often hid their symptoms (such as breathlessness, fever, and a dry cough), and at least one-fourth of the participants lied about their symptoms. This emphasizes the requirement to investigate how moral opinions are expressed in the setting of politicized health crises. Particularly, because COVID-19 encourages physical quarantine, people may be less likely to voice unfavorable beliefs out of fear of isolation on psychological as a result.

As Noelle-Neumann (1974) said that people's propensity to voice their thoughts in public depends on how they think the public feels about a particular subject as per the SOS theory. Consequently, opinion expression managing strategies are used even the perceived climate of opinion is aligned with individual's opinion, individuals will be more expected to express their opinion. While, on the other hand, opinion expression avoidance tactics increased in a substantial way when there was an unfavorable opinion environment as individuals avoid and refrain from expressing their opinions. Lee et al. (2014) analyzes the relationship between opinion expression management and avoidance on debatable issues like global pandemic. The findings say that both expressing and holding back opinions were highly impacted by fear of isolation.

Similarly, with regard to a contentious topic (abortion), SoS with alternative news discussions revealed that people were more inclined to voice their views when they had a greater sense of anonymity online (Wu, Xu, & Atkin, 2020). Whereas, anonymity refers to people who can have nicknames or at least do not use their real name to convince their online behaviors. Studies on SOS using anonymity in online setting has provided with mixed results (Liu & Fahmy, 2011; Porten-Cheé & Eilders, 2015; Yun & Park, 2011). Yun and Park (2011) compared the willingness of anonymous and non-anonymous participants to comment on abortion which is a contentious topic. They concluded that people who shared their opinions using personal information (non-anonymous) were more willing to discuss the topic as compared to anonymous people who gave up after single comment. Online anonymity and the absence of social cues, according to research conducted in the West, make it more likely that people will voice their thoughts. Due to these features of the online environment, people can avoid

intimidating other people and uncomfortable social circumstances (Al-Kandari et al., 2022).

Dam and his colleagues (2021) reported that positive correlations were found between participating in COVID-19 opinion expressions and better participation levels and problem awareness, though the avoidance of expressing a viewpoint is increased at higher degrees of constraint awareness. Moreover, by including situational principles, SoS helps to further understand why people choose to "speak out" about certain controversial topics. Thus, it would seem that the connection between the fear of isolation and the expressing of opinions is influenced not merely by kind of interaction (online vs. face-to-face), as well as by level of engagement and awareness of the issue among the individuals (Damet al., 2021). So conclusively, the researchers emphasize the importance of literacy initiatives in the context of a divisive health issue that is impacting all demographics in order to provide them the means to voice up.

2.9. Offline Versus Online Opinion Expression

The spiral of silence, in its initial conception, is a philosophy that attempts to forecast the views conveyed in face-to-face environments. However more recently researchers have started to investigate the relation between the environment of opinion and the expression of opinion in online environments (Ho & McLeod, 2008;) or in social media (Gearhart & Zhang, 2014). They have contrasted anonymous and non-anonymous online settings (Yun & Park, 2011). The position of online environments is far from known, although most studies have suggested that the spiral of silence can still operate in the online world. There are two contrasting scientific opinions (Metzger, 2009).

On the one hand, the influence of the atmosphere of opinion on the inclination of individuals to report their views can be lowered online than offline (Ho & McLeod, 2008). The online world allows for a vast range of viewpoints, and viewpoint support compared to offline venues can be more readily found by people of dissenting views. By the same time, people may simply self-select content that agrees with their opinions, so most pressures might be poor. Unpopular views can be easily articulated, particularly in anonymous online contexts, without placing personal relationships at stake, as is the case in interpersonal contact (Matthes, 2013; Mutz, 2002). Similarly, most of the online views are conveyed via email, while nonverbal contact is often used in offline interpersonal conversations. It may be argued that nonverbal comments are interpreted as an additional signal that unique viewpoints are unwelcome and thereby ostracized. In contrast, the online world provides fewer social metrics and is thus less daunting when voicing views (Ho & McLeod, 2008). All this means that online, the spiral of silence is slower than offline.

On the other hand, the lines between online and offline contact are constantly blurred, one might say (Pang, 2016). Individuals can go back and forth online and offline between talking to their social contacts. Facebook contacts, for example, are mostly focused on existing interactions in the real world (Pang ,2016). In addition, research within the framework of online ostracism have consistently shown that online ignorance or rejection will pose a significant threat to our desire for identity, equivalent to our fear of being socially excluded (Williams & Nida, 2011). Political orientations are frequently not revealed on social network websites (Wu et al., 2020), as Metzger (2009) has reported, because consumers may risk losing a friend or professional contact. All of this

indicates that before sharing views publicly, the apprehension of not getting a majority

position is also a possible concern (Pang, 2016). Al-Kandari et al. (2022) has reported in

their study that women's expression of opinion was more influenced by causes of fear

offline than online. Online environment is more beneficial to women as compared to

offline settings. Women's ability to voice their opinions in online environments was

influenced by their fear of mockery, but their fear of being stigmatized and

communication anxiety disappeared. These are positive findings that show women can

use online media as an alternative form of expression. Compared to stressful and

constrictive offline environments, it can substantially liberate them and provide them

with a greater sense of speaking freedom (Al-Kandari et al., 2022).

2.10. Nature of Issue and Spiral of Silence

The spiral of silence theory explores public conversation on morally questionable

or value-laden topics (Neumann, 1993; Scheufele, 2007; Scheufele, 2007). These topics

have potential to threat alienation. Otherwise, there is no pressure from public opinion

and therefore no spiral of silence" (Neumann, 1993). Using a number of contentious

topics, current literature has tested the theory. In the same research, however few

experiments test several issues, and little academic attention has been paid to how the

existence of issues impacts the spiral of silence processes.

Yeric and Todd (1989) described three types of issues based on their relative

stability in public spheres. These include enduring issues, evolving issues and transitory

issues. Enduring issues are stable and exist in the spotlight for a prolonged time; evolving

issues are fresh to the mainstream but can remain in the spotlight and become enduring

issues; and transitory issues do not occupy public's mind for too long but come back in

recurrent manner. The present study examines controversial issues (armed forces influence in democratic system) and relationship between use of public affairs media by audience members and public opinion in society on national issues.

According to the spiral of silence idea, media depictions of contentious social topics might act as a gauge for audience opinions (Lin & Salwen, 1997). For contentious social topics, the specifics of the relationships between elite media attitude and the general public's opinion may differ. For instance, we see that The New York Times frequently features favorable coverage of globalization, yet the fact that Donald J. Trump was elected president in 2016 indicates that not all Americans share this opinion (Huang et al., 2021).

2.11. Issue Characteristics

2.11.1. Issue Importance

All societies and cultures around the world have their own unique dynamics, so something that can be contentious in one might seem resolved or unimportant in another. For example, divergent viewpoints regarding the morality of homosexuality and the usage of the term "gay" as a stigma led to intense feelings and tensions within the societies. In the case of military involvement in political affairs and Covid 19 vaccination, as the definition of a controversial subject is one that "problems which provoke strong feelings and split communities and societies." It is based on the cognitive parameter and has the potential to be too accepting (Hammer, 2021). However, the presentation of issues like military involvement in politics and COVID 19 vaccination in media is crucially important in shaping public opinion (Jackson, 2019).

Likewise, mass shootings are frequently covered in the US mainstream media, which not only draws attention to them but also affects how we perceive them and how we talk about preventing them. News audiences do not, however, automatically accept messages from the media, even though news frames might draw the audience's attention to "a particular issue to be rectified by particular means." Instead, people actively form opinions by comparing them to their own experiences or viewing them through the prism of their core beliefs and sense of self (Zhang & Lin, 2022). However, when people find that news coverage of controversial topics, particularly those related to politics, and that it contradicts their predilections and beliefs, they tend to discuss them more frequently and actively participate in opinion sharing/expressing activities. This perception of media biasness decreases political engagement and fosters mistrust of news campaigns (Zhang & Lin, 2022).

2.11.2. Issue Obtrusiveness

Issue obtrusiveness is one of the variables studied in the spiral of silence literature. Winter (1981) defined it as degree of one's own experience with the issue. Because people have more knowledge of the issues with which they have their personal experience, they rely less on news media thus reducing the effect media may have on their opinion. In contrast to the issues with people do not have much experience and lesser knowledge, media is their only source of information. So, in such cases impact of media in framing their opinion is much more visible. Willnat and colleagues (2002) explains it in terms of opinion expression in following words, "those who consider an issue more important or are more interested in public affairs in general, might be more willing to discuss these issues in public, even when faced with an opposing majority". It

is evident that obtrusiveness of an issue is a stronger predictor of spiral of silence (Mathhes et al., 2018) suggesting that fear of isolation for holding minority opinion is closely linked with issues related to daily life of majority people. Eventually, according to Noelle-Neumann (1974), everyone has a strong fear of being alone. People are compelled by this dread to pay great attention to their immediate environment and weigh the general consensus on contentious issues before expressing their own views (Cavazzaa & Roccatob, 2021).

In addition to this, Noelle-Neumann (1993), argues that SOS is only initiated when the topics under debate are contentious, have a moral component, or involve concerns with strong values. For instance, hazing in Portuguese institutions, views on smoking or laws pertaining to abortion. Because public opinion asserts its threat of isolation from this normative or moral element, people in this situation tend to grow increasingly uneasy and disturbed. Some people speak up even when they feel like they are in a minority, despite the fact that most people are sensitive to their social environment and tend to examine the climate of opinion, the overall distribution of viewpoints on a certain issue, and its tendencies in order to not get isolated. These groups were described as hardcore and avant-garde by Noelle-Neumann in 1993.

Alexandre and Aguiar-Conraria (2021) confirm that through the results of their study, students who pay greater attention to the news are more likely to participate in conversations, express their actual beliefs, and rely less on avoidance methods that explicitly cited the impact of the media on students. However, the likelihood of students pursuing engagement communication tactics is lower when they feel themselves to be different from the majority. The SOS theory's most extensively studied implication is the

perceived incongruence, which refers to the discrepancy between an individual's perspective and how they perceive the unanimous opinion. So conclusively obtrusiveness of issue being in the public discussion highly inclined towards creating spiral.

2.12. Consonance in Media

Noelle-Neumann (1973) notion of consonance is part of the explanation for the clear potential of the media to influence the views of opinion forming. According to Scheufele (2008), "consonance refers to the tendency of multiple media sources to homogeneously present controversial issues". Katz (1983) argued that studies on spiral-of-silence implies that "the newspapers prefer to communicate in one accent." Getting trapped by a monopoly and pervasive media system lets the population dependent highly on the media as an expression of political opinion results (Salmon & Glynn, 1996). According to the spiral-of-silence theory, the harmonic portrayal of the opinion environment in mass media reinforces media impact "as it eliminates the willingness of audience participants to deliberately expose oneself only to media messages that are compatible with their own opinions" (Scheufele, 2008).

2.13. Demographics Factors Affecting Opinion Formation and Spiral of Silence

Noelle-Neumann (1974) has found evidence that demographic factors may be important markers when determining those who are likely to speak out such as education status, urban vs. rural populations, family wealth, and age. Her results reveal "that men, young people, better educated people and those belonging to the higher social strata tend to speak out more politically" (Lasorsa, 1991). In order to accurately assess public opinion, Glynn and McLeod (1985) claimed that it is necessary to monitor certain

demographic variables; this may be a constraint on most studies in public opinion. The smaller the group, the less likely anyone is to speak up about what is considered to be a controversial opinion, Salmon and Oshagan (1988) found; they said that "larger communities are characterized by greater diversity of viewpoints by their nature." Proof may be found that by voicing their views against the majority viewpoint, people from smaller groups can experience a greater sense of distress (Salmon & Oshagan, 1988).

As a big indicator of silence, gender has also been examined. "Fassinger (1995) found male students to be more optimistic and active while assessing classroom engagement by different genders. While female students were more prepared for class, more engaging in the subject matter and more interested in the comments and questions of peers." Both genders have identifiers that would encourage them to participate in classroom debate willingly, yet they have reasons to not speak. "Women are much more likely to say that their silence is due to poorly formulated ideas, ignorance of a topic, and fear that peers will appear unintelligent" (Fassinger, 1995). On the other hand, young men feel inexperienced and dreaded for classroom events, not inherently social alienation, but a fear of having a bad score (Fassinger, 1995).

Literature on the gender being the major indicator of difference between women and men expressing their opinion pointed out two major school of thoughts. First one argues that the cultural distinctions that link feminine duties to sensitivity and consideration of others' feelings and opinions while linking male roles to speaking up, being aggressive, and forcefulness. While according to a different school of thought, gender disparities in opinion expression are caused by genetic variations in cognitions and styles of existence. In this regard, men believe that rivalry, disagreement, and

influencing other people's beliefs and behaviors are of utmost relevance. While women

place a higher emphasis on group cohesiveness and consistency. Gender difference of

opinion expression in offline setting, with the exception of a few differences, most

notably the expressiveness level, personal support for the subject, and insights of future

opinion climates, is similar for both genders, particularly in the case of the standing of

religion and fear of social isolation. On the other hand, opinion expression outcomes

highlighted more variation amongst men and women (Al-Kandari et al., 2022).

2.14. Psychographic Factors Affecting Opinion Formation and Spiral of Silence.

2.14.1. Communication Apprehension

Both a quality and a state of being include communication apprehension. A

generally persistent personality-type bias towards a specific style of communication over

a wide range of settings is what communication apprehension is defined as a trait.

Whereas communication apprehension as a state is where an individual feel fearful when

communicating with a particular person or group of people in one setting but not in

another, which is known as an ephemeral orientation toward communication

(McCroskey, 1977). Alexandre and Aguiar-Conraria (2021) and Ho & Mcleod (2008)

found negative relationship between communication apprehension and opinion

expression in context of controversial issues. Other researchers also found the same

relationship in other contexts as well (Neuwirth et al., 2004; Willnat et al., 2002).

In light of this, individuals may feel nervous when speaking in front of a group or

in front of others in a variety of communicative language contexts, such as group

meetings or public forums and face to face communications. The four distinct but related

categories of apprehension that McCroskey (1982) identified to account for these various

communication contexts are, generalized-context, trait-like, situational, and person-group. These categories consider personal traits (such as personality traits, personal characteristics), audiences (such as professors, and peers), and contexts (such as speaking in public, small-group discussions, speaking in meetings or classroom settings and speaking in dyadic interactions) that are linked to anxiety about communicating. Communication channel or medium have an impact on communication apprehensions experienced by an individual. Ledford, et al. (2022) suggest that students in online classes experience apprehensions including anxiety alongside media channels and communication diversity.

2.14.2. Attitude Certainty

An individual's confidence upon his or her attitude is termed as attitude certainty (Krosnick et al., 1993). Moy et al (2001) concluded in their study that people are more willing to speak out for the actions which they consider to be more important. The results were evident even across multiple controlling variables. This might be true for attitude certainty as well because Matthes et al. (2019) found attitude certainty to be a significant moderator in spiral of silence effect. Moreover, Gearthart and Zang (2013) observed in their study on gay bullying that individuals who were more certain of their opinion on the topic discussed it in offline environments as well. But it was limited only to friend groups indicating that despite how certain an individual is of this or her opinion, it does not predict willingness to speak out when faced with incongruent opinion environment, especially for value laden topics.

Keating et al., (2022) is of view that in accordance with Deutsch and Gerard's (1955) definition, this body of research takes the operative mechanism to be normative

influence, in that beliefs about the normative opinion and anxieties related to publicly expressing one's opinion drive either opinion expression or avoidance. According to one theory, suppression is motivated by situational expectancies about the possible outcomes of speaking up which includes being disparaged, rejected, or trolled (Neubaum & Krämer, 2018). Additionally, the metacognitions connected to people's opinions may also play a role in expressing behavior. The degree of conviction with which an individual embraces an opinion, how strongly they feel about their attitude, and how informed they think themselves to be about the subject are examples of metacognitions that could influence the results of expressiveness (Keating et al., 2022).

According to earlier research, attitude certainty, attitude strength, and perceived knowledgeability all have immediate and moderating effects (Rios et al., 2018) on the results of opinion expression. When people did not hold their opinions with utmost certainty, professed minority status predicted expression outcomes; but, when people held their opinions with great certainty, professed minority status did not have a significant impact on their view and opinions (Matthes et al., 2010; Rios et al., 2018).

Additionally, Keating et al. (2022) is of view that public's perceptions whether their opinion on contentious topics is considered in a minority opinion, anxieties, and opinions about whether being outspoken will result in social isolation, are the omnipresent reason behind expression outcomes. Consequently, in online environment, more perceived minority opinion status and trait-like fear of isolation were linked to reduced likelihoods of commenting, while greater fear of rejection and attitude certainty were linked to more explicit responses. According to Neubaum and Krämer (2018),

expression behavior is influenced by ideas about the climate of opinion that are context-dependent, such as the conviction that one is a minority in their current social setting.

2.14.3. Conflict Avoidance

The avoidant style of conflict avoidance can be defined simply as the propensity to avoid conflict, as its name suggests (Rahim, 1983). Conflict avoidance can be characterized as a non-confrontational style (Cai & Fink, 2002) synonymous with withdrawing from threatening conditions, staying quiet, postponing discussion of conflict-inducing matters, and declining to openly admit that there is a conflict between oneself and the parties concerned (Rahim, 1986). This style of managing conflict has also been labeled 'inaction' or 'withdrawing' (Cai & Fink, 2002).

For different causes, people are driven to prevent confrontation. According to the model of dual consideration, individuals prefer to escape confrontation if they have no concern about their own needs and the interests of the other side (Rahim, 1983). This model suggests that if they perceive they have little to gain from seeking them, individuals prevent disputes. However, a few researchers have proposed that the model of dual concern should only refer to Western contexts (Oetzel, 2007), whereas for other reasons, such as preserving relationships, persons from Eastern cultures might prefer to prevent confrontation. Therefore, researchers have started to understand that conflict prevention motivations will differ across cultures (Cai & Fink, 2002).

2.14.4. Fear of Cyber Bullying

Belsey (2006) and Smith et al. (2008) defined cyber bullying as;

> "Cyberbullying involves the use of information and communication technologies such as e-mail, cell-phone and pager text messages, instant messaging,

defamatory personal web sites, blogs, to support deliberate, repeated, and hostile behavior by an individual or group that is intended to harm others and repeatedly and persistently against a victim who is unable to easily defend themselves."

Internet has transformed the concept of social life. Due to its widespread usage, it can be accessed from anywhere regardless of time which has made it a lot easier to create and organize social interactions and activities. But the dark side of this freedom is that it has gave a free rein to people who are mor inclined towards offending or threatening others. Though anonymity and rapid spread of information is beneficial for most of the people but at the same time it's misuse can affect a lot of people. A hostile comment Online has the power to quickly influence millions of people, whereas a hostile remark on the street can only, at best, reach a small number of people (Rudnicki et al., 2022).

Due of its fast emergence and quick rise in public discourse, cyberbullying is a prime topic for research into the construction of harm. Social hostility that is facilitated through digital technologies or platforms is known as cyberbullying (Young, 2022). Currently, academics are discussing the advantages and disadvantages of new media technologies as well as how these technologies might promote media freedom. Masduki (2019) researched the said concept in the context of how Indonesians use new mobile technology to access the Internet and social media; while these technologies will diversify communication, there is no assurance of media freedom. The term "media freedom" needs to be reinterpreted in light of all of its components. The independence of a broader spectrum of actors than its professionals determine media freedom in the digital age. Politicians or state-sponsored cyber troops and other attackers using social media

platforms are now the ones that violate people's freedom of expressing opinions, not governments or elected officials (Masduki, 2019).

A portion of academic literature has covered various domains of cyber bullying which include but not limited to impact of gender (Mitchell, 2001), frequency (kowalski et al, 2007) and social media platforms used for bullying (Hinduja et al, 2007). However, effect of cyber bullying and the factor of anonymity (using fictional names on social media) on people's willingness to speak out has not been addressed properly. Therefore, this research examines the experience of cyberbullying and impact of anonymity on opinion expression among youth of Pakistan.

2.14.5. Fear of Isolation

Fear of isolation (FOI) is a psychological variable which represents a negative emotional state associated with the possibility of expression of opinion on a given subject" (Neuwirth et al., 2007). When some tend to disagree with the viewpoint of an individual on a subject matter, FOI is linked to presumed public opinion, that person feels discouraged from expressing his or her own. The notion of human beings increasingly perceiving a profound fear of loneliness, a desire not to be rejected by others, but to be common and valued is a central concept in Noelle-spiral Noelle-Neumann's of silence theory (Noelle-Neumann, 1977). This fear of isolation is seen not only as a major driving factor behind the conduct of individual opinion speech, but also as a catalyst for macro-social cycles, influencing how patterns in public opinion grow over time on contentious topics. Despite its meaning, the fear of loneliness has been the focus of a number of scientific experiments, with varying conceptualizations: this fear has been seen by one

school of thought as a trait-like element with behavioral variation (Hayeset al., 2013; Scheufele et al., 2001).

For example, this refers to the degree to which a person normally fears being removed from social events. Empirically, the trait-like fear of alienation has been found to be (a) negatively linked to the ability of people to engage in a divisive dispute (Scheufele, 2001) and (b) positively related to the general propensity of people to self-censor in order to escape unfavorable social effects in order to usually hold back one's deviant opinion (Matthes, 2012). In the other hand, researchers have also provided a situational viewpoint on the fear of loneliness, which suggests that people experience a specific degree of fear based on the actual circumstance in which they find themselves: Neuwirth, Frederick, and Mayo (2007) have specifically differentiated the apprehension of situational contact from the apprehension of trait-like communication. Empirically, they found that anxiety of situational contact was positively connected to strategies to avoid voicing one's opinion (the same was true for the fear of alienation related to the issue) and negatively correlated with strategies to participate in a conversation, though weakly. In view of these effects, Neuwirth and colleagues (2007) suggest that calculating a state-like apprehension will regulate situational variables that affect the communication actions of people.

2.15. Summary

1. The concept of public opinion formation is of the view that public opinion is a multidimensional concept rather than just a concept of collectivism: having both normative and cognitive elements in his study. (Kim et al., 2019; Shamir & Shamir, 2000; Fisher, 1950; David, 2021). Moreover, literature further gives a

holistic view of the influence publicity and visibility have on individual

perception and opinion, their role in transition of individual opinion into public

opinion (Allport, 1937; Wouters, 2019). The development of social movements

and the participation in collective action are significantly influenced by public

opinion and media consumption (Perrin & McFarland, 2011; Rosenberg, 2015).

2. The formation of public opinions can be viewed in two distinct ways (Fatas-

    Villafranca et al., 2011; Tang et al., 2021) depending on how we view the issue in

    terms of logics, intuitions, reasoning, and rationality. Moreover, along a degree

    with which public feel connected with prevailing issues related knowledge. Many

    models have been proposed in the opinion dynamic literature in recent years that

    explain the phenomenon of opinion suppression (Mitsutsuji & Yamakage, 2020;

    Chanet al., 2022).

3. Nature of society (individualism, collectivist) has an impact on opinion formation

    dynamics (Bond & Smith, 1996; Hofstede, 1980; Hui & Triandis, 1986). Both

    societies have people with different beliefs and values, therefore have different

    process of opinion formation. For instance, collectivistic culture appears to show

    mor conformity when compared with individualistic cultures (Bond & Smith,

    1996). Pakistan as allocentric society make decisions in groups, so to study

    Pakistani society from the theoretical background of spiral of silence is important.

4. The nature of the issue—whether it is temporary, persistent, or emerging (Yeric &

    Todd, 1989) — affected various communities. Lee (2004) tested 2 different

    topics, findings found that outcomes differ not only across countries, but also

    among issues in each country. This suggests that individuals from diverse societal

backgrounds would respond to each issue differently, therefore it is crucial to conduct study on controversial national issues from the point of view of Pakistani society.

5. Public opinion is majorly induced by media exposure (Neumann, 1981; Neubaum & Krämer, 2016; David, 2022). People express their opinion when it is popular, and media plays important role in making popular opinion (Glynn et al., 1997). Moreover, people's willingness to voice their opinion is highly dependent on whether an issue is obtrusive or not, as well as whether it is ongoing, passing, or urgent (Matthes et al., 2018).

6. Additionally, media exposure also has an impact on individual's perception of climate of opinion (Eveland et al., 1995; Shamir, 1997; Shanahan, 2004). Neumann (1984) stated that there are two primary reasons for our quasi-statistical sense, or our ability to track the spread of opinions: the interpersonal atmosphere and the mass media. Noelle-Neumann clarified the claim that the media manipulates public opinion views in terms of media reliance. (Neumann, 1974; Mutz, 1998).

7. The primary guiding factor for the presumption of the news outlets' validity in political communication is their association with specific political parties (Zhao, 2015; Idid et al., 2019). Audiences find outlets that serve their political views more trustworthy (Apejoye, 2015). Lee (2010) points out to the U.S. public that the entire legitimacy of the news outlets is focused purely on the fact that the outlet reports the politics of the moment. If the new channel meets the public's instincts on the political topic it is covering, it eventually ends up as a trustworthy

and reliable source of news. In Pakistan different news channels (i.e. Geo, ARY) serve narratives of different political parties, thus it will be interesting to find out relationship between news channel's political affiliation and formation of public opinion.

8. The spiral of silence is crucial in the context of new media because user comments under news stories affect how audience members perceived opinion climate and expressed their opinions accordingly (Eilders & Porten-Cheé, 2022; Matthes et al., 2017; Dam et al., 2021). Social media platforms aid in the creation of a space where individuals may freely express themselves, which promotes a more democratic process (Wu, 2021). Social media's influence on public opinion was evident because societal issues were frequently presented, re-published, and highlighted there (Shiyab & Geraghty, 2021). Therefore, research is essential to understand how new media affects opinion dynamics in societies like Pakistan.

9. The way in which topics are framed by the media has a significant impact on how public opinion is formed surrounding an issue (Druckman & Parkin, 2005; Zhang & Lin, 2022). The way that news reports about topics like COVID 19 vaccination and military engagement in politics influence public opinion is greatly influenced by the framing strategies used by the media (Jackson, 2019) which is also backed by Mathhes et al. (2018), that obvious issues are more likely to have spiral of silence effects than subtle ones.

10. Reviewing the literature gives an overview on the impact demographic's factors have on public opinion formation (Glynn & McLeod, 1985; Salmon & Oshagan, 1988; Fassinger, 1995; Zhao, 2015). The expressiveness level, personal support

for the subject, and insights of future opinion climates are the main variations between the genders when it comes to how they express their opinions in offline settings (Al-Kandari et al., 2022). So, in the context of a developing society like Pakistan it is needed to analyze the difference of gender in opinion expression.

11. Alexandre and Aguiar-Conraria (2021) is of view that for an individual, probability of expressing opinion on contentious topic decreases with increased level of communication apprehension (McCroskey, 1977; Willnat et al., 2002; Neuwirth et al., 2004; Ho & Mcleod, 2008). Indue with this, communication channel or medium have an impact on communication apprehensions experienced by an individual (Ledford, et al., 2022). People are more likely to express in online environment than face to face settings.

12. Cyberbullying and the factor of anonymity (using fictional names on social media) on people's willingness to speak out has not been addressed properly in the literature (Hinduja et al, 2007; Kowalski et al, 2007; Masduki, 2019; Mitchell, 2001). Further numerous people can be impacted by cyberbullying because of traits including anonymity, accessibility to technological communication, and quick audience expansion (Belsey, 2006; Smith, et al., 2008; Rudnicki et al., 2022).

2.16. Gap in Literature

In the West many different issues were taken in account to test the scope of theory like most of the times the election campaigns (Glynn & McLeod, 1984) but many other dissimilar issues like genetically modified food (Kim, 2012), environmental activism

(Hayes, 2007), gay marriages (Ho & McLeod, 2008), interracial marriages (Lee, 2004), abortion (Woong & Park, 2011), membership in the European Union (Mathes et al., 2010) and capital punishment (Hayes, 2007) etc. The available literature on SOS theory does not give any evidence of a test of this theory in Pakistani societal setting. Few studies might already be conducted but hard data on public opinion on issues of national importance is not available. When Spiral of Silence theory is discussed in educational institutions, the students do not see any facts and figures from out of Pakistani society. This study will add to the pool of knowledge of communication theory especially with respect to opinions of Pakistani society on issues of national importance.

The study aimed at generating empirical data on public affairs media use, climate of opinion and opinion expression. The data is of potential use to media academics interested in further investigating the dynamics of public opinion formation, also, to professionals in the media industry and communication policy planners who want to use mass media information and communication campaigns in order to "manufacture" socio-political consent on issues of national importance or more generally on the effects of mass media infusions on society. The study will be beneficial to not only research community and educationists, but it will also help social sector and media planners to use mass media in a planned fashion in the task of nation building.

2.17. Theoretical Framework

This study adopted the framework of Spiral of Silence (SOS) theory, the psychological mechanisms behind public opinion are explained by SOS theory, introduced by the political scientist Noelle-Neumann (1974). It defined public opinion as opinions on controversial issues that can be expressed publicly without fear of isolation.

Since public opinion is seen as a general opinion reshaped by the perception of the climate of opinion (Noelle-Neumann, 1974), the change in public opinion is due to people's perception process because their perceptions impact their willingness to speak out (Neumann, 1974). People respond sensitively to their social environment, according to the theory, where they obtain indicators (lack of disapproving expressions) about the dominant atmosphere of opinion and determine whether to stand up for their opinion or remain silent (Noelle-Neumann, 1977; Nekmat & Gonzenbach, 2013) (Noelle-Neumann, 1977; Nekmat & Gonzenbach, 2013). Taylor (1982) identified four variables implicit in the theory, which are a) one's opinion on an issue, (b) one's view of the prevailing public opinion, (c) one's estimation of the probable future direction of public opinion, and (d) one's ability to express one's opinion. Moy and Scheufele (2000) summarized that their surveillance of the opinion environment constructs the understanding of fact by individuals, and this monitoring entails internal conversation, media attention or direct evaluation of their environment.

The theory has been evaluated in a number of contexts on the basis of these theoretical foundations, showing that the expression of ideas by people is key to fostering public dialogue and political participation (Valenzuela et al., 2011). In fact, the SOS paradigm on political topics that are responsive and polarized has been adopted by several researchers (Fox & Holt, 2018). For example, in the framework of social debate on affirmative action policies, a study confirmed the theory that fear of isolation prevents people from speaking out when they perceive inconsistency with their opinion of friends or family (Moy et al., 2001). Glynn and McLeod (1984) found expectations of the results

of the vote (such as seeing one's position as gaining support) impacted the ability of people to debate or express their preference for a candidate.

In the 2004 paper the researchers echoed the significant position played by the spiral of silence in democratic elections by a second analysis of the data obtained during the 1948 presidential election, underlining the influence of the extreme in the original hypothesis, highlighting the connection between social exclusion and fear of isolation (McDonald et al., 2001). Several new collaborations were recognized by researchers fourteen years later, focusing on the sense of interactive media. Based on the types of problems, the outcome of the spiral of silence can change from the fact that acceptable content has a good relationship with the expression of opinion on long-term issues, while unpleasant content has a positive relationship with the expression of opinion on, transitory and emerging issues (Gearhart & Zhang, 2018).

In his analysis, Kennamer (1990) confirmed that people might be less likely to interact in the discussion of a topic when exposed to the setting in which the data is contradictory to their belief, although this research considers this process from a self-serving bias point of view. This introduces a new method, in other words. For in-depth interviews on the scientific expertise level of the theory, another research has expanded the theory based on data collection techniques. The results suggest that people use social, economic and political environments as cues when presented with divisive information. When predicting public sentiment, individuals depend on opinion makers and attitude spread. When estimating the distribution of public sentiment, people use projective knowledge as a guideline. A smaller range

Moreno (2002) explores the climate of the silent spiral theory and expands the psychological hierarchy of beliefs, classifying them into micro, macro and group stages, and examining their various impacts on participants. The outcomes of this analysis suggest the importance of the viewpoints of the majority of people affect the individual's beliefs, complementing the assumed majority with their perception of the levels of macro and collective opinion.

Though Spiral if silence theory has been one of the most influential theories of public opinion it has not escaped the criticism by scholars. Griffin (2009) points out 3 major critiques on Spiral of silence theory. The first major critique questions the ear of isolation (FOI) as the only reason for silence, the second criticizes the use of hypothetical situation to assess opinion expression of individuals suggesting that results based on hypothetical situations do not reflect the actual willingness to speak. The third major criticism refers to the theory's reliance on national opinion climate whereas later studies reveal that micro-opinion climates formed by reference groups such as family and friends have a greater impact on an individual's judgment. Moreover, the recent raise of computer-mediated communication and social networking sites has challenged the applicability of the theory in modern contexts (Hassan et al., 2019) but the modern approaches to the theory have addressed these concerns and some of it concepts are strengthened on in the modern age (Drew, 2022; Panayırcı, 2016)

From the literature, it was found that the spiral of silence in the theory is most appropriate to examine media impact on the opinion formation of audience related to controversial issues. So, this study examined media use and public opinion on matters of

national importance within the theoretical framework of the spiral of silence theory and hence tested the core assumptions of theory with a subset of Pakistani population.

2.18. Research Questions

RQ 1: What is the nature of the climate of opinion in the presence of a new media environment?

RQ 2: What is the effect of the climate of media opinion on the interpersonal opinion climate?

RQ3: What is the relationship between the perceived climate of opinion and opinion expression?

RQ4: How does news channel reliance influence the relationship between exposure to Television and an individual's own opinion?

RQ 5: How does fear of social isolation influence the relationship between the perceived climate of opinion and opinion expression?

RQ6: How does cyberbullying influence the relationship between anonymity and opinion expression online?

RQ7: What is the effect of psychographic attributes on opinion expression?

RQ8: What is the effect of issue characteristics on opinion expression?

2.19. Hypotheses

H1: New media environment has a relationship with the climate of opinion such that:

H1 (a). The perceived opinion of social media will have a positive relationship with own opinion, perception of traditional media opinion, perception of friends and family opinion, perception of country opinion and perception of future country opinion.

H2: The climate of media opinion for an issue will be related to the climate of interpersonal opinion for the same issue.

H3: The perceived climate of opinion from interpersonal communication and traditional media will predict opinion expression.

H3a: Perceived climate of opinion from interpersonal communication and traditional media will predict opinion expression after controlling for a demographic (age, political affiliation) and psychographic variables (Communication apprehension, fear of isolation, conflict avoidance)

H3b: Perceived climate of opinion from interpersonal communication and social media will predict opinion expression online after controlling for a certain demographic (age, political affiliation) and psychographic variables (Communication apprehension, fear of isolation, conflict avoidance, fear of cyberbullying and anonymity)

H4: News Channel Reliance will moderate the relationship between exposure to Television and own opinion such that:

(H4a): The moderating effect will be more in enduring issues than emerging issues.

H5: The level of fear of social isolation will moderate the relationship between the perceived climate of opinion and opinion expression such that

(H5a): people with high fear of isolation will reflect lower opinion expression, compared to low fear of isolation

H6: Cyberbullying will moderate the relationship between anonymity and Opinion expression

H7: Psychographic attributes (fear of social isolation, communication apprehension, conflict avoidance and issue certainty) will predict opinion expression.

H8: Issue characteristics (issue importance and issue obtrusiveness) will predict opinion expression.

CHAPTER 3

RESEARCH METHODOLOGY

3.1. Introduction

This study adopted a quantitative approach to investigate the relationship between opinion climate and opinion expression. A survey research method was employed to measure the respondents' perceptions. As, Noelle-Neumann also adopted the survey method for Spiral of Silence research (Noelle- Neumann, 1993). The most common methodology adopted to test the SOS theory even in current times is a survey, although some researchers prefer triangulation and adopted experiment or content analysis along with the survey, questionnaires and interviews are still common practices. So, the study adopted a survey and quantitative approach. Moreover, this study employed two issues to test the assumptions. Both the issues were controversial in nature and morally loaded concerning Pakistani society at the time of data collection, these issues are further categorized as an emerging issue (COVID 19 vaccination) and enduring issue (Military's Involvement in Political Affairs of Pakistan).

This section will be enclosed on explaining the research design, target population, sampling strategy, data collection instruments and process and analysis of the data.

3.2. Research Design

A quantitative approach using a survey was done in this study to examine media use and public opinion on issues of national importance. Through the examination of social research methodologies, a survey is found to be a handy tool for researchers to

collect primary data employing questionnaires and interviews regarding the perceptions and attitudes of the respondents.

The use of the survey for this study allowed the researcher to gather data directly from the youth in their natural environment to study their attitudes, views and comments about both issues. The survey is the most suitable method for this study because it can measure the impact of media use on audiences and the same method was also used by multiple researchers for analyzing public opinion on important issues (Geahart, 2015; Ho & Mcleod, 2008).

Based on the predictions of the study in line with the spiral of silence theory, two main dimensions were measured in the survey: (1) the perceived climate of opinion through various channels regarding the two controversial issues selected, issue characteristics along with their willingness to speak out about the issue via traditional channels and social media and (2) media use along with psychographic and demographic characteristics of the respondents.

3.3. Population of Study and Sample

The population, the whole group of items on which the study is based and the researcher desires to generalize the results (Boyd et al., 1977), for the study consisted of their level students from the Foundation University School of Science and Technology (FUSST) and International Islamic University Islamabad (IIUI), Pakistan enrolled at different departments during the 2020-2021 academic year. The student population was chosen due to certain limitations like lack of funds, feasibility and time limitations. though the study sample do not represent the broader population of Pakistan, as the

selected are younger, more urban and more cosmopolitan with respect to the general population of the country. They are more relevant to the SOS theory-testing as they maintain and express their opinions in regard to the issues taken for the study. The senior-level students were focused because the issues selected were serious, political, and controversial, as the selected population can understand them and respond to the questionnaire more effectively. Hence, the purpose of the study i.e. testing of theory can be achieved with this population set. the results of the study will remain limited to the theory testing and not the general Pakistani public. As the study also is based on the social media component and students belong to youth which are the more frequent users of social media and can provide better responses than households, any other age groups or the general public. The sample was drawn by using multistage cluster sampling from an estimated total population of 33,000 students in different departments. Clustering was performed based on departments.

From the chosen population, a sample of 1000 students was carefully chosen by following the Probability- Multi stage Cluster sampling procedure. This method produces unbiased estimates with measurable precision that requires relatively little knowledge about the population as sampling using probability methods ensures that each member of a population has an equal chance to be selected for study and is free from the bias or impact of researcher.

As the first step, departments were clustered according to their size. For this all the departments of both universities were listed, along with students enrolled in batches for each department.

For FUSST a total of 4 departments through clustering were obtained for the final sample (Arts & Media, Psychology, Management sciences, Software engineering) and a total of 7 departments were selected from IIUI (management sciences, mathematics, English, psychology, media politics and IR, sociology and biological sciences). Next, the senior-level student batches (7th and 8th) of undergraduate and all batches from post-graduate programs were selected from the respective departments. The questionnaire was distributed in classrooms but due to the pandemic and online classes, an electronic version of the questionnaire was also sent via email and WhatsApp class groups when and where required with the help of subject teachers to the selected batches and the registration number helped in systematically selecting the final respondent.

The total sample size was 1000 and out of which 909 questionnaires were completely filled. Thus, the overall rejection rate was approximately 10% of the total sample. The researcher supervised the entire data collection process, but course instructors were also used to motivate students to fill out the questionnaires and also briefed the respondents before distributing the questionnaire. the respondent profile is given in table 3.1.

3.4. Instrument

A questionnaire was designed based on adapted measures for different variables. The questionnaire was divided into three sections, the first section consisted of the emerging issue and enduring issue and these sections included items related to issue importance, attitude certainty, issue obtrusiveness, perception of climate of opinion climate and opinion expression. The second portion was comprised of items aimed to measure media use, channel reliance, communication apprehension, fear of isolation,

conflict avoidance and cyberbullying. The third section consisted of demographic variables. details of each measure along with its items, sources and reliability has been further discussed in section 3.7 and Table 4.1

Validity is the degree to which a research instrument is capable of measuring what it aims to measure. It is the accuracy and meaningfulness of the inferences drawn from the results (Mugenda et al, 1999). In other words, validity can be defined as the extent to which study variables are represented in results obtained from the study. The instruments for the present study were assessed for criterion and content validity.

Mugenda et. al. (1999) defined reliability as the capacity of an instrument to give consistent measurements for the characteristic of interest over a period of time. Therefore, a reliable instrument should be able to provide consistent data for repeated trials. Test -retest technique is usually employed to check the reliability of an instrument. Reliability of the measures utilized in present study was determined by computing Cronbach's alpha coefficients for each measure.

An informal focus group discussion was also made with a group from the population to check the level of understanding of the instrument as well as the issues selected for the study. The instrument was later pretested twice on 40 cases. the respondents of the two pilot studies did not constitute part of the final sample. Revisions were incorporated into the final version of the instrument. The Cronbach alpha reliability test measure for internal consistency of indices ranged between 0.7- 0.9. The instrument was then ready to use and distributed to the selected sample.

3.5. Data Collection

After the instrument was finalized, it was distributed to the selected sample. an electronic version of the questionnaire was also made to reach the sample during the pandemic as universities were working online as well for some time during the data collection period. Participants were requested and motivated to fill out the questionnaire, in the classrooms chocolates were also provided to participants along with questionnaires to get a better response rate and upraise motivation.

Ethical transparency ought to be noticed all throughout all phases of research. Subsequently, I got the consent of the research participants, guaranteeing them that their support / participation was willful and liberated from any pressure.

A total of 1000 questionnaires were received back and out of which 909 were filled. The data collection exercise was completed in 4 months starting in March 2022. The collected data revealed respondents' profiles across age, gender, level of education, institute, family income and political affiliation. The youngest respondent was 17 years old while the oldest was 47. Later age groups were defined and most of the participants (47.3%) were from the age 21-23 years old. Table 3.1 showed the respondent's profile based on the demographic variables of the study.

add total number of students of IIUI and FUSST.

Table 3.1

Respondents Profile (N=909)

Sr.	Item	Category	Frequency	Percent
1.	**Age**	20 and below	280	30.8
		21-23	430	47.3
		24-26	101	11.1

		27-29	47	5.2
		30 and above	51	5.6
2.	**Gender**	Male	323	35.5
		Female	586	64.5
3.	**Level of Education**	Undergraduate	663	72.9
		Masters	221	24.3
		PhD	25	2.8
4.	**Institutes**	IIUI	505	55.6
		FUSST	404	44.4
5.	**Family income**	less than 50000Rs	221	24.3
		50000-100000Rs	356	39.2
		100000-150000Rs	145	16
		150000-200000Rs	92	10.1
		More than 200000Rs	95	10.5
6.	**Political Affiliation**	PTI	617	67.9
		PMLN	175	19.3
		PPP	47	5.2
		Others	70	7.7

3.6. Concepts and Measures

The actual explanation of the Spiral of Silence theory mainly deals with the relationship between the perceived climate of opinion and opinion expression but after going through the extensive literature for both online and offline settings, the researcher established some main variables which would direct the study:

3.6.1. Perceived Climate of Opinion

The perception of reality by people is created by their surveillance of the world of view, and this observation includes the individual's own opinion, interpersonal opinion

(includes friends, family, country, and future opinion), media opinion (includes traditional and social media) (Moy & Scheufele, 2000).

Own Opinion

Own opinion is defined as one's personal opinion. As the respondents were first communicated about the controversial issues and respondents were asked about their personal opinion on the issue (do you mostly favor or oppose the issue), on a 6-point scale where 6 = favor, 1 = oppose (Geahart & Zang, 2015). Like, for the corona vaccination issue, the question was asked "What is your personal opinion? Do you mostly favor it or oppose it?" (M=4.95, SD=1.37) and it was also inquired for issue 2 which was military involvement in politics (M= 3.84, SD=1.81). Further, this 6-point scale was recoded into a continuum scale ranging from a score of -1(oppose) to +1(favor) (Ho & McLeod, 2008). Respectively respondents' own opinion was compared with the perceived interpersonal opinion and media opinion to evaluate congruency variables.

Perceived Interpersonal Opinion

Perception of the climate of opinion from people like friends and family, countrymen and future countrymen. Borrowed from Geahart and Zang (2015), this variable was employed to measure the opinion climate by several scholars (Neuwirth, 2000; Matthes et al., 2010; Scheufele et al., 2001). For measuring the perceived interpersonal opinion, three questions were asked of respondents, including (a) friends and family, (b) most people in the country, and (c) the future nation. Like, for the corona vaccination issue, these questions were asked: (a) regarding COVID-19 vaccination, do you think the majority of your family and friends are in favor of it or oppose it? (M=4.7, SD=1.5) (b) Regarding COVID 19 vaccination, do you think most people in the country

are in favor of it or oppose it? (M=3.9, SD=1.6), (c) Regarding COVID 19 vaccination, do you think the majority of people in your country in 10 years from now will be in favor of it or oppose it? (M=4.3, SD=1.6). Same three questions related to friend and family (M=3.9, SD=1.7), country (M=3.8, SD= 1.6) and future nation (M=3.6, SD= 1.7) were also asked for issue 2 which was military involvement in politics. Further, this 6-point scale was recoded into a continuum scale ranging from score of -1(oppose) to +1(favor). For opinion congruency, respondents' own opinion was compared with the perceived interpersonal opinion (each family friends, country, future nation opinion)**,** then further a measure for opinion congruency was created (Ho & McLeod, 2008) from the product of the scores for own opinion and the perception of interpersonal opinion, resulting in a continuous score ranging from -1 to +1 where -1 indicates low congruency ad +1 indicate high congruency.

Perceived Media Opinion

Perceived Traditional Media Opinion : Perceived climate of traditional media opinion borrowed from Geahart and Zang (2015), the dominant opinions in the traditional media were asked from the respondents by giving them a situation where they were required to think about when the issue is discussed on media by directly asking them, "Thinking about all of the different times you have seen this issue discussed in the media, what do you think about opinion on traditional media (tv, newspaper, radio) related to covid 19 vaccination (M=4.8 , SD=1.4)". The same question was also asked for issue related to military involvement in politics (see appendix for complete questionnaire) (M=3.7, SD=1.7), the response was obtained on 6-point scale (6 = favor, 1 = oppose). Further, this 6-point scale was recoded into a continuum scale ranging from score of -

1(oppose) to +1(favor). For media congruency, respondents' own opinion was compared with the perceived traditional media opinion, then further a measure for media congruency was created (Ho & McLeod, 2008) from the product of the scores for own opinion and the perception of traditional media opinion, resulting in a continuous score ranging from -1 to +1 where -1 indicates low congruency ad +1 indicate high congruency.

Perceived Social Media Opinion: Perceived climate of social media opinion, respondents were asked to think about all the different times they have seen this issue discussed in the social media, what do they think about opinion on social media (Facebook, twitter, YouTube etc.) related to covid vaccination? (M=4.61, SD=1.51). Same question was also asked for issue related to military involvement in politics (see appendix for complete question) (M=3.9, SD=1.6), the response was obtained on 6-point scale (6 = favor, 1 = oppose). Further, this 6-point scale was recoded into a continuum scale ranging from score of -1(oppose) to +1(favor). For social media congruency, respondents' own opinion was compared with the perceived traditional media opinion, then further a measure for media congruency was created (Ho & McLeod, 2008) from the product of the scores for own opinion and the perception of traditional media opinion, resulting in a continuous score ranging from -1 to +1 where -1 indicates low congruency ad +1 indicate high congruency.

3.6.2. Media Use

Media use includes both traditional and social media use. Borrowed from Geahart and Zhang (2013) for media use, five questions related to television (M= 2.24, SD = 1.52) Newspaper (M= 1.79, SD = 1.21), Radio (M= 1.31, SD=.835), Social media

(M=3.95, SD=1.70) and Other media use (M=2.47, SD = 1.7) were asked to inquire about participants' media use by directly asking them, to think of a typical day in their life and indicate how much time do they spend with different media in a day from news and entertainment?" and the media use response was taken in minutes (where 1 = less than 30 min to 6 = 150 or more mins).

Participants were also asked about the most reliable news channel according to their opinion by asking them "In your point of view, which is the most reliable Television News Channel that you trust and prefer watching?" (Where 1=GEO, 2=ARY, 3=Others) (M=1.63, SD=3.08).

3.6.3. Opinion Expression

Opinion expression is the ability of people to share an opinion and it has been observed that when their viewpoint is perceived to be in majority, individuals (gear to speak and share their opinion. (Neumann, 1993). Opinion expression was measured for both offline and online platforms separately. For Offline opinion expression willingness of respondent to publicly express personal opinions was measured using10-point Likert scale (Baldassare & Katz, 1996; Chia, 2014; Glynn et al, 1997; Liu & Fahmy, 2011) , with 1 indicating ''not at all likely'' and 10 indicating ''very much likely by telling respondents to imagine a situation when most people around you do not agree with your opinion on 'issue' how likely would you be to speak out your opinions if someone brings up the issue, using statements: ''Imagine a situation when most people around you do not agree with your opinion on "selected controversial Issue", how likely would you be to speak out your opinions if someone brings up the issue" (a) among your friends at a party b) in the company of strangers (c) among a political gathering.

The general disposition towards being socially active online is an essential factor to examine the impact of opinion climates on an individual's inclination to express their opinion on social media (Weeks & Holbert, 2013). Opinion expression online was measured by adding three more statements in the same scenario for social media opinion expression: "by creating a new post about the issue", "by commenting on the post related to the issue", and "by sharing the post related to the issue". Further, a statement related to the online environment specifically was added to record the score on anonymity "by using a fake username and profile". As previously, all the responses were recorded on a 10-point Likert scale, ranged between 1= not at all likely to 10 =very much likely.

Table 3.2

Mean and Standard Deviations of Opinion Expression (N=909)

Sr.	Item	Emerging Issue (Covid 19 Vaccination)		Enduring Issue (Military's Involvement in Political Affairs)	
		Mean	SD	Mean	SD
1	among your friends at a party	5.15	2.61	5.31	3.11
2	in the company of strangers	4.59	2.46	4.2	2.75
3	among people in a political gathering	5.61	2.73	4.58	2.96
4	social media by creating a new post about the issue	5.37	3.06	4.58	2.91
5	social media by commenting on the post related to the issue	5.24	3.05	4.61	2.93
6	social media by sharing the post related to the issue	5.59	3.10	4.85	3.00

7	social media by liking (reacting) the post relating to the issue	5.68	3.08	5.06	3.03
8	social media by using a fake username and profile	4.69	3.29	3.51	2.98

Note: SD is used to represent the standard deviation

3.6.3. Issue Characteristics

Issue Importance

Individuals' perceived importance of the issue under study has been considered as issue importance. As issue importance and willingness to speak out about that issue has been found to have a positive relation (Moy et al., 2001). Perceived issue importance was measured using the question Borrowed from Geahart and Zhang (2013), "How important is the issue to you personally?" (where, 1 = not important at all to 10 = very important) (Emerging issue -M=7.97, SD=2.67). The same question was also asked for issue related to (Enduring issue- M=7.22, SD=2.77).

Issue Obtrusiveness

Issue obtrusiveness has been considered as how much the respondent has personal experience with the issue. If we have personal experience and the issue hinders in our lives then we have been directly exposed to the issue and hence have more knowledge about the issue and we are less dependent on news media (Winter, 1981). Both the issues were observed and for covid vaccination 2 questions were asked to know about personal experience with the issue "Has anyone around your immediate surroundings (you/your friends/ your neighbors/ your relatives etc.) been infected with COVID-19? (M=1.5, SD=.5) and Has anyone around your immediate surroundings (your friends/your neighbors/your relatives etc.) died from COVID-19?" (M=1.52, SD=.5) and for the other

issue obtrusiveness was measured by asking "Does anyone of your immediate family currently serve or has served in the armed forces?" (M= 1.52, SD=.5), where 1= No, 2= Yes

3.6.4. Psychographic Attributes

Attitude Certainty

It refers to the degree of confidence that an individual has upon his or her attitude towards the said issue (Krosnick et al., 1993). Attitude certainty was measured (Matthes et al., 2010; Gearthart & Zang,2013) by asking respondents, ''how sure are you in your opinion about issue'' (emerging: M=7.18, SD=2.8 and enduring: M=7.66, SD=2.66), where 1 = not at all sure to 10 = very much sure.

Communication Apprehension

Communication apprehension has been conceptualized as a psychological problem with the typical characteristic of the indication of pressure or tension to speak with individuals (Molnar & Crnjak, 2018). Developed by McCroskey (1977) and further adapted by Ho and Mcleod (2008). Communication apprehension was measured on a 5-point rating scale (M=9.88 ,SD=3.68), respondents were asked to indicate their level of agreement along the scale from strongly disagree (1) to strongly agree (5) to the following 4 statements: (a) "I dislike participating in group discussions," (b) ", I am tense and nervous while participating in group discussions" (c) "I am afraid to express myself at meetings," and (d) "Communicating at meetings usually makes me uncomfortable". The below table presents the mean and standard deviation of all items of communication apprehension.

Table 3.3

Mean and Standard Deviation of Communication Apprehension (N=909)

Sr.	Item	Communication Apprehension (%)					Mean	SD
		1 St. D	2	3	4	5 St. A		
1	I dislike participating in group discussions	26.5	28.5	29.9	8.8	5.8	2.39	1.13
2	I am tense and nervous while participating in group discussions	23.7	32.3	22.4	15.7	5.8	2.48	1.17
3	I am afraid to express myself at meetings	22.4	30.8	24.2	15.4	7.2	2.54	1.19
4	Communicating at meetings usually makes me uncomfortable	22.3	33.6	23.1	16.5	4.5	2.47	1.13

Note: St. D= Strongly Disagree, St. A = Strongly Agree, SD= Standard Deviation

Fear of Isolation

Fear of isolation represents a negative emotional state of being alone and is linked to the possibility of expressing one's opinion on a given subject. Individuals will refrain their opinion expression if they perceive that opinion as less popular due to an emotional state in which he fears from being left alone and isolated. The measure assessed cognitive response social isolation (Hayes et al., 2013; Dalisay, 2012; Gearhart &Zang, 2015; Matthes et al., 2012). Respondents rated their level of agreement on a 5-point rating scale (1= strongly disagree, 5= strongly agree) to five statements: (a) "It is scary to think about not being invited to social gatherings by people I know"; (b) "One of the worst things that could happen to me is to be excluded by people I know"; (c) "It would bother me if no one wanted to be around me"; (d) "I dislike feeling left out of social functions, parties, or other social gatherings"; and (e) "It is important to me to fit into the group I

89

am with." (M = 14.19, SD = 4.44). Below table presents the means and standard

deviations for each of the five items of fear of isolation.

Table 3.4

Mean and Standard Deviation of Fear of Isolation (N=909)

Sr.	Item	Fear of Isolation (%)					Mean	SD
		1	2	3	4	5		
		St. D				St. A		
1	It is scary to think about not being invited to social gatherings by people I know	24.5	28.8	26.1	15.6	5	2.48	1.16
2	One of the worst things that could happen to me is to be excluded by people I know,	17.8	23.8	27.8	19.3	11.3	2.83	1.25
3	It would bother me If no one wanted to be around me	16.8	24.5	24.1	23.1	11.4	2.88	1.26
4	I dislike feeling left out of social functions, parties, or other social gatherings	16.4	26	29.6	19.5	8.6	2.78	1.18
5	It is important to me to fit into the group I am with	11.2	18.2	23.8	29.7	17.2	3.23	1.24

Note: St. D= Strongly Disagree, St. A = Strongly Agree, SD= Standard Deviation

Conflict Avoidance

Conflict avoidance is the avoidant style of conflict management is it is

characterized by the inclination to keep away from or avoiding the conflict (Rahim,

1983). To measure conflict avoidance, a 5-point scale (1=strongly disagree, 5=strongly

agree) adapted from Rahim's (1983) and further borrowed by Dalisay (2012) was used.

Respondents were asked six items (a) I try to stay away from disagreement with others,

(b) I usually avoid open discussions of differences with others, (c) I try to keep my

disagreement with others to myself in order to avoid hard feelings, (d) I try to avoid

unpleasant exchanges with others, (e) I keep disagreements with others to myself to

prevent disrupting my relationships with them, and (f) I generally avoid conflict

situations with others. (M = 19.37, SD = 5.47). The below table presents the means and

standard deviations for each of the six items of conflict avoidance.

Table 3.5

Mean and Standard Deviation of Conflict Avoidance (N=909)

Sr.	Item	Conflict Avoidance (%)					Mean	SD
		1	2	3	4	5		
		St. D				St. A		
1.	I try to stay away from disagreement with others,	11.9	21.5	28.3	25.7	12.7	3.06	1.20
2.	I usually avoid open discussions of differences with others	13	24.4	27.2	23.8	11.7	2.97	1.21
3.	I try to keep my disagreement with others to myself to avoid hurt feelings	8.8	17.7	27.9	29.9	15.6	3.26	1.17
4.	I try to avoid unpleasant exchanges with others,	6.6	13.9	24.2	36.2	19.1	3.47	1.14
5.	I keep disagreements with others to myself to prevent disrupting my relationships with them,	10.2	19	28.6	29.3	12.9	3.16	1.17
6.	I generally avoid conflict situations with others	7.4	13.4	24	35.3	19.9	3.47	1.16

Note: St. D= Strongly Disagree, St. A = Strongly Agree, SD= Standard Deviation

Fear of Cyber Bullying

Fear of being bullied in the online environment and cyberbullying has been referred to an individual or a group using social media for harming others by intentionally supporting continual hostile behavior (Belsey, 2006). The harm online may include online teasing, online rumors, online exposure to privacy, online exclusion and online threats (Li & Hesketh, 2021). Measure was developed based on the suggested operationalization of cyberbullying by Li and Hesketh (2021) ,along a 5-point rating scale, ranged within strongly agree = 5 and strongly disagree = 1consisting of 5 items: (a) It is scary to think of online teasing/insulting, (b) I dislike feeling of online spread of rumors about me, (c) I dislike feeling of online exposure of private information about me, (d) One of the worst feeling is exclusion from online groups and (f) I am afraid of online threats. (M = 16.46, SD = 4.72). The below table presents the means and standard deviations for each of the six items of fear of cyberbullying.

Table 3.6

Mean and Standard Deviation of Fear of Cyberbullying (N=909)

Sr.	Item	Cyberbullying (%)					Mean	SD
		1 St. D	2	3	4	5 St. A		
1.	It is scary to think of online teasing/insulting	10.6	14.9	22.3	31.8	20.5	3.37	1.25
2.	I dislike feeling of online spread of rumors about me	9.2	12.7	18.2	32.5	27.5	3.56	1.26
3.	I dislike feeling of online exposure of private information about me	7.4	10.7	16.1	32.5	33.4	3.74	1.23

	St. D				St. A		
4. One of the worst feelings is exclusion from online groups	15.8	25.6	32.5	16.2	9.9	2.79	1.18
5. I am afraid of online threats	17.4	19	23.9	24.2	15.5	3.01	1.32

Note: St. D= Strongly Disagree, St. A = Strongly Agree, SD= Standard Deviation

3.6.5. Demographic Variables

In accordance with the prior mass media studies, to test the hypotheses properly this study used a sum of potential six demographic variables which were controlled so they may not affect the results. Demographic variables involved gender "(1 = male and 2 = female ; M=1.64, SD=0.48), age (measured continuously), level of educational (1 undergraduate, 2 = Masters/ M.Phil., 3 = PhD; M=1.30, SD=0.51), Institute (1=IIUI, 2=FUSST; M= 1.44, SD= 0.50) , Family income (1 = less than 50000 Rs, 2 = 50000-100,000 Rs, 3 = Rs 150,000-200,000, 4 = Rs more than 200000 Rs ; M=2.43, SD=1.25) and political affiliation (1=PTI, 2=PMLN, 3=PPP, 4=others; M= 1.53, SD= 0.90)"

3.7. Preliminary Data Analysis

Data collected through survey was examined in Statistical Package for Social Scientist version 25 and to describe it was presented in tables. The skewness (between ±2) and kurtosis (between ±3) values for the study variables were within acceptable range of normal distribution to assess the correlation between the variables, Zero Order Correlation matrix was obtained. To investigate the relationship between predictors, control and criterion variables Zero Order and partial along with Hierarchical multiple regression were used. as, it has been observed from literature review that hierarchal multiple regression was most widely used statistical test for SOS testing. In next chapter, comprehensive statistical data as well as interpretations are mentioned.

CHAPTER 4

DATA ANALYSIS

Current study was carried out to examine the relationship between opinion climate and opinion expression. To analyze the data, SPSS 25 was used. Descriptive statistics were obtained for all study variables and then research questions and hypotheses were explored/tested. The data has been collected from the selected sample between March- June 2021.

To examine the relationship between dependent and independent variables, quite a few analytical techniques were applied. First, Univariate Descriptive Statistics of all the study's variables (Predictors, Control and Criterion variables) were obtained to report the key structure of the sample which included mean, standard deviation, and the number of respondents. Zero-order correlation matrix was then calculated to check the intercorrelation of the study's variables. To test the hypothesis of the study, zero order and hierarchal multiple regression analysis were used. The reliability of the scale was checked by using Cronbach alpha for internal consistency.

4.1. Reliability

Reliability analysis for internal consistency of measurement scales used, to collect data on the relationship between opinion climate and opinion expression, was conducted through the Cronbach alpha coefficient. Table 4.1 shows that all the main scales of the study have reliability greater than 0.7 which is sufficient reliability to use the data and proceed further for analysis.

Table 4.1

Reliability for Study Scales

#	Variable	Items	Reliability (Cronbach's alpha)
	Opinion Expression		
1	Opinion Expression Offline	3	0.81
2	Opinion Expression Online	4	0.91
	Psychographic Attributes		
1	Communication Apprehension	4	0.80
2	Fear of Isolation	5	0.78
3	Conflict Avoidance	6	0.86
4	Fear of Cyberbullying	5	0.81

4.2. Sample Description

Univariate descriptive statistics of the study's variables with respect to both controversial issues selected for the study i.e., emerging, and enduring issues is given in Table 4.2. The table shows the variables' mean and standard deviation in certain issues. The table shows the perception of opinions either its own opinion, the opinion of friends and family, countryman and future country and the perception of either traditional or social media. Moreover, it also expresses opinion expression in both respects like opinion expression offline and online and anonymity. Thus, it also shows the characteristics of issue importance, issue obtrusiveness and attitudes certainty. In the perception of opinion, own opinions Mean(M) is 4.95, Standard Deviation (SD) is 1.36 in the emerging issue. While in enduring issue, it is $M=3.84, SD=1.81$. Friends & family opinions $M=4.7, SD=1.94$ in emerging issues, while in enduring issues, it is $M=3.98, SD=1.74$. Traditional and social media have the same mean in emerging issues $M=4.95, SD=1.36$, while social media of enduring issues it is $M=3.88, SD=1.61$, and traditional media

M=3.70, SD=1.66. The future country has mean in emerging issues is *M=4.31, SD=1.56* and countrymen *M=3.95, SD=1.56*, while in enduring issues, countrymen have a mean *M=3.79, SD=1.56* and future country *M=3.59, SD=1.69*. In opinion expression, opinion expression online has a mean in emerging issues *M=21.91, SD=11.04*, as well as in enduring issues *M=10.10, SD=10.75*. Opinion expression offline has a mean in emerging issues *M=15.35, SD=6.68* and in enduring issues *M=14.07, SD=7.57*. In anonymity, the mean score is *M=4.69, SD=3.29* in emerging issues than in enduring issues *M=3.51, SD=2.98*. In issue characteristics, issue importance has a mean in emerging issues *M=7.97, SD=2.66*, issue obtrusiveness *M=1.52, SD=0.50* and attitude certainty *M=7.18, SD=2.80*. While in enduring issues, attitudes certainty has a mean *M=7.66, SD=2.66* than issue importance *M=7.22, SD=2.73* and issue obtrusiveness *M=1.52, SD=0.50*. The table indicates a mean in both emerging issues and enduring issue.

Further, the table 4.3 indicates the primary univariate description of the variables as a foundation for subsequent comprehensive analysis. The mean, standard deviation and minimum and maximum values are given for study variables including media use, psychographic attributes and demographics. In media use, respondents are more engaged in social media (*M=3.95, SD=1.70*) than in television use (*M=2.24, SD=1.52*). After that newspaper use (*M=1.79, SD=1.21*) and radio use (*M=1.31, SD=0.83*). Moreover, respondents rely more for news on ARY and GEO News channels than Dunya or others (*M=1.53, SD=0.72*),

Table 4.2

Sample Distribution across Issues (N=909)

Variable/s	Emerging Issue				Enduring Issue			
	M	SD	Min	Max	M	SD	Min	Max
Perception of Opinions								
Own Opinion	4.95	1.36	1	6	3.84	1.81	1	6
Friends and Family	4.7	1.46	1	6	3.98	1.74	1	6
Country	3.95	1.56	1	6	3.79	1.56	1	6
Future Country	4.31	1.56	1	6	3.59	1.69	1	6
Traditional Media	4.61	1.41	1	6	3.70	1.66	1	6
Social media	4.61	1.51	1	6	3.88	1.61	1	6
Opinion Expression								
Opinion Expression Offline	15.35	6.68	3	30	14.07	7.57	3	30
Opinion Expression Online	21.91	11.04	4	47	10.10	10.75	4	40
Anonymity	4.69	3.29	1	10	3.51	2.98	1	10
Issue Characteristics								
Issue Importance	7.97	2.66	1	10	7.22	2.73	1	10
Issue Obtrusiveness	1.52	0.50	1	2	1.52	0.50	1	2
Attitude Certainty	7.18	2.80	1	10	7.66	2.66	1	10

Note. Emerging Issue = Covid 19 Vaccination, Enduring Issue = Military Involvement in Politics

In psychographic attributes, conflict avoidance has a greater mean (*M=19.37, SD=5.47*) than fear of cyberbullying (*M=16.46, SD=4.72*). After that, fear of isolation (*M=14.19, SD=4.44*) and, in the end, communication apprehension (*M=9.88, SD=3.68*).

In demographics, the youngest respondent was aged 17 years while the oldest was 47 years old, with the mean age being 22 years (*M=22.41, SD=3.99*); after that, about 39% of respondents reported 50000-100000 Rs as family income (*M=2.43, SD=1.25*). A higher response rate from female respondents yields 64% of females (*M=1.64, SD=0.48*) and about 72% of the respondents were from a bachelor's degree in the education

category (*M=1.30, SD=0.58*), and about 55% were from IIUI as institute (*M=1.44, SD=0.49*). In the end, PTI (67%) and PMLN (17%) was leading political affiliation (*M=0.90, SD=3.08*) among respondents.

Table 4.3

Univariate Descriptive Statistics of the Study's Variables (N=909)

#	Variable/s	M	SD	Min	Max
1	**Media Use**				
	Television Use	2.24	1.52	1	6
	Newspapers Use	1.79	1.21	1	6
	Radio Use	1.31	0.83	1	6
	Social media	3.95	1.70	1	6
	News Channel Reliance	1.53	0.72	1	4
2	**Psychographic Attributes**				
	Communication Apprehension	9.88	3.68	4	20
	Fear of Isolation	14.19	4.44	5	25
	Conflict Avoidance	19.37	5.47	5	25
	Fear of Cyber Bullying	16.46	4.72	5	25
3	**Demographics**				
	Gender	1.64	0.48	1	2
	Age	22.41	3.99	17	47
	Education	1.30	0.51	1	3
	Institute	1.44	0.49	1	2
	Family Income	2.43	1.25	1	5
	Political Affiliation	0.90	3.08	1	4

News channel reliance across male and female participant was analyzed by using crosstabulation. Table 4.4 shows the results of cross tab analysis suggesting that most of participants who relied on ARY were females (41%).

Table 4.4

News Channel Reliance by Gender

		Gender	
		Male	Female
News Channel	ARY	16.6%	41%
Reliance	GEO	15	19
	Duniya	0.8	1.8
	Others	3.2	2.6
	N	323	586

Male and female participants were also analyzed for high or low fear of isolation. Table 4.5 presents the results suggesting that overall women scored higher in fear of isolation.

Table 4.5

Fear of Isolation by Gender

		Gender	
		Male	Female
Fear of Isolation	Low	13.8%	18.5%
	Hi	21.8	46
	N	323	586

4.4. Zero-Order Correlations

Zero order correlation using Pearson correlation was applied to measure the relationship between study variables and results are visible in table 4.4. A significant relationship is found between age, gender, level of education, institute, family income,

channel reliance, communication apprehension, fear of isolation, conflict avoidance and own opinion on enduring issue (p<.01). The relationship is significant at 0.05 alpha level and positive in direction except for negative own opinion. Gender is also correlated with political affiliation, channel reliance, communication apprehension, fear of isolation, conflict avoidance, cyberbullying, an offline and online opinion expression on emerging issues, and own opinion on enduring issues (p<.05). The relationship is significant at 0.05 alpha level and positive in direction. Level of education is also interlinked with the institute, family income, channel reliance, conflict avoidance and own opinions on enduring issues (p<.05). Institutes are correlated with family income, political affiliation, conflict avoidance, cyberbullying, own opinions in emerging issues, opinion expression online in both issues and opinion expression offline in enduring issues (p<.05). The relationship is significant at 0.05 alpha level and positive in direction. Family income is interlinked with political affiliation, opinion expression online in issue one and opinion expression offline in issue 2 (p<.05). Political affiliations are highly significantly correlated with channel reliance, own opinions in enduring issues, and opinions expressed in enduring issues (p<.01). Channel reliance is highly related to own opinion and online opinion expression in enduring issues (p<.01). Communication apprehension is highly significantly correlated with fear of isolation, conflict avoidance, cyberbullying, opinion expression online in both issues and opinion expression offline in enduring issues (p<.01).

Fear of isolation is correlated highly significantly with conflict avoidance, cyberbullying, own opinions in emerging issues, and opinion expression online in both issues, while opinions expression offline in enduring issues (p<.01). Conflict avoidance is

100

highly significant with cyberbullying, opinion expression online in both issues, while

opinions expression offline in enduring issues (p<.01).

Table 4.6

Zero Order Correlation Matrix for Study Variables (N=909)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Age	–															
2. Gender	-.14**	–														
3. Education	.65**	.06	–													
4. Institutes	.12**	-.01	.08*	–												
5. Income	.25**	-.01	.14**	.30**	–											
6. Pol. Aff [a]	.03	-.20**	-.01	-.11**	-.08*	–										
7. Ch. Rel [b]	.15**	-.13**	.09**	-.03	.03	.25**	–									
8. CA [c]	-.08*	.08*	-.01	-.02	-.06	-.01	-.03	–								
9. FOI [d]	-.07*	.11**	-.06	.03	-.05	.02	-.01	.33**	–							
10. CAD [e]	.07*	.08*	.09*	.09**	-.01	-.05	-.02	.29**	.46**	–						
11. CB [f]	.05	.16**	.03	.11**	-.01	-.04	.01	.27**	.46**	.57**	–					
12. Own Op [g] 1[h]	.01	.03	.02	-.10**	.04	-.06	.02	-.01	-.08*	-.02	-.03	–				
13. OE [i] 1[h] Offline	-.05	.10**	-.02	.10**	.06	-.01	.03	-.06	-.01	-.01	.02	.10**	–			
14. OE [i] 1[h] Online	.03	-.07*	.02	.10**	.12**	.03	.06	-.25**	-.51**	-.23**	-.16**	.19**	.41**	–		
15. Own Op [g] 2[j]	-.10**	.12**	-.08*	.03	-.05	-.15**	-.47**	-.01	-.06	-.08*	-.07*	NR[k]	NR	NR	–	
16. OE [i] 2[j] Offline	.03	-.05	-.03	.10**	.08*	.03	.06	-.13**	-.10**	-.12**	.03	NR[k]	NR	NR	-.12**	–
17. OE [i] 2[j] Online	-.06	-.03	-.02	.07*	.03	.09**	.09**	-.14**	-.20**	-.24**	-.23**	NR[k]	NR	NR	-.07*	.51**

Note. **Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).
[a] Pol. Aff- Political Affiliation
[b] Ch.Rel-News Channel Reliance
[c] CA- Communication Apprehension
[d] FOI- Fear of Isolation
[e] CAD- Communication Apprehension
[f] CB- Cyber Bullying
[g] Op-Opinion
[h] Issue 1-Emerging Issue (Covid19 Vaccination)

Cyberbullying has a highly significant relationship with opinion expression online in both issues, while opinions expressed offline in enduring issues (p<.01). Own opinions on emerging issues are significantly interrelated with opinion expression online and offline (p<.01). Opinions of online and offline emerging issues are interlinked (r=.41, p<.01). Own opinions of enduring issues online and offline opinion expression are significantly correlated (r= .12, p<01). Opinion expressions of online and offline enduring issues are also correlated significantly (r=.07, p<.01).
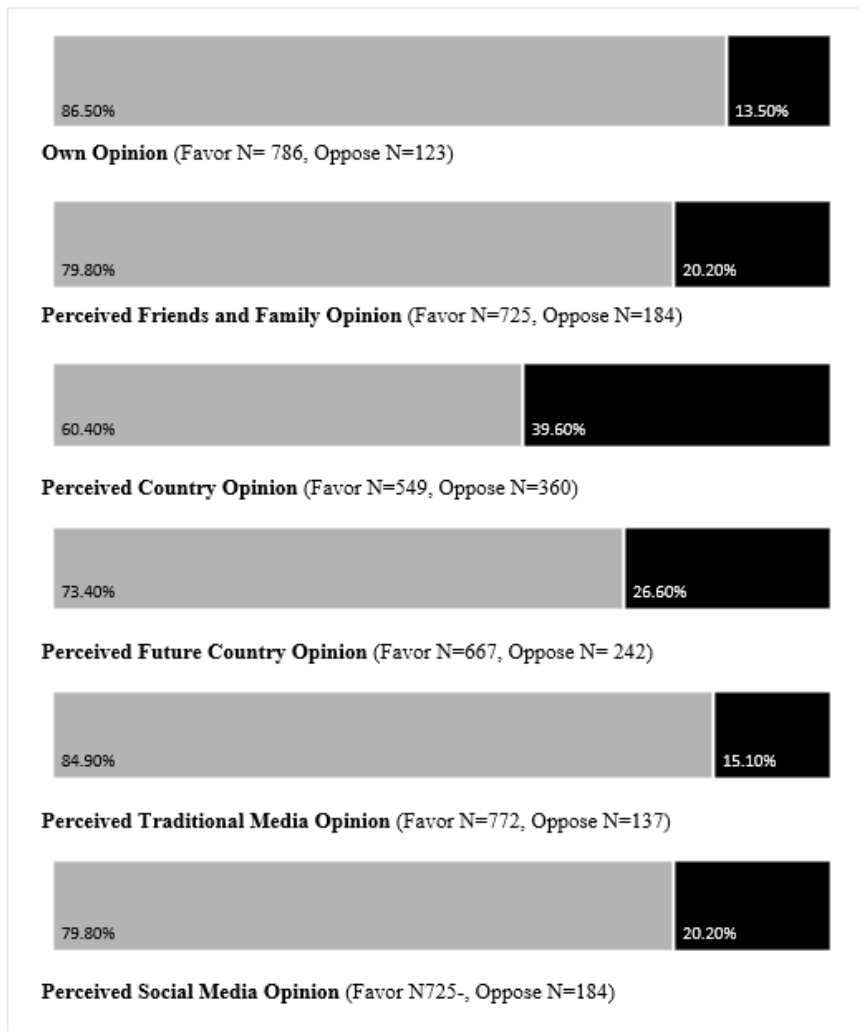
4.5 Research Questions and Hypotheses

For the two selected controversial issues, i.e. emerging and enduring, first the climate of opinion was observed. To examine the nature of the climate of opinion in the presence of a new media environment people were asked about their own opinion, and perceptions of opinions (friends and family, country, future country, traditional media and social media) about both the issues selected to address the first research question.

Figure 4.1 depicts the perceived climate of opinion on an emerging issue, i.e. Covid-19 vaccination. Of the sample of 909 participants, 786 participants favored it, while 123 opposed it. Perceived friends and family opinion, 725 favored while 184 opposed. Regarding perceived country opinion, 549 participants favored and 360 opposed. On the other hand, in perceived future country opinion, 667 participants favored it while 242 opposed it. In perceived traditional media opinion, the climate majority favored 772 participants, and only 137 opposed. Thus, in perceived social media opinion,

climate 725 participants favored it, while 184 opposed it. Hence the majority opinion

climate is in favor of the emerging issue, so the famous or popular opinion goes in favor

of the emerging issue.

Figure 4.1

Perceived Climate of Opinion: Emerging Issue - Covid19 Vaccination (N=909)

Own Opinion (Favor N= 786, Oppose N=123)

86.50%   13.50%

Perceived Friends and Family Opinion (Favor N=725, Oppose N=184)

79.80%   20.20%

Perceived Country Opinion (Favor N=549, Oppose N=360)

60.40%   39.60%

Perceived Future Country Opinion (Favor N=667, Oppose N= 242)

73.40%   26.60%

Perceived Traditional Media Opinion (Favor N=772, Oppose N=137)

84.90%   15.10%

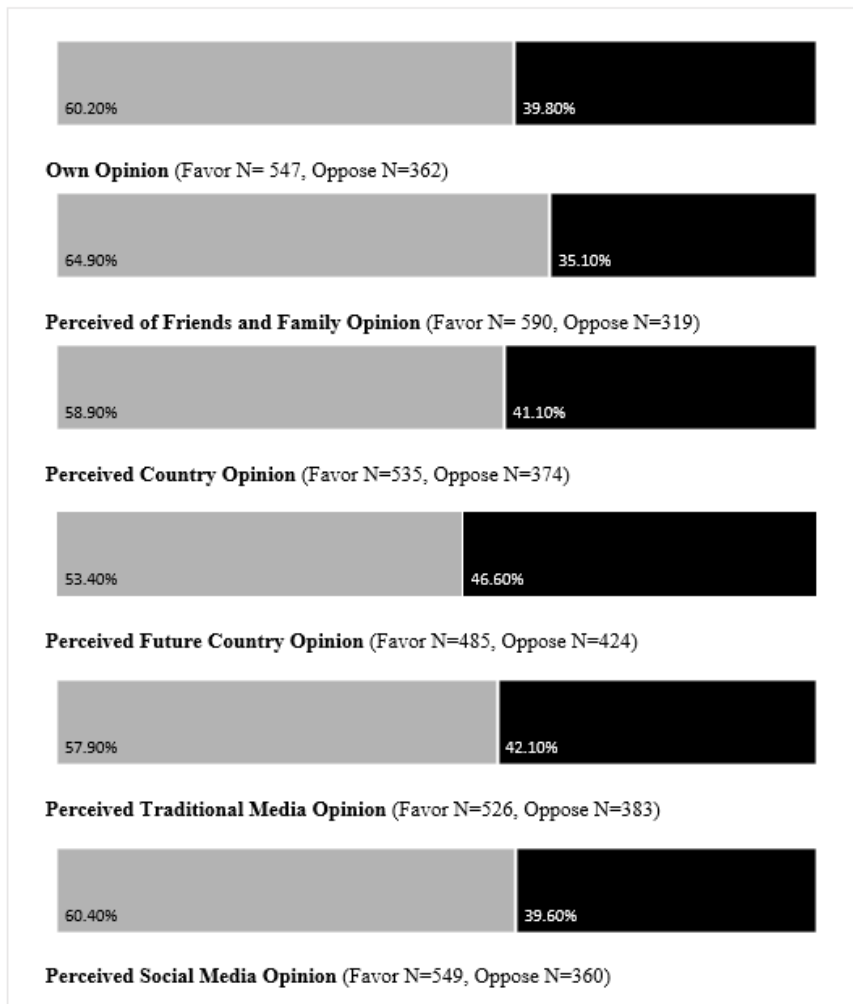**Perceived Social Media Opinion** (Favor N725-, Oppose N=184)

79.80%   20.20%

Note. ☐ Favor ■ Oppose.

In same manner, the climate of opinion for enduring issue i.e., Military

involvement in politics, has been discussed in figure 4.2 . Out of the 909 participants in

the sample, 547 favored the enduring issue, while 362 opposed it. In perceived friends

and family opinions, 540 favored, while 319 were opposed to it. Regarding perceived

country opinion, 535 participants were in favor, and 385 were opposed. In contrast, in

future country opinion, 485 participants were in favor while 424 were opposed. In

perceived traditional media opinion, 526 participants favored it, while 383 opposed it.

Thus, in the perceived social media opinion climate, 549 participants were in favor, while

360 were against.

Figure 4.2

Perceived Climate of Opinion: Enduring Issue – Military Involvement in Political Affairs (N=909)

Own Opinion (Favor N= 547, Oppose N=362)
60.20% / 39.80%

Perceived of Friends and Family Opinion (Favor N= 590, Oppose N=319)
64.90% / 35.10%

Perceived Country Opinion (Favor N=535, Oppose N=374)
58.90% / 41.10%

Perceived Future Country Opinion (Favor N=485, Oppose N=424)
53.40% / 46.60%

Perceived Traditional Media Opinion (Favor N=526, Oppose N=383)
57.90% / 42.10%

Perceived Social Media Opinion (Favor N=549, Oppose N=360)
60.40% / 39.60%

Note. ☐ Favor ■ Oppose.

This has resulted in contradictory findings if half of the participants favor and the other half oppose it. The enduring issue seemed more controversial in nature, but yet the popular opinion climate is in favor but people perceived that other country man in future will be shifting their opinion to some extend towards opposing it.

Perception of opinion was further analyzed for opinion congruency such that, respondents' own opinion was compared with the perceived friends and family opinion, then further a measure for opinion congruency was created (Ho & McLeod, 2008) by multiplying the score for own opinion with the score for the perception of friends and family opinion, resulting in a continuous score in which –1 (indicates low congruency) and +1 (indicates high congruency). The same way was adopted to compute media congruency and social media congruency.

For emerging issues, 84 % of respondents had own opinions congruent with the perception of friends and family opinion, 85.7 % of respondents had congruent own opinions with the perception of traditional media and 83.8 % of respondents had own opinions congruent with the perception of social media opinion. Table 4.5 further explained the exact number of respondents against each congruency variable. Whereas for enduring issues 81.6 % of respondents had own opinions congruent with the perception of friends and family opinion, 73.3 % had media congruency and 73.8 % had social media congruency. Table 4.5 shows detailed statistics.

Table 4.7

Statistics of Opinion Congruency, Traditional Media Congruency and Social Media Congruency (*N=909*)

Opinion/s	Emerging Issue	Enduring Issue

	Not Congruent % (N)	Congruent %(N)	Not Congruent % (N)	Congruent %(N)
Opinion Congruency	16.0 (145)	84.0 (764)	18.4(167)	81.6 (742)
Media Congruency	14.3 (130)	85.7(779)	26.7 (243)	73.3 (666)
Social Media Congruency	16.2 (147)	83.8 (762)	26.2(238)	73.8(671)

Note. Emerging Issue = Covid 19 Vaccination, Enduring Issue = Military Involvement in Politic.

4.5.1 First Hypothesis

The first hypothesis (H1) states that the new media environment has a relationship with the climate of opinion such that: (H1a) The perceived opinion of social media will have a positive relationship with own opinion, perception of traditional media opinion, perception of friends and family opinion, perception of country opinion and perception of future country opinion.

Table 4.8 above indicates the results of the correlation. Pearson correlation was applied to measure the relationship between perceptions of a climate of opinions in both emerging, i.e. Covid-19 vaccination, and enduring issue, i.e. military affiliation. Perception of social media opinions has a highly significant relationship with own opinion (r=.45, p<.01), perception of traditional media opinion (r=.57, p<.01), perception of friends and family opinion (r=.43, p<.01), perception of country opinion (r=.40, p<.01) and perception of future country opinions (r=.44, p<.01) in both emerging and enduring issues. Own opinion also has a highly significant relationship with perception of traditional media opinion (r=.45, p<.01), friends and family opinion (r=.61, p<.01), perception of country opinion (r=.38, p<.01) and future country opinions (r=.43, p<.01) in emerging issues. Moreover, the perception of traditional media is also interlinked with a perception of

friends' and family's opinions ($r=.21$, $p<.01$), country ($r=.45$, $p<.01$) and future country opinions ($r=.30$, $p<.01$) in enduring issues.

Table 4.8

Zero Order Correlation Matrix for Perceptions of Climate of Opinion (N=909)

Perception of Opinion Climate	Emerging Issue						Enduring Issue					
	1	2	3	4	5	6	1	2	3	4	5	6
1. Social media	−						−					
2. Own Opinion	.45**	−					.44**	−				
3. Traditional Media	.57**	.45**	−				.42**	.42**	−			
4. Friends and Family	.43**	.61**	.46**	−			.34**	.21**	.30**	−		
5. Country	.40**	.38**	.39**	.51**	−		.35**	.45**	.32**	.35**	−	
6. Future Country	.44**	.43**	.43**	.48**	.55**	−	.23**	.30**	.26**	.36**	.26**	−

Note. ** Correlation is significant at the 0.01 level (2-tailed).
Emerging Issue = Covid 19 Vaccination, Enduring Issue = Military Involvement in Politics

Furthermore, perceptions of friends and family opinions correlate significantly with perceptions of the country ($r=.39$, $p<.01$) and future country opinions ($r=.43$, $p<.01$) in emerging issues. Lastly, perception of the country and future country opinions ($r=.26$, $p<.01$) are also related. All the climate of opinion variables are interlinked and have a highly significant relation. The direction of relationships is positive, meaning increases in one may also increase in another. Also, the hypothesis (H1a) has been supported.

4.5.2 Second Hypothesis

The study examined the effect of the climate of media opinion on the interpersonal opinion climate such that (H2) the climate of media opinion for an issue will be related to the climate of interpersonal opinion for the same issue.

A hierarchical regression analysis to examine the potential relationship between the media's stance on a particular topic and the associated interpersonal opinion on that issue. Table 4.7 shows the results regarding the emerging issue, Covid-19 vaccination.

Table 4.9

The Effect of Own *Opinion and Media Opinion (Traditional and Social Media) on Interpersonal Opinion Climate (Issue Type = Emerging: Covid 19 Vaccination, N=909)*

	Perceived Climate of Interpersonal Opinion					
	Friends &Family		Country		Future Country	
	r	β	r	β	r	β
Demographics						
Age	-.04	-.05	-.06	-.07**	-.01	-.03
Gender (1=M, 2=F)	.01	-.002	-.002	-.01	.05	.04
Family Income	.02	.03	.004	.02	.11	.11**
Political Affiliation	-.03	-.03	-.01	-.004	-.07	-.05
Incremental R^2 (%)	0.4 %		.4 %		1.7**%	
Own Opinion						
(1=Oppose, 6=Favor)						
Opinion	.50	.50***	.24	.24***	.32	.32***
Incremental R^2 (%)	24.7***%		5.9***%		9.9***%	
Perception of Media Opinion						
(1=Oppose, 6=Favor)						
Traditional Media	.35	.12***	.24	.18***	.28	.15***
Social Media	.37	.16***	.31	.25***	.25	.09***
Incremental R^2 (%)	4.3***%		9.7***%		3.1***%	
Total R^2 (%)	29.4%		16%		14.7%	

Note. Betas (β) are standardized regression coefficients after all are variables entered in the model; r = zero-order correlation. ***$p< .001$; **$p< .01$; *$p< .05$.

Age, gender, family income, and political affiliation were entered in the first phase of the model as control variables. The first model was not a significant predictor of the perceived climate of interpersonal opinion, which produced an $F_{(4, 904)} = .86$; $p > .001$. In addition, in step 2, the own opinion explained a significant portion of the variance in the perceived climate of interpersonal opinions, $F_{(5, 903)} = 60.41$; $p<.001$.

Significant predictors of (the perceived climate of interpersonal opinions) were friends and family, countrymen and future country. This implies that own opinion predicts the perceived climate of interpersonal opinions.

Consequently, the model's third phase investigates the effect of media perspectives on the perceived climate of interpersonal opinions. It also accounted for a substantial proportion of the variance, $F(7, 901) = 53.48$; $p < .001$ Moreover, the perception of media perspectives (traditional and social media) accounted for a substantial proportion of the variance in the perceived climate of interpersonal opinions, $p < .001$. After controlling for demographic factors such as age, gender, family income, and political affiliation, the findings suggest that peers and family, fellow citizens, and anticipated future country opinions account for approximately 29 per cent of the variance in opinions. Consequently, social media, traditional media, and own opinion play a significant role in predicting the perceived climate of interpersonal opinions. These findings shed light on the intricate relationship between own opinions, media perceptions, and the environment in which interpersonal opinions are perceived.

Due to a highly significant association between the variables, the alternative hypothesis was deemed valid, whereas the null hypothesis was rejected. It has been discovered that own and traditional media and social media opinions are significant indicators of a perceived climate of interpersonal opinion for emerging issue.

Table 4.10.

The Effect of Own Opinion and Media Opinion (Traditional and Social Media) on Interpersonal Opinion Climate (Issue Type = Enduring: Military Involvement in Political Affairs, N=909)

	Perceived Climate of Interpersonal Opinion		
	Friends & Family	Country	Future Country

	r	β	r	β	r	β
Demographics						
Age	-.10[*]	-.08	-.06	-.04	-.09	-.06
Gender (1=M, 2=F)	.10	.06	.04	.03	.07	.05
Family Income	-.07	-.06	-.09	-.08[**]	-.10	-.10[*]
Political Affiliation	-.14	-.14[***]	-.03	-.03	-.04	-.03
Incremental R² (%)	3.7[***] %		1.2[**] %		1.9[***] %	
Own Opinion (1=Oppose, 6=Favor)						
Opinion	.63	.62[**]	.39	.39	.45	.45[***]
Incremental R^2 (%)	36.9[***] %		14.8[***] %		19.4[***] %	
Perception of Media Opinion (1=Oppose, 6=Favor)						
Traditional Media	.48	.21[***]	.41	.22	.44	.19[***]
Social Media	.43	.09[***]	.40	.21	.46	.23[***]
Incremental R^2 (%)	5.3[***] %		8.6[***] %		10.3[***]%	
Total R^2 (%)	45.9%		16%		31.6%	

Note. Betas (β) are standardized regression coefficients after all variables are entered in the model; *r* =zero-order correlation. ***p< .001; **p< .01; *p< .05.

The same procedure of hierarchical multiple regression was performed for enduring issues as well, results shown in Table 4.8. Demographics, including age, gender, family income, and political affiliation, were entered at step 1 in the model as control variables. The results indicated that age affects friends' and family's opinions in demographic variables (β=-.07, p<.028). Results also indicate that political affiliation emerged to be a significant predictor of friends & family opinions when calculated by regression R^2=.037, t (904) =-4.05, p<.01. Moreover, in step 2, the own opinion explained a significant proportion of variance in a perceived climate of interpersonal opinions, R² = .369, F (5,903) =123.5, p < .001. The results showed that own opinions are significant predictors of (perceived climate of interpersonal opinions) friends & family,

countrymen and future country, which means that own opinions affect the perceived climate of interpersonal opinions.

Thus, the 3rd step is followed to examine the perception of media opinions on the perceived climate of interpersonal opinions in the model. It also explained a significant proportion of variance, $R^2 = .053$, $F (7,901) = 109.3$, $p < .001$. Moreover, the researcher examined the perception of media opinions (traditional & social media) and explained a significant proportion of variance in a perceived climate of interpersonal opinions, $p < .001$. So results indicate a 45% variance in opinions account for friends and family, countrymen & future country opinions after controlling for age, gender, family income and political affiliation. So social media, traditional media and own opinions are significant predictors of perceived interpersonal opinions climate. These results shed light on the complex relationship between own opinions, perception of media opinions, and perceived climate of interpersonal opinions. The alternative hypothesis was supported while the null was rejected, as a highly significant relationship exists between variables. Own opinion and media opinion (traditional and social media) are significant predictors of interpersonal opinion climate for enduring issue.

4.5.3 Third Hypothesis

To examine the relationship between the perceived climate of opinion and opinion expression multiple hierarchical regression was conducted to measure the effect of demographic, psychographic variables and opinion congruency on offline opinion expression as shown in Table 4.9. Demographics, including age, gender, family income, and political affiliation, were entered at step 1 in the model as control variables. The results indicated that in demographic variables, opinions expressed offline has been

predicted by gender (β=-.063, p<.001). Results also indicate that political affiliation

emerged to be a significant predictor of opinion expression offline in emerging issues

when calculated by regression ß=.023, R^2 = .019, F (4,903) =4.33, p < .001. Moreover, in

step 2, psychographic variables explained a significant proportion of variance in opinions

expression offline, R^2 = .291, F (8,899) =46.2, p < .001. The results showed that

psychographic variables are significant predictors of opinions expression offline in an

emerging issue, Covid-19 vaccination, which means that own opinions affect the

perceived climate of interpersonal opinions.

Thus, the 3rd step is followed to examine the perception of opinion congruency on

opinion expression offline in the model after controlling for demographic and

psychographic variables. It also explained a significant proportion of variance, R^2 = .301,

F (8,899) =38.6, p < .001. Moreover, the researcher examined the perception of media

opinions (traditional & social media) and explained a significant proportion of variance in

a perceived climate of interpersonal opinions, p < .001.

Table 4.11

The Effect of Opinion from Interpersonal Communication and Traditional Media on
Offline Opinion Expression after Controlling for Demographic and Psychographic
variables (N=909)

	Opinion Expression Offline			
	Emerging Issue		Enduring Issue	
	r	β	r	B
Demographics				
Age	.04	-.01	.03	-.01
Gender (1=M, 2=F)	-.07	-.06	-.05	-.06
Family Income	.12	.12**	.08	.12***
Political Affiliation	.03	.02	.03	.02
Incremental R^2 (%)	1.8% **		.9%	
Psychographic Variables				
Communication Apprehension	-.25	-.10**	-.13	-.10*
Conflict Avoidance	-.23	.03	-.12	.03

Fear of Isolation	-.51	-.49***	-.10	-.49 ***
Incremental R^2 (%)	28% ***		3.1%***	

Opinion Congruency (OC)				
(-1=Oppose, 1=Favor)				
OC- Friends Family	.03	.06*	.03	.10**
OC- Country	-.06	-.12**	-.06	-.07
OC- Future Country	-.02	-.02	-.02	-.02
OC- Traditional Media	.02	.01	.02	-.03
Incremental R^2 (%)	29% ***		4.2% ***	
Total R^2 (%)	58.8 %		8.2 %	

Note: Betas (β) are standardized regression coefficients after all variables are entered in the model; r = zero-order correlation. ***p< .001; **p< .01; *p< .05.
*(*OC- Opinion Congruency, Emerging Issue = Covid 19 Vaccination, Enduring Issue = Military Involvement in Politics)

Moreover, these three steps of the model have been repeated to measure the hierarchical regression between demographics, psychographic variables and opinion congruency with enduring issues, i.e. military affiliation. Demographics, including age, gender, family income, and political affiliation, were entered at step 1 in the model. The results indicated that in demographic variables, opinion expression offline is affected by gender (β=-.063, p<.001). Results also indicate that political affiliation emerged as a significant predictor of opinion offline in emerging issues when calculated by regression ß=.023, R² = .010, F (4,904) =2.19, p < .001. Moreover, in step 2, psychographic variables explained a significant proportion of variance in opinions expression offline, R² = .032, F (7,901) =4.27, p < .001. The results showed that psychographic variables are significant predictors of (perceived climate of interpersonal opinions) friends & family, countrymen and future country, which means that own opinions affect the perceived climate of interpersonal opinions. Thus, the 3rd step is followed to examine the perception of media opinions on the perceived climate of interpersonal opinions in the model after controlling for demographic and psychographic variables. It also explained a significant

proportion of variance, R^2 = .055, F (9,899) =5.78, p < .001.

So, results indicate 58% variance in opinions account for opinions expression offline after controlling for age, gender, family income and political affiliation with emerging issues, while only 8% variance is indicated in enduring issues. So psychographic variables and opinion congruency are significant predictors of opinion expression offline. These results shed light on the complex relationship between opinion congruency (friends & family, country, future country and traditional media) and opinion expression offline (emerging issues, i.e. Covid-19 vaccination and enduring issue, i.e. military affiliation).

Hence, the hypothesis stating; (H3a) perceived climate of opinion from interpersonal communication and traditional media will predict opinion expression after controlling for a certain demographic (age, political affiliation) and psychographic variables (Communication apprehension, fear of isolation, conflict avoidance), was supported while the null was rejected, as a highly significant relationship exists between variables.

The second part of the hypothesis tests the statement; (H3b) perceived climate of opinion from interpersonal communication and social media will predict opinion expression online after controlling for a certain demographic (age, political affiliation) and psychographic variables (Communication apprehension, fear of isolation, conflict avoidance, fear of cyberbullying).

A hierarchical regression analysis was conducted. For emerging issue, in the first step, demographic factors such as age, gender, family income, and political affiliation were entered as control variables' data suggest that demographic factors affect the

expression of opinions online, with family income having a significant effect (ß=.100, p<.001). According to the study's findings, political affiliation is a crucial factor to consider when attempting to predict online expressions of opinion on emerging issues. This was determined by regression analysis with an R^2 = .018, $F_{(4,904)}$ =4.05, $p < .001$, and a ß coefficient of.022. During the second stage of the study, it was determined that psychographic variables accounted for a substantial proportion of the variance in the online expression of opinions, with an R^2 = .073, $F_{(9,899)}$ =7.86, $p < .001$. This data was derived from the correlation between the two variables. According to the findings, psychographic characteristics serve as valuable indicators of online expression of opinions regarding the newly emerging issue of Covid-19 vaccination. This suggests that own opinions affect how others perceive the atmosphere of social interactions.

Table 4.12

The Effect of Opinion from Interpersonal Communication and Social Media on Online Opinion Expression after Controlling for Demographic and Psychographic Variables (N=909)

	Opinion Expression Online			
	Emerging Issue		*Enduring Issue*	
	r	*β*	*r*	*β*
Demographics				
Age	-.05	-.06	-.05	-.07*
Gender (1=M, 2=F)	.10	.10**	-.02	-.01
Family Income	.06	.08*	.03	.06
Political Affiliation	-.01	.02	.09	.09**
Incremental R^2 (%)	1.8%*		1.4%**	
Psychographic Variables				
Communication Apprehension	-.06	-.07*	-.14	-.04
Conflict Avoidance	-.01	.003	-.24	-.11**
Fear of Isolation	-.01	-.02	-.20	-.12**
Anonymity	.20	.26	-.23	-.14***
Cyberbullying	.02	-.10***	.31	.34***
Incremental R^2 (%)	7.3%***		20%***	

115

Opinion Congruency (OC) (-1=Oppose, 1=Favor)				
OC- Friends Family	-.03	-.02	-.01	-.01
OC- Country	-.09**	-.10	.003	-.02
OC- Future Country	-.07	-.05	.01	.00
OC- Traditional Media	.06	.06	.01	-.03
OC- Social Media	.06	.04	.10	.06
Incremental R^2 (%)	9% ***		20% ***	
Total R^2 (%)	18.1 %		41.4%	

Note: Betas (β) are standardized regression coefficients after all variables are entered in the model; *r* = zero-order correlations. ***p< .001; **p< .01; *p< .05.
*(*OC- Opinion Congruency, Emerging Issue = Covid 19 Vaccination, Enduring Issue = Military Involvement in Politics)

In the third phase of the procedure, the effect of opinion congruency on online

opinion expression within the model was investigated further. With an R^2 = .090, F

(14,899) =6.32, p < .001, indicating statistical significance at a p-value of less than.001,

the statement above illuminated a substantial portion of the variance. In addition, the

researchers examined how traditional and social media affects opinions expression

online. They discovered, with a p-value less than p<.001, that this analysis accounted for

a substantial proportion of the variance in the perceived climate of interpersonal opinions.

The results indicate that demographic factors influence the expression of opinions

offline, with gender being a significant predictor (ß =-.073, p<.001). This conclusion

indicates that demographic factors affect the online expression of opinions. The

regression analysis yielded a ß coefficient of .022, R^2 = .014, F (4,904) =3.29, p < .001,

indicating that political affiliation is a significant predictor of offline opinion expression

in developing issues. This is demonstrated by the fact that the data indicate political

affiliation as a significant predictor of online expression of opinion on enduring issues.

During the second phase of the analysis, it was also determined that psychographic characteristics accounted for a substantial portion of the variance in online expression of opinions. This analysis step yielded an $R^2 = .206$, $F (9,899) = 25.8$, $p < .001$.

As a result, the third step investigates the effects of opinion congruency on the online expression of opinions based on enduring issues contained within the model. With an $R^2 = .209$, $F (14,894) = 16.8$, $p < .001$, the assertion above illuminated a substantial portion of the variance.

Even when demographic factors such as age, gender, family income, and political affiliation are considered, the findings indicate that 18% of the diversity in online opinion expression in emerging issues, while 41% variance in enduring issues, can be attributed to differences in opinions. This holds even when the findings are considered. Psychographic characteristics and the degree to which a person's opinion aligns with one another are significant predictors of online expression of opinion. This study provides insight into the intricate interplay between psychographic factors such as communication apprehension, conflict avoidance, fear of isolation, and cyberbullying, as well as opinion congruency across various domains, such as friends and family, country, future country, and traditional media, about online opinion expression on both emerging and enduring issues such as vaccination against Covid-19 and military affiliation.

The prevalence of a highly significant relationship between the variables led to the conclusion that the alternative hypothesis is supported, and the null hypothesis is rejected. It was discovered that both interpersonal communication and traditional media perceptions of opinion climate significantly predicted opinion expression, even after controlling for demographic variables such as age and political affiliation, as well as

117

psychographic variables such as communication apprehension, fear of isolation, and conflict avoidance.

4.5.4 Fourth Hypothesis

To examine if the news channel reliance moderates the relationship between exposure to television and own opinion ad to verify that the moderating effect will be more visible in enduring issues than emerging issues, a multiple hierarchical regression was conducted. This aims to identify the moderating effect be more visible in enduring issues (military affiliation) than emerging issues (Covid-19 vaccination). Table 4.11 shows the results.

The outcomes revealed a significant effect of block 1 (age, gender, income, political affiliation), block 2 (age, gender, income, political affiliation, tv exposure, and channel reliance), block 3 (tv exposure and channel reliance) among enduring issue (military affiliation) as compared to emerging issue (Covid-19 vaccination).

Table 4.13.

Regression Results Indicating Impact of the Control, Predictor and Moderator Variables on Own Opinion (N=909)

Predictors	Own Opinion			
	Emerging Issue		*Enduring Issue*	
	r	*β*	*r*	*β*
Block 1				
Age	.01	.01	-.10	-.07[*]
Gender (1=M, 2=F)	.03	.02	.12	.08[**]
Family Income	.04	.04	-.05	-.04
Political Affiliation	-.06	-.05	-.15	-.13[***]
Incremental R^2 (%)	.6%		3.7%[***]	
Block 2				
Age	.01	.01	-.10	-.02
Gender	.03	.02	.12	.05
Family Income	.04	.04	-.05	-.03

Political Affiliation	-.06	-.06	-.15	-.03
TV Exposure	.03	.03	-.03	-.02
Channel Reliance	.02	.03	-.47	-.46***
Incremental R^2 (%)	.0%		19.2%***	
Block 3				
TV Exposure x Channel Reliance	.04	.06	-.25	.21**
Incremental R^2 (%)	.1%		.5%**	
Total R^2 (%)	.8%		23.4%	

Note. Betas (β) are standardized regression coefficients after all variables are entered in the model; *r* = zero-order correlation. ***p< .001; **p< .01; *p< .05.

For emerging issue, the interaction was not found significant. Demographics, including age, gender, family income, and political affiliation, were analyzed at step 1 in the model as block 1 predictors. The results indicated a non-significant difference. Moreover, in step 2, block 2 (age, gender, income, political affiliation, tv exposure, and channel reliance), and block 3 (tv exposure and channel reliance) also indicated a non-significant proportion of variance. The results showed that blocks 1, 2 and 3 are non-significant predictors for own opinion of emerging issues.

The steps of hierarchal regression were repeated. Block 1 (age, gender, income, political affiliation), was analyzed at step 1 in the model. Results indicated that political affiliation emerged to be a significant predictor of friends & family opinions when calculated by regression R² = .033, F (4,904) =8.736; p <.001. Moreover, in step 2, block 2 (age, gender, income, political affiliation, tv exposure, and channel reliance) explained a significant proportion of variance in own opinions in enduring issue, R² = .224, F (6,902) =44.73; p <.000. The results showed that block 2 variables are significant predictors of own opinion in the enduring issue.

Thus, the 3rd step is followed to examine the block 3 variables i.e., tv exposure and channel reliance on the own opinions in enduring issue in the model. It also explained a significant proportion of variance, $R^2 = .229$, $F(4,901) = 39.465$; $p < .001$. Moreover, the researcher examined the block 1, block 2, and block 3 variables as predictors of own opinions in both issues and explained a significant proportion of variance in enduring issues only, $p < .001$. So, results indicate a 24% variance in own opinions.

However, the interaction effect was found in the process. This implies that own opinions moderate the relationship between TV exposure and channel reliance with enduring issues. The alternative hypothesis was supported while the null was rejected, as a highly significant relationship exists between variables. Figures 4.3 and 4.4 are visual depictions.

Figure 4.3. *Normal P-P Plot of Regression Standardized Residual for Own Opinion on Enduring Issue (Military Involvement in Political Affairs)*
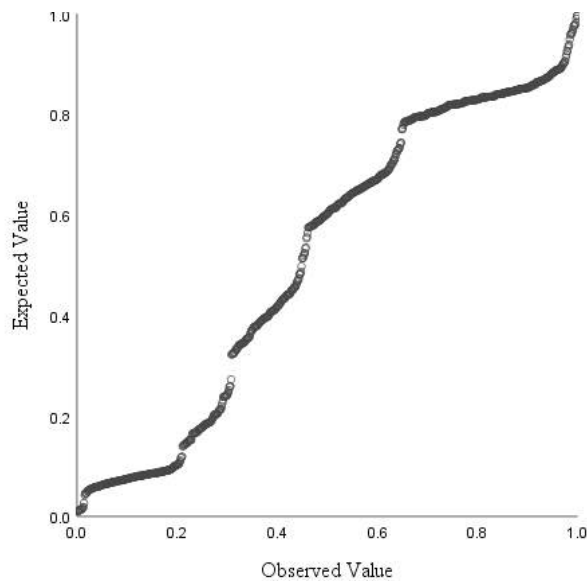
Figure 4.4.

Interaction between Television Exposure and News Channel Reliance on Own Opinion on Enduring Issue
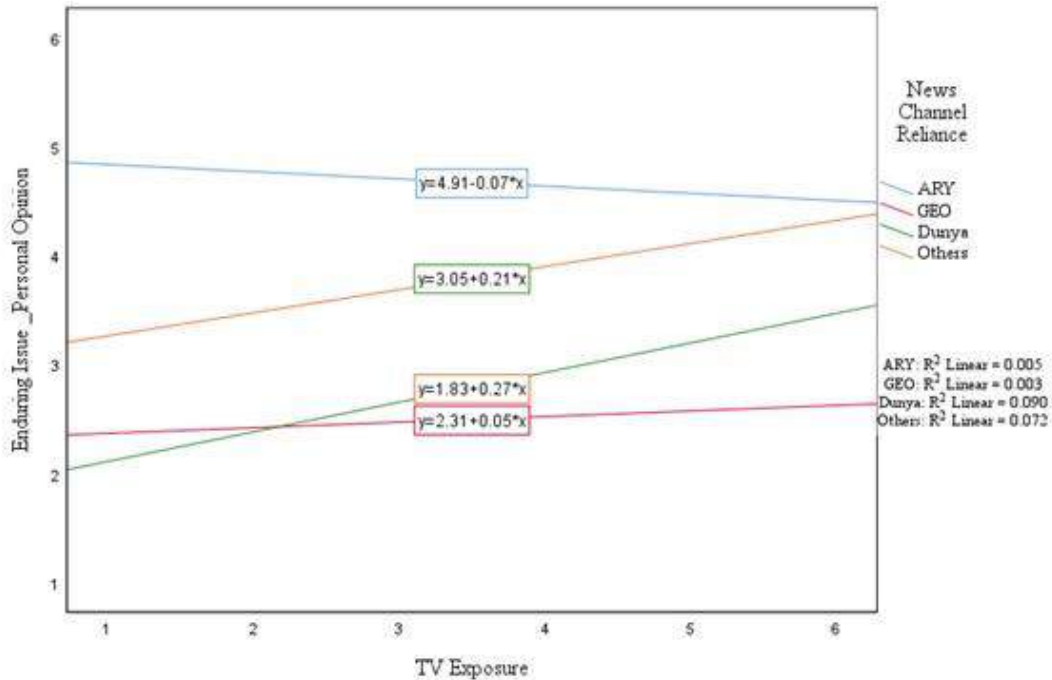
4.5.5 Fifth Hypothesis

To examine the level of fear of social isolation moderate the relationship between the perceived climate of opinion and opinion expression such that: people with high fear of isolation reflect lower opinion expression, compared to low fear of isolation. Multiple hierarchical regression was applied to measure how fear of isolation influences the relationship between the perceived climate of opinion and opinion expression. The outcomes revealed a significant effect of block 1 (age, gender, education, institute, political affiliation), block 2 (age, gender, education, institute, political affiliation, friends and family opinions and fear of isolation), block 3 (friends & family opinions and fear of

isolation) among enduring issue (military involvement in political affairs) as well as in

emerging issue (Covid-19 vaccination). Table 4.12 shows the results.

Table 4.14

Regression Results Indicating Impact of the Control, Predictor and Moderator Variables on Opinion Expression (N=909)

| Predictors | Opinion Expression Offline | | | |
| | Emerging Issue | | Enduring Issue | |
	r	β	r	β
Block 1				
Age	.04	.01	.03	.05
Gender (1=M, 2=F)	-.07	-.06	-.05	-.03
Education	.02	.02	-.03	-.07
Institute	.10	.10**	.10	.11**
Political Affiliation	.03	.03	.03	.03
Incremental R^2 (%)	1.6% **		1.7%**	
Block 2				
Age	.04	-.02	.03	.03
Gender (1=M, 2=F)	-.07	-.02	-.05	.002
Education	.02	.01	-.03	-.07
Institute	.10	.12***	.10	.11
Political Affiliation	.03	.07*	.03	.04**
Friends & Family Opinion	.12	.07**	-.10	-.114***
Fear of Isolation	-.48	-.47***	-.22	-.23***
Incremental R^2 (%)	23%***		6%***	
Block 3				
Friends & Family Opinion x Fear of Isolation	-.26	-.36***	-.12	.65***
Incremental R^2 (%)	1.6% ***		5%***	
Total R^2 (%)	26.2%		12.7%	

Note. Betas (β) are standardized regression coefficients after all variables are entered in the model; *r* = zero-order correlation. ***p< .001; **p< .01; *p< .05.

Block 1 predictors were analyzed at step 1 in the model. The results indicated a

significant difference R^2 = .011, F= (5,903) =2.942, *p* <.01 Moreover, in step 2, block 2,

R^2 = .242, F= (7,901) =42.38, p <.001 and block 3 R^2 = .257, F= (8,900) =40.348, p

<.001 also indicated a significant proportion of variance. The results showed that block 1,2 &3 are significant predictors of opinion expression offline in emerging issues.

The steps of hierarchal regression were repeated. Block 1 was analyzed at step 1 in the model. Results indicated that it emerged to be a significant predictor of opinion expression offline when calculated by regression $R^2 = .017$, F= (5,903) =.0473, p <.01. Moreover, in step 2, block 2 explained a significant proportion of variance, $R^2 = .077$, F= (7,901) =10.665, p <.001 The results showed that block 2 variables are significant predictors of opinion expression offline in enduring issue. Thus, the 3rd step is followed to examine the block 3 variables in enduring issue in the model. It also explained a significant proportion of variance, $R^2 = .124$, F= (8,900) =15.967, p <.001. However, the researcher examined the block 1, block 2, and block 3 variables as predictors of opinion expression offline in both issues and explained a significant proportion of variance, p < .001. So, results indicate a 51% variance in opinions on emerging issue and 21% in enduring issue.

Thus, it was demonstrated that the interaction effect was found in the process. This implies that opinions expressed offline moderate the relationship between friends and family, fear of isolation with emerging issue i.e., Covid-19 vaccination, and enduring issue i.e., military involvement in political affairs. The alternative hypothesis was supported while the null was rejected. Figures 4.5 and 4.6 visually demonstrate the interaction effect.

Figure 4.5.

Interaction between Opinion Climate and Fear of Isolation on Opinion Expression on Emerging Issue
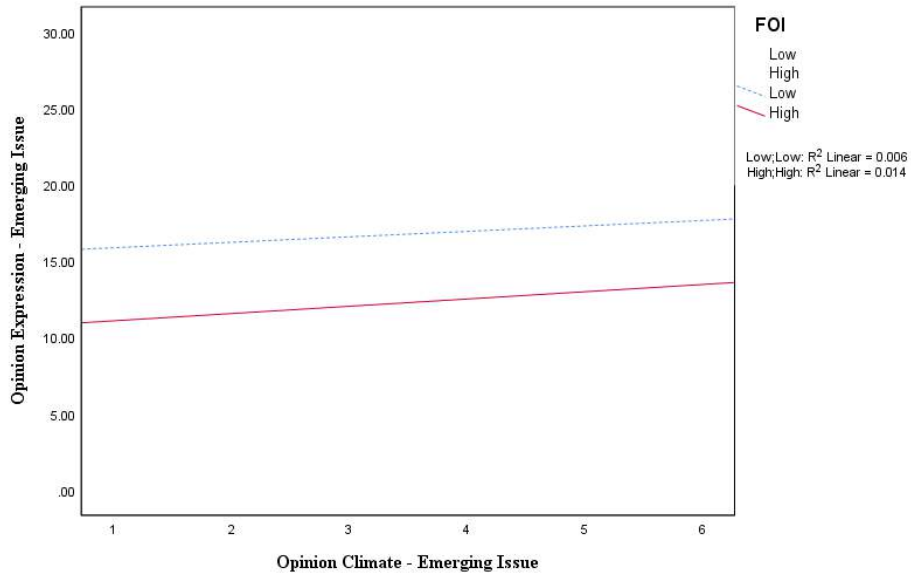
Figure 4.6.

Interaction between Opinion Climate and Fear of Isolation on Opinion Expression on Enduring Issue
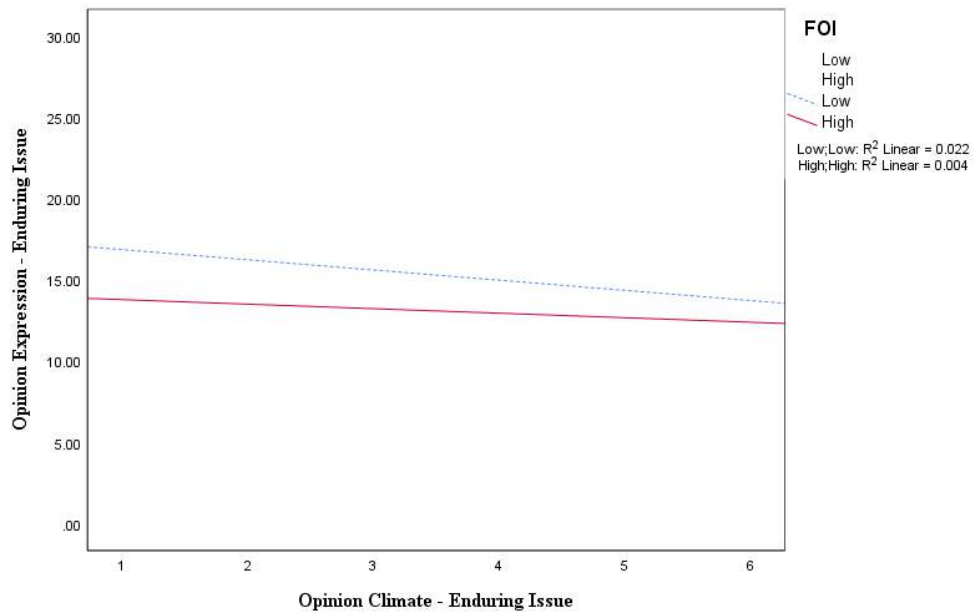
4.5.6 Sixth Hypothesis

Cyberbullying was examined as a moderator of the relationship between anonymity and online expression of opinion, with anonymity defined as concealing one's true identity online and using a fake profile. Multiple hierarchical regression was utilized to assess the moderating effect of cyberbullying on the relationship between anonymity and online opinion expression. The results revealed a significant effect of block 1 (age, gender, education, institute, political affiliation), block 2 (age, gender, education, institute, political affiliation, anonymity and cyber bullying), and block 3 (anonymity and cyber bullying) in comparison to the emerging issue (Covid-19 vaccination). Table 4.13 shows the results.

In phase 1 of the model, Block 1 predictors were analyzed. Results indicated a statistically significant difference $R^2 = .015$, $F= (5,903) = 3.245$, $p < 0.01$. In addition, in step 2, block 2, $R^2 =.068$, $F= (7,901) = 9.349$, $p <.001$, and in block 3, $R^2 =.075$, $F= (8,900) = 9.176$, $p < .001$, a significant proportion of variance was indicated. The results indicated that blocks 1, 2, and 3 are significant predictors of online expressions of opinion regarding emergent issues.

The hierarchical regression stages were repeated. Block 1 was analyzed during the model's first phase. As calculated by regression $R^2 =.018$, $F = (5,903) = 2.74$, $p\ 0.05$, this variable emerged as a significant predictor of online opinion expression. In addition, in step 2, block 2 explained a significant portion of variance, $R^2 =.178$, $F= (7,901) = 27.894$, $p <.001$. The results indicated that variables from Block 2 are significant predictors of online expression of opinion on enduring issues. Thus, the third stage is to examine the

block 3 variables in the model that pertain to the enduring issue. $R^2 = .185$, F= (8,900) = 25.575, p <.001. It also explained a significant portion of the variance.

Table 4.15

Regression Results Indicating Impact of the Control, Predictor and Moderator Variables on Opinion Expression Online (N=909)

| Predictors | Opinion Expression Online | | | |
| | Emerging Issue | | Enduring Issue | |
	r	β	r	β
Block 1				
Age	-.05	-.06	-.05	-.09
Gender (1=M, 2=F)	.10	.01**	-.02	-.02
Education	-.02	.01	-.02	.03
Family Income	.06	.08*	.03	.06
Political Affiliation	-.01	.02	.09	.09**
Incremental R^2 (%)	1.8% **		1.5%**	
Block 2				
Age	-.05	-.05	-.05	-.05
Gender (1=M, 2=F)	.10	.10	-.02	.03
Education	-.02	.01	-.02	.02
Institute	.06	.09**	.03	.08**
Political Affiliation	-.01	.03	.09	.09**
Anonymity	.20	.26***	.31	.34***
Cyberbullying	.02	-.12**	-.23	-.27***
Incremental R^2 (%)	50% ***		16%***	
Block 3				
Anonymity X Cyberbullying	.15	-.46**	.24	.35**
Incremental R^2 (%)	.8%**		.7%**	
Total R^2 (%)	52.6%		18.2%	

Note. Betas (β) are standardized regression coefficients after all are variables entered in the model; *r* =zero-order correlation. ***p< .001; **p< .01; *p< .05.

Nonetheless, the researcher examined the block 1, block 2, and block 3 variables as predictors of online expression of opinion on both issues and found that they explained a significant proportion of variance (p .0001). Consequently, the results indicate that

opinions on emergent issues vary by 52%, whereas opinions on enduring issues vary by 18%.

Thus, it was demonstrated that anonymity and cyberbullying substantially impact the online expression of opinion. However, the procedure reveals interaction effects. This suggests that online expressions of opinion mitigate the relationship between anonymity and cyberbullying with respect to emerging issue and enduring issue. The alternative hypothesis was adopted while the null hypothesis was rejected due to the existence of a highly significant relationship between variables.

Figure 4.7.

Interaction between Anonymity and Cyberbullying on Opinion Expression Online on Emerging Issue
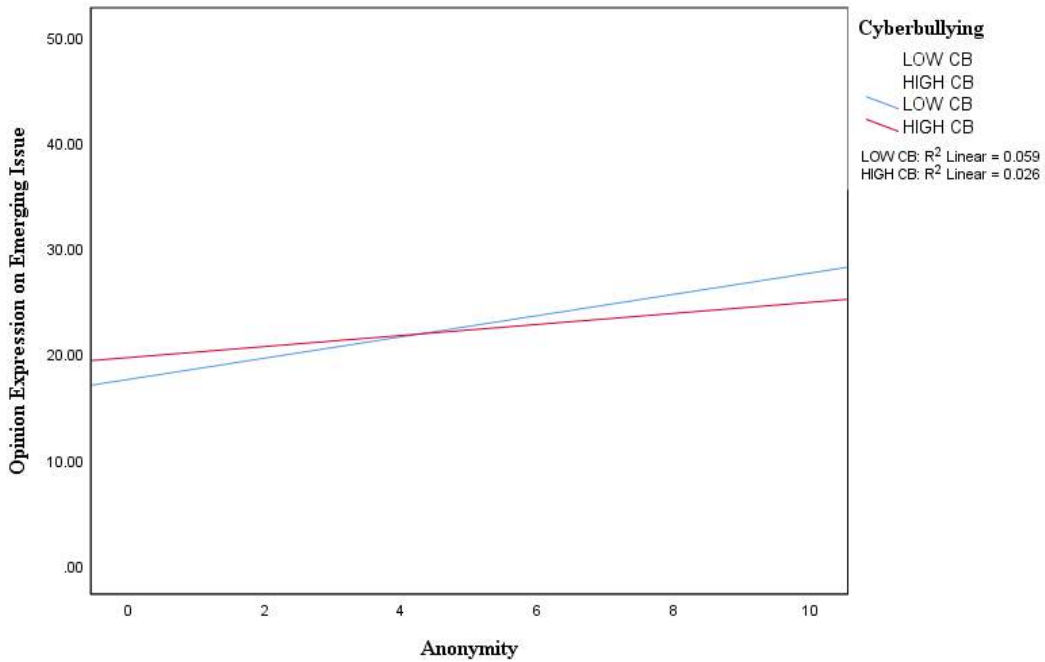
Figure 4.8.

Interaction between Anonymity and Cyberbullying on Opinion Expression Online on Enduring Issue
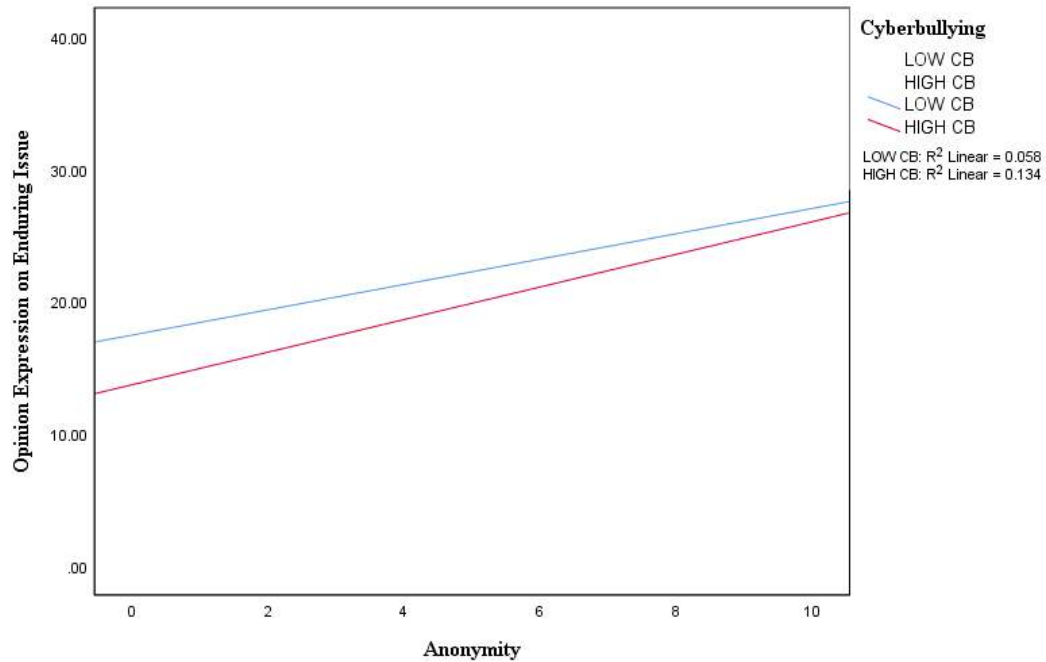
4.5.7 Seventh Hypothesis

Psychographic attributes were analyzed as a potential predictor of opinion expression offline. The study employed multiple hierarchical regression to evaluate the effect of psychographic attributes on the expression of opinions.

During the first step of the model, an analysis was conducted on demographic predictors. The findings of the study revealed a significant statistical distinction in the emerging issue with a R^2 value of .024, F= (5,903) = 4.35, p < .01, and in the enduring issue with a R^2 value of .017, F= (5,903) = 3.21, p < .01. Furthermore, during the second step of the analysis, various additional variables such as age, gender, family income, education, institute, issues certainty, communication apprehension, conflict avoidance, and fear of social isolation were included as predictors of offline opinion expression. The

results indicate a statistically significant difference in both issues. In emerging issue, the difference is R^2 =.300, F= (9,899) = 42.829, p < .001, and in enduring issue R^2 =.138, F= (9,899) = 15.94, p < .001, a significant proportion of variance was indicated. These findings suggest that a substantial proportion of variance was present in both issues. The findings suggest that demographic factors and variables play a crucial role in predicting the manifestation of opinions expressions offline, for both emerging and enduring issues.

Table 4.16

Regression Results Indicating Impact of the Psychographic Attributes on Opinion Expression (N=909)

	Opinion Expression Offline			
Predictors	*Emerging*		*Enduring*	
	r	*β*	*r*	*β*
Age	.04	-.02	.03	.04
Gender	-.07	-.07*	-.05	-.04
Family Income	.12	.10**	.08	.05
Education	.02	.02	-.03	-.06
Institutes	.10	.07*	.10	.09**
Incremental R^2 (%)	2.4%**		1.7%**	
Age	.04	-.05	.03	.01
Gender	-.07	-.02	-.05	.01
Family Income	.12	.05	.08	.02
Education	.02	.02	-.03	-.05
Institutes	.10	.09**	.10	.10**
Issue Certainty	.13	.11***	.21	.21***
Communication Apprehension	-.34	-.22***	-.25	-.18***
Conflict avoidance	-.23	.01	-.12	-.01
Fear of Social Isolation	-.48	-.42***	-.22	-.16***
Incremental R^2 (%)	27%***		12%	
Total R^2 (%)	29.4%		13.7%	

Note. Betas (β) are standardized regression coefficients after all variables are entered in the model; *r*= zero-order correlation. ***p< .001; **p< .01; *p< .05.

The findings suggest that there is a 29% variation in opinions regarding emerging issues, while opinions on enduring issues exhibit a 14% variation. The study revealed that

factors such as issue certainty, communication apprehension, conflict avoidance, and fear of social isolation have a significant influence on the manifestation of opinions expression offline. Psychographic attributes like Issue certainty, communication apprehension, and fear of social isolation effect opinion expression, in relation to both emerging issues such as Covid-19 vaccination and enduring issues such as military involvement in political affairs. But conflict avoidance was not found to be a significant predictor for both issues. Based on the presence of a statistically significant association between the variables, the alternative hypothesis was supported, and the null hypothesis was rejected.

4.5.8 Eighth Hypothesis

The current analysis examined the effect of issue characteristics on offline expressions of opinion. Using multiple hierarchical regression, the effect of issue characteristics on the offline expression of opinions was tested. The findings of the study indicate a statistically significant effect of demographic factors such as age, gender, family income, level of education, and institute, as well as other variables including age, gender, family income, education, institute, issues importance, and issues obtrusiveness, on both emerging and enduring issues.

During the initial phase of the model, demographics were entered as control variables. The model revealed a significant statistical difference in the emerging issue with a R^2 value of .024, F= (5,903) = 4.35, p < .01, and in the enduring issue with a R^2 value of .017, F= (5,903) = 3.21, p < .01. Furthermore, during the second step of the analysis, issues importance, and issues obstructiveness were included as predictors of

opinion expression offline. The results indicate a highly significant difference in both

issues. In emerging issue, the difference is R^2 =.030, F= (7,901) = 3.93, p < .001, and in

enduring issue R^2 =.078, F= (7,901) = 10.83, p < .001, a significant proportion of

variance was indicated.

Table 4.17.

Regression Results Indicating Impact of the issue characteristics on Opinion Expression (N=909)

	Opinion Expression Offline			
Predictors	*Emerging*		*Enduring*	
	r	β	r	β
Age	.04	-.02	.03	.04
Gender	-.07	-.07**	-.05	-.04
Family Income	.12	.10**	.08	.05
Level of Education	.02	.02	-.03	-.06
Institutes	.10	.07**	.10	.09**
Incremental R^2 (%)	2.4%**		1.7%**	
Age	.04	-.01	.03	.04
Gender	-.07	-.08*	-.05	-.03
Family Income	.12	.09*	.08	.03
Level of Education	.02	.02	-.03	-.07
Institutes	.10	.08*	.10	.10**
Issue Importance	.08	.08*	.24	.23***
Issue Obtrusiveness	.02	-.02	-.08	-.06
Incremental R^2 (%)	0.6%		6% ***	
Total R^2 (%)	3%		7.7%	

Note. Betas (β) are standardized regression coefficients after all variables are entered in the model; *r*= zero-order correlation. ***p< .001; **p< .01; *p< .05.

The findings indicate that opinions on emerging issues vary by 29%, whereas

opinions on persistent issues vary by 14%. The study revealed that factors such as the

issue's importance have a significant effect on the offline expression of opinions. The

issue of obtrusiveness was not a significant predictor. Hence the hypothesis was partially

supported as issue importance was found to be a significant predictor, but issue

obtrusiveness was not significant for both issues i.e. enduring and emerging.

CHAPTER 5

DISCUSSION ON RESULTS, CONCLUSION AND RECOMMENDATIONS

The present study has examined the relationship between opinion climate and opinion expression in the presence of a new media environment. As this research revolves around the spiral of silence theory and the spiraling process of opinion formation required controversial issues to be active. According to Neumann (1993) spiral of silence can only happen where the subject of conversation includes a strong moral aspect, which means, the topic needs to be controversial and emotionally laden. Without a moral component, there would not be a clear societal incentive to silence one's opinions in public circumstances. However, two controversial issues were taken to test the hypotheses, both were controversial and emotionally laden. The issues were further categorized as emerging issue (Covid 19 vaccination) and enduring issue (military involvement in political affairs). Both issues were found to be controversial at the time of data collection and satisfied the requirements to be taken to test the hypotheses taking the spiral of silence as a theoretical framework as they also gauge public opinion. Public opinion is an intensely debated and extremely complex idea. The way audiences can participate in public discourse has substantially changed as a result of developments in communication technologies. The old passive and disengaged audiences of traditional media such as television are gradually changing into Internet users who participate actively in public discourse and communicate with others. People are reading more news about public affairs online (Eilders & Porten-Cheé, 2022).

5.1 Summary of Results

The summary of the reported findings of the study is presented as follows:

1. The perceived climate of opinion for the emerging issue was in favor of the issue. The favor was more than seventy percent in most aspects including own opinion, perceived friends and family opinion, future country opinion, traditional media opinion and social media opinion as well. Only perception of opinion country men was found a little less favorable reported sixty percent in favor of the issue. Hence it was found that the majority perception of opinion was in favor of the emerging issue.

2. The enduring issue was found to be more controversial in nature as the favor of the issue ranged between fifty to sixty-four percent for own opinion, perception interpersonal and media opinions. Yet the majority opinion was in favor of the enduring issue. But the ratio remained almost neck to neck.

3. For both issue types, the own opinion was found to be congruent with the traditional media opinion and social media opinion. for emerging issue, the range of the congruency of own opinion with media opinion was found to be above eight percent, whereas for the enduring issue it ranged between seventy to eight per cent.

4. The new media environment was found to have a significant relationship with the climate of opinion and this relationship was found for both emerging and enduring issue types. Moreover, the climate of opinion included own opinion, perception of traditional media opinion, perception of friends and family opinion, perception of country opinion and perception of future country opinion.

5. The findings showed the effect of the climate of media opinion on the interpersonal opinion climate for both emerging and enduring issues. The perception of the climate of media opinion including both traditional media and social media for an issue was found to be related to the perception of the climate of interpersonal opinion (friends and family, countrymen and future countrymen) on the same issue.

6. The study explored the relationship between the perceived climate of opinion and opinion expression both online and offline after controlling demographic and psychographic variables. Research revealed that the perceived climate of opinion from interpersonal communication and traditional media predicted opinion expression offline after controlling for a certain demographic (age, political affiliation) and psychographic variables (communication apprehension, fear of isolation, conflict avoidance). Whereas the perceived climate of opinion also predicted opinion expression online after controlling for demographic and psychographic variables (communication apprehension, fear of isolation, conflict avoidance, cyberbullying, and anonymity)

7. The analysis showed evidence of the moderating effect of news channel reliance on the relationship between exposure to television and own opinion on the enduring issue. But the findings fell short of providing evidence for the same moderation effect for the emerging issue as it was not significant.

8. One of the focused prepositions of the spiral of silence theory was to examine the fear of social isolation moderating the relationship between the perceived climate of opinion and opinion expression. The findings provide evidence for the

moderation effect as people with high fear of isolation reflected lower opinion expression, compared to low fear of isolation. The moderation effect of fear of social isolation was found significant for both issue types, i.e., enduring and emerging.

9.   As the online environment brought some other variables into consideration, hence the study also examined cyberbullying as a moderator on the relationship between anonymity and online expression of opinion. The results provided evidence for cyberbullying as a moderator for both the issues under consideration of the study, i.e., enduring and emerging.

10. Psychographic attributes were analyzed as potential predictors of opinion expression offline, and results revealed that fear of issue certainty, fear of social isolation and communication apprehension were significant predictors of opinion expression. Whereas the findings fell short of providing evidence for conflict avoidance as a significant predictor of the opinion expressed. The same findings were observed in both issue types.

11. Lastly, the finding provides strong evidence for the issue's importance to be a significant predictor for opinion expression but contrary to that issue obtrusiveness did not uphold to be a significant predictor of opinion expression for both issue types, i.e., enduring and emerging.

5.2 Discussion and Implications of the Findings

The study suggested a strong relationship between the climate of opinion and opinion expressed in the presence of a new media environment as well. Hence highlighting the validity of the spiral of silence theory in the current time even in the presence of a new media environment with some variables merging in the spiraling process from new media environment for online opinion expression. In this time when technology has created a global society for us as well in the form of social media, one cannot exclude social media from the climate of opinion.

The finding of the study showed enduring issue as more controversial as it was a political issue and the emerging issue was a controversial health issue i.e., covid 19 vaccination. The sample of the study was university students who were more educated than the average citizen of Pakistan. So famous opinion was in favor of the covid 19 vaccination whereas the enduring issue had very dissimilar opinions in the sample it remained more controversial, and the hypotheses results showed a higher significance level for the enduring issue for most of the revealed results.

Moreover, one's own opinion was found to be in line with media opinion in both online and traditional environment. Also, new media environment was found to have a significant relationship with the climate of opinion and this relationship was found for both emerging and enduring issue types. Lin and Salwen (1997) also suggested the importance of media climate and it has power to mold the individual's opinions. Media exposure can not only influence one's perception of majority opinion but also one's own opinion (Gonzenbach et al., 2010). Neubaum and Kräme (2016) reported similar findings

when they studied shifts in own opinion while using Facebook owing to the comments conveying opinion climate which resulted in change in recipient's attitude.

An assessment of individuals perception of the affordances of online environment can better explain the implication of SoS on it (Fox & Holt, 2018). Public opinion as social control, however, views processes of opinion formation and expression as mostly unconscious. Individuals scan their environment for present and future distributions of opinion to a large degree unconsciously. Speaking out is therefore less of a conscious decision to enter a discussion than an unconscious reluctance to express one's opinion (Scheufle, 2000).

The climate of media opinion effects the climate of interpersonal opinion. This also includes new media environment. When people share their opinions or news in an online context, they could be serving a similar role to the media themselves, as they send out pieces of information that further solidify their and their friends' opinions, thereby increasing polarization (Neubaum & Kräme, 2016).

The findings of the study go in line with the previous studies about the relationship of perceived climate of opinion and opinion expression both online and offline. The relationship stands valid like the past. The researchers identified a robust negative relationship between perceived incongruence of opinion or pluralism and the intention to express opinions (Shen & Wang, 2015; Lin & Salwen, 1997; Porten-Cheé & Eilders, 2015). Also, demographic variables predicted the opinion expression. Age and education can also be good indicators for breaking or maintaining the spiral of silence on an issue that challenges a nation's identity and unity (Lin & Salwen, 1997).

The study showed evidence of the moderating effect of news channel reliance on the relationship between exposure to television and own opinion on the enduring issue

According to Lin and Sawlen (1997), the respondents were quite capable of identifying the perceived tone of media coverage on the issue. They became more willing to discuss this issue in public with the understanding that perceived media coverage on this issue was generally positive or "supportive" in nature. News attention was positively associated with both dimensions of outspokenness. News media are the main sources of information on politics and public affairs for most people. Therefore, knowledge gained from the mass media may offer ammunition for people to express their opinions and offer a rationale for their own stance (Ho, Chen & Sim, 2013).

Fear of social isolation was and still found from the study, as main contributor to silence people. If the fear of isolation is high then people will be less willing to express their opinion if the opinion is in the minority. The spiral of silence theory assumes that for morally loaded issues, fear of isolation propels people to gauge the opinion climates around them using the mass media to evaluate their social environment (Ho, Chen & Sim, 2013; Neubaum & Kräme, 2016). Similar to Noelle-Neumann's original conceptualization of the spiral of silence, individuals who are more supportive of how the government is handling the response, are more likely to speak out in favor of the response, as they are more likely to not feel as though they are in the minority (Croucher, Spencer, Bustamante, Nguyen & Gomez, 2023). Online contacts may overlap with offline contacts, so even if there is no direct threat of social isolation online, it may exist offline (Matthes, Knoll & Sikorski, 2017). As this study was conducted in Asia, which is a collectivist cultural society that fears social pressures, based on the assumption that

collectivist cultures like those in Asia value the collective work of groups while Western

cultures tend to emphasize the individual, it has been assumed that the spiral of silence

should be more pronounced in collectivist rather than individualist cultures (Matthes,

Knoll & Sikorski, 2017).

In the online environment, individuals were more likely to share opinions online

when they perceived greater support for their opinions in their social networks (Wang,

Hmielowski, Hutchens & Beam, 2017). As the online environment brought some other

variables into consideration, the study also examined cyberbullying as a moderator on the

relationship between anonymity and online expression of opinion. People hid their

identities using fake profiles or go to unknown groups where their identity is not revealed

and then express their opinion due to the fear of cyberbullying. Fox and Holt (2018) also

suggested that anonymity may influence opinion expression online.

Psychographic attributes also contributed to opinion expression. communication

apprehension, issue certainty and fear of isolation were found to be significant predictors

of the opinion expressed. Communication apprehension, issue certainty and fear of

isolation showed a negative relationship with opinion expressed in the study. Previously,

also Communication apprehension and fear of isolation was significant predictors of

respondent intention to employ deception strategies, not engagement strategies

(Neuwirth, Frederick & Mayo, 2007).

Further issue characteristics were analyzed and found that issue importance was a

significant predictor, but issue obtrusiveness was not found to be a significant predictor in

previous literature, the effects of climate perceptions on opinion expression are stronger

for unobtrusive compared with obtrusive issues. For obtrusive issues, people may be

inclined to speak their minds independently of the opinion climate (Matthes, Knoll & Sikorski, 2017).

Hence, from the findings, it becomes evident that the spiral of silence assumptions remains valid even in this current era in the presence of a new media environment for the enduring and emerging issues selected from Pakistani society.

5.3 Limitations

The population of the study comprised of university students and the level of education and socio-economic status of the university students is higher than an average citizen of Pakistan. Even the level of understanding of an educated person about any controversy is different of an educated person than the average citizen, they are less afraid of isolation and have fewer psychological issues as they are from a privileged class, so they cannot represent the public. Hence the findings of the study may not be generalized to the population at large.

The data collected for the enduring issue is one time and the current situation of Pakistan highlighted this issue as more controversial and there might be some climate shift in opinion. But the study's results are limited to the time period of data collection for enduring issue as well as the emerging issue.

The current study has not considered the laws related to opinion expression online as cybercrime bill and some clauses related to opinion expression online about the military have also been introduced in Pakistan recently and might affect the silencing effect online about controversial issues.

This study tested the spiral of silence assumptions for traditional variables in the presence of new media environment and borrowed a few variables from online setting only. The scope included both traditional and social media. But was not limited to new media environment only and if so, it would have more deeply identified the new media environment variables.

In view of the limitations, several recommendations have been made for future studies.

5.4 Recommendations for Future Studies

The present study offered opportunities for future researchers to expand the theoretical underpinnings of the spiral of silence theory for the new media environment as well as test the assumptions in a different society as well as issue/s with its own dynamic. As Pakistani society has many controversial issues, and this can provide more avenues for theory testing for other issues as well.

The study can be replicated for the general public instead of the student population, as the general public opinion can also be studied in the same fashion, and it might provide more understanding of the theory as well as might provide different evidence.

The enduring issue selected for this study keeps on shifting its opinion, hence a longitudinal study to test spiral of silence effect for this issue would be very effectively explain the spiraling process. As this study collected data before the PDM movement in Pakistan and after PDM movement the enduring issue becomes very important and also the political instability increased the controversiality of the issue, especially when this

was associated with law and order. People become more silent. This provoked an ideal scenario to collect the data again and it would yield different results. Future researchers can again take this issue to study the process of opinion formation. Also, the cybercrime bill and other laws related to the online environment can be added in the studies.

Instead of collecting facts for both offline and online environments, future researchers can only focus on online settings to identify further complications of the new setting and what other challenges/ variables might challenge the basic assumptions of the theory of opinion formation.

5.5 Conclusion

Public opinion as social control is the principle that is linked with the spiral of silence theory (Bentham,1962) and findings of the current study confirmed that the current society as allocentric society make decisions in groups, so to study Pakistani society from the theoretical background of spiral of silence has shown relevant findings and the silencing process was visible in the population selected.

Mass Media, whether written/spoken or broadcast, has been affecting the formation of opinions of masses. It has the power to reach larger audience within a blink of eye. Organizing of massive volumes of information into coherent interpretive structures, or "media frames," is one of the media's primary functions in society (Lowenstein ,2020). In situations where viewers do not have clear awareness or understanding of what is going on, they become especially dependent on the media to educate them (Philo, 2008). In these scenarios, media outlets can participate in generating a climate of opinion and yet can influence opinion expression. People are reading more

news about public affairs online (Eilders & Porten-Cheé, 2022). How individuals now learn about current events has altered because of the spread of online media. The expansion of the available content is one aspect of change. The only information source that could approach a big audience in the past was conventional journalism, but since anyone may now exchange information with an indefinite audience, alternative sources have appeared. New media environments also participate in the climate of opinion, and which eventually can help individuals to opinion expression by guessing about popular opinion.

Individual differences like demographics and personality types, issue certainty and issue importance still can bring differences in opinion expression and can bring challenges to the spiraling process of opinion formation for both online and offline environments.

REFERENCES

Alam, M. M., & Alam, M. M. (2014). Military Intervention in Politics: A Third World Perspective. 1-18. http://dx.doi.org/10.2139/ssrn.2468243

Alexandre, J. C., & Aguiar-Conraria, L. (2021). Opinion expression on hazing: has the Spiral of Silence reached the Portuguese higher education? *Journal of Further and Higher Education, 45*(10), 1325-1341. DOI:10.1080/0309877X.2020.1860205

Al-Kandari, A. A., Frederick, E., Al-Tourah, A. F., Chen, K., & Alfahad, M. M. (2022). Gender differences in offline and online expression of opinion about women serving in the Kuwaiti military. *Gender, Technology and Development, 25*(3), 311-330. DOI:10.1080/09718524.2021.1984372

Allport, F. H. (1937). Toward a science of public opinion. *Public Opinion Quarterly, 1*(1), 7-23. https://doi.org/10.1086/265034

Anke, & Jung, S. (2017). TV News Exposure of Young People in Changing Viewing Environments: A Longitudinal, Cross-National Comparison Using People-Meter Data. *International Journal of Communication*, 72-93. https://ijoc.org/index.php/ijoc/article/viewFile/5384/1887

Apejoye, A. (2015). Comparative Study of Social Media, Television and Newspapers' News Credibility. *International Conference on Communication, Media,* 69-77. Dubai: United Arab Emirates https://www.researchgate.net/publication/305737452_Comparative_Study_of_Social _Media_Television_and_Newspapers'_News_Credibility

Baum, M. A., & Gussin, P. (2005, September). Issue bias: How issue coverage and media

    bias affect voter perceptions of elections. In *Meeting of the American Political*

    Science Association. Washington, DC: Apsa.

Beckers, K. (2020). The Voice of the People in the News: A Content Analysis of Public

    Opinion Displays in Routine and Election News. *Journalism Studies, 21*(15), 2078-

    2095. DOI:10.1080/1461670X.2020.1809498

Beckers, K., & Moy, P. (2021). Public Opinion in the News: Examining Portrayals and

    Viewpoint Heterogeneity. *Journalism Practice*, 1-18.

    https://doi.org/10.1080/17512786.2021.1984282

Belsey, B. (2006). Cyber Bullying: An Emerging Threat to "Always on" Generation.

Benrazek, Y. (2022). The role of social media as a public sphere in the Algerian protests: An

    analytical study. *Journal of Intercultural Communication Research*, *51*(2), 153-173.

Bentham, J. (1838–1843/1962): 'The constitutional code'. In Bowring, J. (ed.) TheWorks of

    Jeremy Bentham. 9, Book1 New York, Russel & Russel, pp. 41–6.

Berg, J. (2016). The impact of anonymity and issue controversiality on the quality of online

    discussion. *Journal of Information Technology & Politics, 13*(1), 37-51.

Bernays, E.L. (1928). Manipulating public opinion: the why and the how', *American Journal*

    of Sociology, *33*(6), 958-7. DOI:10.1086/214599

Bogdan, R.C. (1982). The Disabled: Media's Monster. *Social policy, 13*, 32-35.

Bond, Rod & Smith, Peter. (1996). Culture and conformity: a meta-analysis of studies using
asch's (1952b, 1956) line judgment Task. *Psychological Bulletin. 119,* 111-137. DOI:
10.1037/0033-2909.119.1.111..

Boyd, H. W., Westfall, R., & Stasch, S. F. (1977). Marketing research: Text and cases.
4th ed. Richard D. Irwin, Inc.

Cabrera, B., Ross, B., Röchert, D., Brünker, F., & Stieglitz, S. (2021). The influence of
community structure on opinion expression: an agent-based model. *Journal of
Business Economics, 91*(9), 1331–1355. DOI:10.1007/s11573-021-01064-7

Cai, D. A., & Fink, E. L. (2002). Conflict style differences between individualists and
collectivists. *Communication Monographs, 69*, 67–87. doi:
10.1080=03637750216536

Cavazzaa, N., & Roccatob, M. (2021). Are we gaining or losing ground? Dynamic
perceptions of public opinion influence willingness to speak out and participate in
land use conflicts. *Social Influence, 16*(1), 12-23,
https://doi.org/10.1080/15534510.2021.1944907

Chaffee, S., &Schleuder, J. (1986). Measurement and Effects of Attention to Media News.
Human Communication Research,13, 76-107. https://doi.org/10.1111/j.1468-
2958.1986.tb00096.x

Chan, J. K.-C., & Leung, L. (2005). Lifestyles, reliance on traditional news media and online
news adoption. *New Media & Society, 7*(3), 357–382,
DOI:10.1177/1461444805052281

Chan, K. M., Duivenvoorden, R., Flache, A., & Mandjes, M. (2022). A relative approach to

    opinion formation. *The Journal of Mathematical Sociology*.

    https://doi.org/10.1080/0022250X.2022.2036142

Chan, M. (2017). Reluctance to talk about politics in face-to-face and Facebook settings:

    Examining the impact of fear of isolation, willingness to self-censor, and peer

    network characteristics. *Mass Communication and Society*, 1-34.

Chandrappa, D. K. (2014). The Influence of the Media in Politics - Campaigns and Elections.

    International Journal of Science and Research (IJSR), 3(12). 2310-2312.

    https://www.ijsr.net/archive/v3i12/MDkxMjE0MDU=.pdf

Chia, S. (2013). How Authoritarian Social Contexts Inform Individuals' Opinion Perception

    and Expression. *International Journal of Public Opinion Research. 26*. 384-396.

    10.1093/ijpor/edt033.

Childs, H. L. (1965). *Public Opinion Nature Formation and Role*. D van nostrand company.

Christen, C. T., & Gunther, A. C. (2003). The influence of mass media and other culprits on

    the projection of personal opinion. *Communication Research, 30*, 414–431. doi:

    10.1177/0093650203253366.

Croucher, S. M., Spencer, A., Bustamante, S., Nguyen, T., & Gomez, O. (2023). COVID-19

    and government trust: A spiral of silence analysis in South America. *The*

    International Communication Gazette, 1-16.

Csikszentmihalyi, M. (1991). Reflections on the spiral of silence. In Anderson, J.A. (ed.)

    Communication Yearbook, 14, Newbury Park, CA, Sage, pp. 288–97

Dalisay, F. (2012). The Spiral of Silence and Conflict Avoidance: Examining Antecedents of

    Opinion Expression Concerning the U.S. Military Buildup in the Pacific Island of

    Guam. *Communication Quarterly, 60*(4), 481-503.

    DOI:10.1080/01463373.2012.704567

Dam, L., Basaran, A. M., & Atkin, D. (2021). Fear of COVID-19 Opinion Expression:

    Digitally Mediated Spirals of Silence and the Situational Theory of Problem Solving.

    Journal of Broadcasting & Electronic Media, 65(4), 457-478.

    DOI:10.1080/08838151.2021.2008937

David, Y. (2021). Public opinion, media and activism: the differentiating role of media use

    and perceptions of public opinion on political behaviour. *SOCIAL MOVEMENT*

    STUDIES,21(3), 334-354. https://doi.org/10.1080/14742837.2021.1875321

Dennis, A. R., Minas, R. K., & Bhagwatwar, A. P. (2013). Sparking creativity: Improving

    electronic brainstorming with individual cognitive priming. *Journal of management*

    information systems, *29*(4), 195-216.

Dietram A. Scheufle, P. M. (2000). TWENTY-FIVE YEARS OF THE SPIRAL OF

    SILENCE: A CONCEPTUAL REVIEW AND EMPIRICAL OUTLOOK.

    International Journal of Public Opinion Research, 3-28.

Dijck, J. v., & Poell, T. (2013). Understanding Social Media Logic. *Media and*

    Communication, 1(1), 2-14. DOI:10.12924/mac2013.01010002

Dowler, K. & Zawilski, V. (2007). Public perceptions of police misconduct and

    discrimination: Examining the impact of media consumption. *Journal of Criminal*

    Justice,*35*(2), 193-203. DOI:10.1016/j.jcrimjus.2007.01.006

Drew, M. (2022). Expanding the Scope of the Spiral of Silence Theory to Increase Relevance the Digital Age. *Journal of Student Research at Indiana University East*, *4*(1), 104-124

Druckman, J. N., &Parkin, M. (2005). The Impact of Media Bias: How Editorial Slant Affect Voters. *The Journal of Politics, 67*(4), 1030-1049. https://doi.org/10.1111/j.1468-2508.2005.00349.x

Eilders, C., & Porten-Cheé, P. (2022). Effects of online user comments on public opinion perception, personal opinion, and willingness to speak out: A cross-cultural comparison between Germany and South Korea. *Journal of Information Technology & Politics*, 1-16. DOI:10.1080/19331681.2022.2103766

Eveland, W. P., & Scheufele, D. A. (2000). Connecting news media use with gaps in knowledge and participation. *Political Communication, 17*(3), 215–237. doi:10.1080/105846000414250

Eveland, W. P., McLeod, D. M., & Signorielli, N. (1995). Actual and perceived public opinion: The spiral of silence during the Gulf War. *International Journal of Public Opinion Research, 7*, 91–109. doi: 10.1093-ijpor-7.2.91

Fairclough, N. (2003). Political correctness': The politics of culture and language. *Discourse & Society*, *14*(1), 17-28. https://doi.org/10.1177/0957926503014001927

Farnsworth, P. R. (1936). Review of *Propaganda, its Psychology and Technique* [Review of the book *Propaganda, its psychology and technique,* by L. W. Doob]. *Psychological Bulletin, 33*(7), 552–555. https://doi.org/10.1037/h0052195

Fatas-Villafranca, F., Saura, D., & Vazquez, F. J. (2011). A dynamic model of public opinion

formation francisc. *Journal of Public Economic Theory,13*(3), 417-441.

DOI:10.1111/j.1467-9779.2011.01506.x

Field, J. M., & Schuman, H. (1976). Public beliefs about the beliefs of the public. *Public

Opinion Quarterly, 40*, 427–448. doi: 10.1086/268330.

Fisher, B. R. (1950). *Public Opinion as a Process in Society.* Retrieved from: The University

of Michigan Institute for Social Research: /isr.umich.edu/wp-

content/uploads/historicPublications/Public_769_.PDF

Fox, J., & Holt, L. F. (2018). Fear of Isolation and Perceived Affordances: The Spiral of

Silence on Social Networking Sites Regarding Police Discrimination. *Mass

Communication and Society,21*(5), 533-554. doi:10.1080/15205436.2018.1442480

Gearhart, S., & Zhang, W. (2013). Gay Bullying and Online Opinion Expression. *Social

Science Computer Review, 32*(1), 18-36. doi:10.1177/0894439313504261

Gearhart, S., & Zhang, W. (2014). Gay bullying and online opinion expression: Testing

spiral of silence in the social media environment. *Social Science Computer Review*,

32, 18-36. doi:10.1177/0894439313504261

Gearhart, S., & Zhang, W. (2018). Same Spiral Different Day? Testing the Spiral of Silence

Across Issue Types. Communication Research, 45(1), 34–54.

https://doi.org/10.1177/0093650215616456

Geißa, S., Magina, M., Jürgens, P., & Starkb, B. (2021). Loopholes in the Echo Chambers:

How the Echo Chamber Metaphor Oversimplifies the Effects of Information

Gateways on Opinion Expression. *Digital Journalism, 9*(5), 660-686.

DOI:10.1080/21670811.2021.1873811

Gerber, A. S., Karlan, D., & Bergan, D. (2009). Does the Media Matter? A Field Experiment Measuring the Effect of Newspapers on Voting Behavior and Political Opinions. *American Economic Journal, 22*.

Glynn, C. J. and McLeod, J. M. (1984). Public opinion du jour : An examination of spiral of silence. *Public Opinion Quarterly*,*48*(4),731-740. DOI:10.1086/268879

Gonzenbach, W. J., King, C., & Jablonski, P. (2010). Homosexuals and the Military: An Analysis of the Spiral of Silence. *Howard Journal of Communications, 10*(4), 281-296.

Griffin,E.(2009).29.InA first look at communication theory (7thed.,pp.372–382).McGraw-Hill Higher Education

Gunther, A. C. (1998). The persuasive press inference: Effects of mass media on perceived public opinion. *Communication Research, 25*, 486–504. doi: 10.1177/009365098025005002.

Gunther, A. C., & Christen, C. T. (1999). Effects of news slant and base rate information on public opinion inferences. *Journalism & Mass Communication Quarterly,76*, 277–292. doi: 10.1177/107769909907600207.

Habermas, J. (1962): Strukturwandel der O¨ffentlichkeit: Untersuchungenzueiner Kategoriederbu¨rgerlichen Gesellschaft [The structural transformation of the public sphere: Aninquiry into a category of Bourgeois society], Neuwied, Luchterhand.

Habermas, J. (1991). *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society.* (T. Burger, Trans.) The MIT Press (original work published 1962)

Haddock, G., Rothman, A., Reber, R., & Schwarz, N. (1999). Forming judgments of attitude certainty, intensity, and importance: The role of subjective experiences. *Personality and Social Psychology Bulletin, 25*(7), 771-782. DOI:10.1177/0146167299025007001

Hammer, A. (2021). Using forum theatre to address homosexuality as a controversial issue in religious education. *British Journal of Religious Education* .

Hayes, A. F., & Krippendorff, K. (2007). Answering the call for a standard reliability measure for coding data. *Communication methods and measures*, *1*(1), 77-89. DOI:10.1080/19312450709336664

Hayes, A. F., Matthes, J., & Eveland, W. P., Jr. (2013). Stimulating the quasi-statistical organ: Fear of social isolation motivates the quest for knowledge of the opinion climate. *Communication Research, 40*, 439-462. DOI:10.1177/0093650211428608

Hayes, A. F., Uldall, B. R., & Glynn, C. J. (2010). Validating the Willingness to Self-Censor Scale II: Inhibition of Opinion Expression in a Conversational Setting. *Communication Methods and Measures, 4*(3), 256-272.

Hinduja, S., & Patchin, J. W. (2007). Offline consequences of online victimization: School violence and delinquency. *Journal of School Violence, 6*(3), 89–112 https://doi.org/10.1300/J202v06n03_06

Ho, S. S., & McLeod, D. M. (2008). Social-psychological influences on opinion expression in face-to-face and computer-mediated communication. *Communication Research*, *35*, 190- 207. doi:10.1177/0093650207313159

Ho, S. S., Chen, V. H.-H., & Sim, C. C. (2013). The spiral of silence: examining how cultural predispositions, news attention, and opinion congruency relate to opinion expression. *Asian Journal of Communication, 23*(2), 113-134.

Hofstede, G. (1980). Culture's consequences: International differences in work-related values.Beverly Hills, CA: Sage.

Huang, J., Cook, G. G., & Xie, Y. (2021). Between reality and perception: the mediating effects of mass media on public opinion toward China. *Chinese Sociological Review, 53*(5), 431-450. https://doi.org/10.1080/21620555.2021.1980720

Hui, C. H., & Triandis, H. C. (1986). Individualism-collectivism: A study of cross-cultural researchers. *Journal of Cross-Cultural Psychology, 17*(2),225-248. DOI:10.1177/0022002186017002006

Idid, S. A., Sannusi, S. N., & Arandas, M. F. (2019). Reliance, Media Exposure and Credibility. *Centre of Research in Media and Communication* (pp. 626-644). Selangor, MALAYSIA: Universiti Kebangsaan Malaysia.

Iyengar, S., & Hahn, K. S. (2009). Red media, blue media: Evidence of ideological selectivity in media use. *Journal of Communication, 59*(1), 19-39. http://dx.doi.org/10.1111/j.1460-2466.2008.01402.x

Jackson, J. M. (2019). Black Americans and the "crime narrative": comments on the use of

    news frames and their impacts on public opinion formation. *Politics, Groups, and*

    Identities, 7(1), 231-241. https://doi.org/10.1080/21565503.2018.1553198

Keating, D. M., E. K., & McCullock, S. P. (2022). Probing the Effects of Normative Beliefs,

    Attitude Strength, and Attitude Certainty on Opinion Expression Behavior.

    Communication Studies, 73(1), 53-67. DOI:10.1080/10510974.2021.2011350

Kim, K., Baek, Y. M., & Kim, N. (2019). Online news diffusion dynamics and public

    opinion formation: A case study of the controversy over judges' personal opinion

    expression on SNS in Korea. *The Social Science Journal, 52*(2), 205-216.

    https://doi.org/10.1016/j.soscij.2015.02.001

Kim, S.-H. (2004). Talking on 'Sunshine in North Korea': A Test of the Spiral of Silence as a

    Theory of Powerful Mass Media. *International Journal of Public Opinion Research,*

    16(1), 39–62. doi:10.1093/ijpor/16.1.39

King, C. L. (1928): 'Public opinion in government'. Introduction to Graves, W. B.(ed.)

    Readings in Public Opinion: Its Formation and Control, New York, Appleton, pp.xxi–

    xxxiv.

Kowalski, R. M., & Limber, S. P. (2007). Electronic Bullying among Middle School

    Students. *Journal of Adolescent Health, 41*, 22-30.

    https://doi.org/10.1016/j.jadohealth.2007.08.017

Kozitsina, I. V. (2021). Opinion dynamics of online social network users: a micro-level

    analysis. *The Journal of Mathematical Sociology,47,*1-41.

    DOI:10.1080/0022250X.2021.1956917

Krosnick, J. A., Boninger, D. S., Chuang, J. C., Berent, M. K., & Carnot, C. G. (1993).

    Attitude strength: One construct or many related constructs? *Journal of Personality*

    and Social Psychology, 65(6), 1132–1151. DOI:10.1037/0022-3514.65.6.1132

Kushin, M. J., Yamamoto, M., & Dalisay, F. (2019). Societal majority, Facebook, and the

    spiral of silence in the 2016 US presidential election. *Social Media+ Society*, *5*(2),

    2056305119855139.

Laken, A. R. (2009, May). Parasocial relationships with celebrities: An illusion of intimacy

    with mediated friends. Retrieved from University of Las Vagas:

    https://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?article=1963&context=thesesd

    issertations.

Lasorsa, D. L. (1991). Political outspokenness: Factors working against the spiral of silence.

    Journalism Quarterly, 68(1), 131-140 DOI:10.1177/107769909106800114

LaRose R, Matthew SE (2004). A social cognitive theory of Internet uses and gratifications:

    Toward a new model of media attendance. J.Broadcast. Electron. Med., 48(3): 358-

    377

Ledford, V., Wang, X., Anderson, L. B., Leach, J., Lucas, M., & Mazzone, R. (2022).

    Communication apprehension in the online presentational speaking course:

    Considerations for synchronous course meetings and asynchronous presentations.

    Communication Teacher,37(1), 1-19. DOI:10.1080/17404622.2022.2046284

Lee, H., Oshita, T., Oh, H. J., & Hove, T. (2014). When Do People Speak Out? Integrating

    the Spiral of Silence and the Situational. *Journal of Public Relations Research, 26*(3),

    185-199. DOI:10.1080/1062726X.2013.864243

Lee, H., Oshita, T., Oh, H. J., & Hove, T. (2014). When Do People Speak Out? Integrating

    the Spiral of Silence and the Situational. *Journal of Public Relations Research, 26*(3),

    185-199. DOI:10.1080/1062726X.2013.864243

Lee, T-T.(2010). Why they don't trust the media: An examination of factors predicting trust.

    American Behavioral Scientist 54(1), 8-21.

    https://doi.org/10.1177/0002764210376308

Lemke, R. (2022). Linking Public Opinion Perception, Minority, and Stigma – An Integrated

    Model of Hiding Male Same-Sex Affection in Public. *Journal of Homosexuality*.

    :10.1080/00918369.2022.2059970

Lin, C. A., & Salwen, M. B. (1997). Predicting the spiral of silence on a controversial public

    issue. *Howard Journal of Communications, 8*(1), 129-141.

    DOI:10.1080/10646179709361747

Liu, X., & Fahmy, S. (2011). Exploring the spiral of silence in the virtual world: lndividuals'

    willingness to express personal opinions in online versus offline settings. *Journal of*

    Media and Communication Studies, *3*(2), 45.

Lowenstein-Barkai, H. (2020). Media portrayal of enemy leaders and public opinion toward

    peace: the cases of Yasser Arafat and Yitzhak Rabin 1987-95. *Israel Affairs, 26*(3),

    450-470. DOI:10.1080/13537121.2020.1754593

Masduki. (2019). Cyber-troops, digital attacks, and media freedom in Indonesia. *Asian*

    Journal of Communication, 32(3), 218-233. DOI:10.1080/01292986.2022.2062609

Matthes, J. (2013). Do hostile opinion environments harm political participation? The

    moderating role of generalized social trust. *International Journal of Public Opinion*

    Research, *25*, 23-42. doi:10.1093/ijpor/eds006

Matthes, J., Knoll, J., & Sikorski, C. v. (2017). The "spiral of Silence" Revisited: A Meta

    Analysis on the Relationship Between Perception of Opinion Support and Political

    Opinion Expression. *Communication Research*, 1-31.

Matthes, J., Knoll, J., & Sikorski, C. v. (2017). The "Spiral of Silence" Revisited: A Meta-

    Analysis on the Relationship Between Perceptions of Opinion Support and Political

    Opinion Expression. *Communication Research, 45*(1), 3-33.

    https://doi.org/10.1177/0093650217745429

Matthes, J., Morrison, K. R., & Schemer, C. (2010). A spiral of silence for some: Attitude

    certainty and the expression of political minority opinions. *Communication Research*,

    37, 774-800. doi:10.1177/0093650210362685

McCombs, M. E., & Shaw, D. L. (1972). The agenda-setting function of mass media. *Public*

    Opinion Quarterly, 36, 176–187. doi: 10.1086=267990

McCroskey, J. C. (1977). Oral communication apprehension: A summary of recent theory

    and research. *Human Communication Research, 4*, 78-96. s://doi.org/10.1111/j.1468-

    2958.1977.tb00599.x

McDevitt M, Spiro K, Karin W (2003). Spiral of moderation: Opinion expression in

    computer-mediated discussion. Int. J. Public Opin. Res.,15(4): 454-470.

McDonald, D. G., Glynn, C. J., Kim, S. and Ostman, R. E. (2001) −The spiral of silence in

    the 1984 presidential election. *Communication Research,28*(2), 139-155.

    DOI:10.1177/009365001028002001

Metzger, M. (2009). Media effects in the era of Internet communication. In R. Nabi& M. B. Oliver (Eds.), *The SAGE handbook of media process and effects* (pp. 561-576). Thousand Oaks, CA: SAGE.

Mills, M., Rahal, C., Brazel, D., Yan, J., & Gieysztor, S. (2020). COVID-19 vaccine deployment: behaviour, ethics, misinformation and policy strategies. *London: The Royal Society & The British Academy*. Retrieved from https://royalsociety.org/-/media/policy/projects/set-c/set-c-vaccine-deployment.pdf

Mitchell, K. J., Finkelhor, D., &Wolak, J. (2001). Risk factors for and impact of online sexual solicitation of youth. *Journal of the American Medical Association*, *JAMA*, *285*(23), 3011–3014. https://doi.org/10.1001/jama.285.23.301

Mitsutsuji, K., & Yamakage, S. (2020). The dual attitudinal dynamics of public opinion: an agent-based reformulation of L. F. Richardson's war-moods model. *Quality & Quantity, 5*, 439-461. DOI: 10.1007/s11135-019-00938-x

Molnar, D. & Crnjak, G. (2018). Exploring foreign language communication apprehension among the English Language university students in the English language classroom Setting. *European Journal of Social Sciences Study, 5*(2), 27-39. https://doi.org/10.2478/ejser-2018-0031

Moreno-Riaño, G. (2002). Experimental implications for the Spiral of Silence. *The Social Science Journal*, 65-81.

Moreno-Riaño, G. (2002). Experimental implications for the spiral of silence. *The Social Science Journal*, *39*(1), 65-81. https://doi.org/10.1016/S0362-3319(01)00174-4

Morris, J. S. (2007). Slanted objectivity? Perceived media bias, cable news exposure, and political attitudes. *Social Science Quarterly, 88*(3), 707-728. https://doi.org/10.1111/j.1540-6237.2007.00479.x

Moy, P., &Scheufele, D. A. (2000). Media Effects on Political and Social Trust. *Journalism & Mass Communication Quarterly,77*(4), 744-759. doi:10.1177/107769900007700403

Moy, P., Domke, D., &Stamm, K. (2001). The Spiral of Silence and Public Opinion on Affirmative Action. *Journalism & Mass Communication Quarterly,78*(1), 7-25. doi:10.1177/107769900107800102

Mutz, D. (1992). Impersonal influence: Effects of representation of public opinion on political attitude. *Political Behavior, 14*, 89-122. https://www.jstor.org/stable/586314

Mutz, D. C. (2002). The consequences of cross-cutting networks for political participation. *American Journal of Political Science*, *46*, 838-856. doi:10.2307/3088437

Nam, K. (2002). The effect of personality on the spiral of silence process. (PhD dissertation), University of Tennessee. https://trace.tennessee.edu/utk_graddiss/2176

Nekmat, E., &Gonzenbach, W. J. (2013). Multiple Opinion Climates in Online Forums. *Journalism & Mass Communication Quarterly,90*(4), 736-756. doi:10.1177/1077699013503162

Neubaum, G., & Kräme, N. C. (2016). Monitoring the Opinion of the Crowd: Psychological Mechanisms Underlying Public Opinion Perceptions on Social Media. *Media Psychology*, 1-30.

Neubaum, G., & Krämer, N. C. (2016). Monitoring the Opinion of the Crowd: Psychological

    Mechanisms Underlying Public Opinion Perceptions on Social Media. *Media*

    Psychology, 20(3), 502-531. DOI:10.1080/15213269.2016.1211539

Neubaum, G., & Krämer, N. C. (2018). What Do We Fear? Expected Sanctions for

    Expressing Minority Opinions in Offline and Online Communication.

    Communication Research, 45(2), 139-164. DOI:10.1177/0093650215623837

Neuman, B. (1996). The Neuman systems model in research and practice. *Nursing Science*

    Quarterly, *9*(2), 67-70. DOI: 10.1177/089431849600900207

Neuwirth, K. (2000). Testing the spiral of silence model: the case of Mexico. *International*

    Journal of Public Opinion Research, 12(2), 138-159. DOI:10.1093/ijpor/12.2.138

Neuwirth, K., Frederick, E., & Mayo, C. (2004). The spiral of silence and fear of isolation.

    Paper presented at the annual meeting of the Midwest Association for Public Opinion

    Research, Chicago.

Neuwirth, K., Frederick, E., & Mayo, C. (2007). The spiral of silence and fear of isolation.

    Journal of Communication, *57*, 450–468. doi:10.1111/j.1460-2466.2007.00352.x

Neuwirth, K., Frederick, E., & Mayo, C. (2007). The spiral of silence and fear of

    isolation. *Journal of communication*, *57*(3), 450-468.

Newman, G.R. (1990). Popular culture and criminal justice: a preliminary analysis, *Journal*

    of Criminal Justice,18(3), 261-74. DOI:10.1016/0047-2352(90)90006-W

Nielsen, R. K., & Sambrook, R. (2016). What is happening to television news?. *Digital news*

    project, Reuters Institute.

Noelle-Neumann, E. (1974). The spiral of silence: Theory of public opinion. Journal of
Communication, 24, 43–51. doi: 10.1111=j.1460–2466.1974.tb00367.x

Noelle-Neumann, E. (1987). Quality of lifeindicators. Measuring economic and socialwell-
being: The german experience. Paper presented at Statistics Users' Conference,
London.

Noelle-Neumann, E. (1995): 'Public opinion and rationality'. In Glasser, T. L. and Salmon,
C. T. (eds.) Public Opinion and the Communication of Consent, New York,Guilford,
pp. 33–54.

Noelle-Neumann, E. (2016). The Theory of Public Opinion: The Concept of the Spiral of
Silence. *Annals of the International Communication Association, 14*(1), 256-
287. https://doi.org/10.1080/23808985.1991.11678790

Noelle-Neumann. E. (1983): 'Neue Forschungenim Zusammenhangmit der Schwei-
gespiralen-Theorie' [More recent research on the spiral of silence theory]. In Saxer,U.
(ed.) Politik und Kommunikation, NeueForschungsansa¨tze,Mu¨nchen,
O¨lschla¨ger,pp. 133–144.

Oetzel, J. G., Dhar, S., & Kirschbaum, K. (2007). Intercultural conflict from a multilevel
perspective: Trends, possibilities, and future directions. *Journal of Intercultural
Communication Research, 36*, 183–204. DOI:10.1080/17475750701737124

Oz, M., & Yanik, A. (2022). Fear of surveillance: Examining Turkish social media users'
perception of surveillance and willingness to express opinions on social media.
Mediterranean Politics, 27(2). DOI:10.1080/13629395.2022.2046911

Paletz, D. and Entman, R. Media Power Politics. New York: The Free Press, 1981.

Palmer, P. A. (1936). The concept of public opinion in political theory. In Essays in History
and Political Theory: In Honor of Charles Howard McIlwain, Cambridge, MA,
Harvard University Press.

Panayırcı, U.C. (2016). Are communication theories affected by new communication
technologies?: A Look at Spiral o Silence Theory. *Online Academic Journal of
Information Technology, 7*(22), 51–66. https://doi- org.proxyeast.uits.
iu.edu/10.5824/1309-1581.2016.1.004.x

Pang, N., Ho, S. S., Zhang, A. M. R., Ko, J. S. W., Low, W. X., & Tan, K. S. Y. (2016). Can
spiral of silence and civility predict click speech on Facebook. *Computers in Human
Behavior*, *64*, 898-905. doi:10.1016/j.chb.2016.07.066

Perrin, A. J., & McFarland, K. (2011). Social Theory and Public Opinion. *Annual Review of
Sociology, 37*, 87-107. DOI:10.1146/annurev.soc.012809.102659

Peruzzi, A 2006, 'View Askew',Marketing Health Services, Summer2006, pp. 44-.

Petric, G., & Pinter, A. (2002). From social perception to public expression of opinion: A
structural equation modeling approach to the spiral of silence. *International Journal
of Public Opinion Research, 14*, 37–53. doi: 10.1093/ijpor/14.1.37.

PEW Research Center (2013). Social networking fact sheet. Retrieved from
http://www.pewinternet.org/fact-sheets/social-networking-fact-sheet/.

Philo, G. (2008). Active audiences and the construction of public knowledge. *Journalism
Studies*, *9*(4), 535-544. https://doi.org/10.1080/14616700802114217

Porten-Cheé, P., & Eilders, C. (2015). Spiral of silence online: How online communication affects opinion climate perception and opinion expression regarding the climate change debate. *Studies in Communication Sciences, 15*(1), 143-150. DOI:10.1016/j.scoms.2015.03.002

Rahim, M. A. (1983). A measure of styles of handling interpersonal conflict. *Academy of Management Journal, 26*, 368–376. DOI:10.5465/255985

Rheingold H (2000). Virtual Community, Cambridge, MA: MIT Press

Rios, K., Goldberg, M. H., & Totton, R. R. (2018). An Informational Influence Perspective on (Non) conformity: Perceived Knowledgeability Increases Expression of Minority Opinions. *Communication Research, 45*(2), 241-260. DOI:10.1177/0093650217699935

Roel-Vecino, M. (2008). TV, contents and childhood: keys to teach TV watching. Communiser Vecino, *Media Education Research Journal*, *16*(2). https://www.scipedia.com/public/Roel_2008a

Roncarolo, F., & Mancini, P. (2018). The traditional media, political parallelism and public opinion on contentious issues in the 2018 Italian election campaign. *Contemporary Italian Politics, 10*(3), 243-266. DOI:10.1080/23248823.2018.1531870

Rousseau, A. (2022). Conceptualizing the Role of Social Context in Media Selectivity: The Social Embeddedness of Media Reliance and Internalization (SEMRI) Model. *Mass Communication and Society, 25*(2), 211–236. https://doi.org/10.1080/15205436.2021.1938132

Rudnicki, K., Vandebosch, H., Voué, P., & Poels, K. (2022). Systematic review of
    determinants and consequences of bystander interventions in online hate and
    cyberbullying among adults. *Behaviour & Information Technology*,*42*(5) 1-18.
    https://doi.org/10.6084/m9.figshare.19102488.v1

Safdar, G., Shabir, G., Imran, M., &Ghaznavi, Q.-u.-D. Z. (2015). The Role of Media in
    Increasing Turn-out in Election 2013: A Survey Study of Multan, Punjab, Pakistan.
    Pakistan Journal of Social Sciences (PJSS), 35(1), 411-424. Retrieved from
    https://pjss.bzu.edu.pk/index.php/pjss/article/view/31914.

Salaudeen, M. A., & Onyechi, N. (2020). Digital media vs mainstream media: Exploring the
    influences of media exposure and information preference as correlates of media
    credibility. *Cogent Arts & Humanities, 7*(1), 1-16.
    DOI:10.1080/23311983.2020.1837461

Salmon, C. & Neuwirth, K. (1990). Perceptions of opinion "climates" and willingness to
    discuss the issue of abortion. *Journalism Quarterly, 67,* 567-577.
    https://doi.org/10.1177/107769909006700312

Salmon, C. T., & Glynn, C. J. (2008). Spiral of Silence: Communication and Public Opinion
    as Social Control. In C. T. Salmon, C. J. Glynn, & M. B. Don W. Stacks (Ed.), *An
    Integrated Approach to Communication Theory and Research* (p. 16). New York:
    Routledge.

Salmon, C. T., & Oshagan, H. (1988). Community size, perceptions of majority opinion
    andopinion expression. Madison, WI: School of Journalism & Mass Communication,
    University of Wisconsin-Madison.

Scheufele, D. (1999). Deliberation or dispute? An exploratory study examining dimensions of public opinion expression. *International Journal of PublicOpinion Research, 11*(1), 25-58. DOI:10.1093/ijpor/13.1.25

Scheufele, D. A. & Moy, P (2000). Media Effects on Political and Social Trust. *Journalism & Mass Communication Quarterly,77*(4), 744-759. doi:10.1177/107769900007700403

Scheufele, D. A. (2007). Spiral of silence theory. In W. Donsbach& M. W. Traugott (Eds.), The SAGE handbook of public opinion research (pp. 175-183). Thousand Oaks, CA: SAGE.

Scheufele, D. A., Shanahan, J., & Lee, E. (2001). Real talk—Manipulating the dependent variable in spiral of silence research. Communication Research, 28, 304-324.

Schulz, A., & Roessler, P. (2012). The spiral of silence and the Internet: Selection of online content and the perception of the public opinion climate in computer-mediated communication environments. I*nternational Journal of Public Opinion Research, 24*, 346-367. doi:10.1093/ijpor/eds022

Shamir, J. (1997). Speaking up and silencing out in face of a changing climate of opinion. *Journalism and Mass Communication Quarterly, 74*, 602–614. doi: 10.1177=107769909707400313

Shamir, J., & Shamir, M. (2000). *The Anatomy of Public Opinion* . Michigan: University of Michigan Press.

Shanahan, J., Scheufele, D., Yang, F., &Hizi, S. (2004). Cultivation and spiral of silence

    effects: The case of smoking. *Mass Communication and Society, 7*, 413–428. doi:

    10.1207= s15327825mcs0704_3

Shen, F., & Wang, T. (2015). Does perceived incongruence in opinion climate influence the

    degree of outspokenness? Evidence from two national events in China. *Chinese*

    Journal of Communication, 8(3), 253-271.

Shiyab, T. M., & Geraghty, L. (2021). The impact of social media on the rights of the

    accused in Jordan: Does public opinion matter? *Cogent Arts & Humanities, 8*(1).

    DOI:10.1080/23311983.2021.1994112

Sinha, S. (2013). A Study of Viewership Preference Patterns of News Channels with Special

    Reference to Zee News. *International Journal of Education and Psychological*

    Research (IJEPR),2(2). 79-85. https://ijepr.org/panel/assets/papers/34ij15.pdf

Smith, P. K., Mahdavi, J., Carvalho, M., Fisher, S., Russell, S., & Tippett, N. (2008).

    Cyberbullying: its nature and impact in secondary school pupils. *Journal of Child*

    Psychology and Psychiatry, 49 (4), 376–385. DOI:10.1111/j.1469-7610.2007.01846.x

Soffer, O., & Gordoni, G. (2017). Opinion expression via user comments on news websites:

    analysis through the perspective of the spiral of silence. *Information, Communication*

    & Society, 1-16.

Spitzer, R.J. (Ed.). (1993). Media and public policy. Westport, CT: Praeger. \

Taimoor-ul-Hassan, Shabir, G., Safdar, G., & Hussain, J.S. (2019). Social media defy Spiral of Silence Theory and provides baseline for new Spiral of Social Media Theory: Ground perspective. Pakistan Journal of Social Sciences (PJSS), 39(4), 1549–1558

Tang, T., Ghorbani, A., & Chorus, C. G. (2021). Hiding opinions by minimizing disclosed information: an obfuscation-based opinion dynamics model. *The Journal of Mathematical Sociology, 46*(4),1-27. DOI:10.1080/0022250X.2021.1929968

Taylor, D. G. (1982). Pluralistic Ignorance and the Spiral of Silence: A Formal Analysis. *Public Opinion Quarterly,46*(3), 311-335. doi:10.1086/268729

Tichenor, P. J., Donohue, G. A. and Olien, C. N. Community Conflict and the. Press, Beverly Hills: Sage, 1980.

Ting-Toomey, S. (1989). Identity and interpersonal bonding. In M. K. Asante &W. B. Gudykunst (Eds.), Handbook of international and intercultural communication.

Triandis H. C. (1989). Cross-cultural studies of individualism and collectivism. *Nebraska Symposium on Motivation*, *37*, 41–133. https://pubmed.ncbi.nlm.nih.gov/2485857/

Tuchman, G. (1978). Making News: A Study in the Construction of Reality. New York: Free Press.

Valenzuela, S., Kim, Y., & Zuniga, H. G. (2011). Social Networks that Matter: Exploring the Role of Political Discussion for Online Political Participation. *International Journal of Public Opinion Research,24*(2), 163-184. doi:10.1093/ijpor/edr037

W.Rosenberg, S. (2015). Opinion Formation, Theory of. In S. W.Rosenberg, *International Encyclopedia of the Social & Behavioral Sciences (Second Edition)* (pp. 243-245). CA, USA: University of California, Irvine.

Waltersdorf, M. C. (1927). Public Opinion As A Means of Social Control. *Social Science*,*2*(1), 45-49. http://www.jstor.org/stable/23902424

Wang, M. Y., Hmielowski, J. D., Hutchens, M. J., & Beam, M. A. (2017). Extending the Spiral of Silence: Partisan Media, Perceived Support, and Sharing Opinions Online. *Journal of Information Technology & Politics*, 1-15.

Wanta, W., &Ghanem, S. (2007). Effects of agenda-setting. In R. W. Preiss, B. M. Gayle, N. Burrell, M. Allen & J. Bryant (Eds.), Media effects: Advances through meta-analysis (pp. 37–51). Mahwah, NJ: Erlbaum.

Williams, K. D., & Nida, S. A. (2011). Ostracism: Consequences and coping. *Current Directions in Psychological Science*, *20*, 71-75. doi:10.1177/0963721411402480

Willnat, L (1995). Public opinion and political outspokenness in pre-1997 Hong Kong: Two test of spiral of silence theory. *Asian Journal of Communication.5*(2), 47-67 DOI:10.1080/01292989509364723

Willnat, L., Lee, W., & Detenber, B. H. (2002). Individual-level predictors of public outspokenness: A test of the spiral of silence theory in Singapore. International Journal of Public Opinion, 14, 391–412. doi: 10.1093/ijpor/14.4.391.

Wilson, F. G. (1933). Concepts of public opinion.*The American Political Science Review*. *27*(3), 371-391. https://ideas.repec.org/a/cup/apsrev/v27y1933i03p371-391_02.html

Wilson, J. & Wilson, S. (2001). Mass media, mass culture: An introduction (5th ed.). Boston, MA: McGraw-Hill.

Winter, J. P. (1981). Contingent conditions in the agenda-building process. In G. C. Wilhoit& H. de Bock (Eds.), Mass communication review yearbook (pp. 235-253). Beverly Hills, CA: SAGE.

Woong Yun, G., & Park, S. Y. (2011). Selective posting: Willingness to post a message online. *Journal of Computer-Mediated Communication*, *16*(2), 201-227. DOI:10.1111/j.1083-6101.2010.01533.x

Wouters, R. (2019). The Persuasive Power of Protest. How Protest wins Public Support. *Social Forces, 98*(1), 403-426. DOI:10.1093/sf/soy110

Wright, C. R. (1974). Functional analysis and mass communication revisited. In J. G. Blumler & E. Katz (Eds.), The uses of mass communications (pp. 197-212). Beverly Hills: SAGE Publications, Inc. Retrieved from http://repository.upenn.edu/asc_papers/8Wu, T.-Y. (2021). Proactive Opinion Expression Avoidance about Same-Sex Marriage on Social Media: Acceptance, Reactance, and Self-Censorship . *Mass Communication and Society*, 1-26.

Wu, T.-Y. (2021). Proactive Opinion Expression Avoidance about Same-Sex Marriage on Social Media: Acceptance, Reactance, and Self-Censorship. *Mass Communication and Society, 24*(6), 918-942. DOI:10.1080/15205436.2021.1905848

Wu, T.-Y., Xu, X., & Atkin, D. (2020). The alternatives to being silent: exploring opinion expression avoidance strategies for discussing politics on Facebook. *Internet Research, 30*(6), 1709-1729. DOI:10.1108/intr-06-2018-0284

Yanich, D. (2004). Crime creep: urban and suburban crime on local TV news. *Journal of Urban Affairs,26*(5), 535-563. DOI:10.1111/j.0735-2166.2004.00214.x

Yeric, J. L., & Todd, J. R. (1989). Public opinion: The visible politics (2nd ed.). Itasca, IL: F.E. Peacock.

Young, R. (2022). "We All Know It's Wrong, But…": Moral Judgment of Cyberbullying in U.S. Newspaper Opinion Pieces. *Journal of Media Ethics, 37*(2), 78-92. 10.1080/23736992.2022.2057993

Yousuf, Z. (2012). Private News Channels: Altering The Political Perception Of Pakistani People. Academic Research International. *3*(3), 426. http://www.savap.org.pk/journals/ARInt./Vol.3(3)/2012(3.3-49).pdf

Yuan, E. (2011). News consumption across multiple media platforms: A repertoire approach. *Information, communication & society*, *14*(7), 998-1016.

Zerback, T., Koch, T., & Krämer, B. (2015). Thinking of Others: Effects of Implicit and Explicit Media Cues on Climate of Opinion Perceptions. *Journalism & Mass Communication Quarterly, 92*(2), 421-443. DOI:10.1177/1077699015574481

Zhang, X., & Lin, M.-C. (2022). The Effects of Social Identities and Issue Involvement on Perceptions of Media Bias Against Gun Owners and Intention to Participate in Discursive Activities: In the Context of the Media Coverage of Mass Shootings. *Mass Communication and Society, 25*(2), 260-281 DOI:10.1080/15205436.2021.1916036.

Zhang, Y., & Guo, L. (2021). A battlefield for public opinion struggle': how does news consumption from different sources on social media influence government satisfaction in China? *Information, Communication & Society, 24*(4), 594-610 DOI:10.1080/1369118X.2019.1662073

Zucker, H. G. (1978). The variable nature of news media influence. In B. D. Ruben (Ed.),

      Communication year book 2 (pp. 225-240). New Brunswick, NJ: Transaction Books.

APPENDIXES

Questionnaire

Media Use and Public Opinion on Issues of National Importance

Thank you for agreeing to fill out the questionnaire.

The information you give will contribute to research scholarship in mass communication and will help the scholar complete her PhD thesis at IIUI. There is no right or wrong answer to the questions ahead. Please choose the response that best describes your perceptions and understanding. Your participation in this research is purely voluntary. The identity/personal information of the individual will be kept strictly confidential.

During the duration of this survey, you will be presented with two societal issues followed by a group of questions regarding your opinions on the issues themselves. It is important for you to think about your opinion as you complete the questionnaire.

Thank you for your valuable time, it should not take more than 15 minutes.

Regards

Please answer the following items on this page regarding the health issue presented and.:
Issue 01- **"COVID 19 vaccination"**

1. **How important do you think the issue "COVID 19 vaccination" is to you?**

   Not very important   1 2 3 4 5 6 7 8 9 10   **Very Important**

2. **Has anyone around your immediate surroundings (you/your friends/your neighbors/your relatives etc.) been infected with COVID 19?**

☐ Yes	☐ No

3. **Has anyone around your immediate surroundings (your friends/your neighbors/your relatives etc.) died from COVID 19?**

☐ Yes	☐ No

4. **Regarding "COVID 19 vaccination", do you think most people around you are in favor of it (circle the number as response on scale of 1 to 6, where 1 means most people favor it and 6 means oppose it).**

		Favor it					Oppose it
i	Most of your family and friends	1	2	3	4	5	6
ii	Most of people in your country	1	2	3	4	5	6
iii	Most of people in your country, in10 years from now	1	2	3	4	5	6
	Thinking about all the different times you have seen this issue discussed on mass media , what do you think about opinion on media						
iv	Most of media (TV, Newspaper, Radio)	1	2	3	4	5	6
v	Most of the people in the social media (Facebook, Twitter, Youtube etc)	1	2	3	4	5	6
vi	What is your personal opinion? Do you mostly	1	2	3	4	5	6

5. **How sure are you of your own opinion about issue "COVID 19 vaccination"?**

   Not at all sure   1 2 3 4 5 6 7 8 9 10   **Very much sure**

6. **Imagine a situation when mostly people around you do not agree with your opinion on "COVID 19 vaccination", how likely would you be to speak out your opinions if someone brings up the issue .(encircle the number as response)**

		Not at all likely									Very much likely
i	Among your friends at a party	1	2	3	4	5	6	7	8	9	10
ii	in a meeting with strangers	1	2	3	4	5	6	7	8	9	10

iii	at a gathering with frontline people of COVID 19	1		2	3	4	5	6	7	8	9	10
iv	social media by creating a new post about the issue	1		2	3	4	5	6	7	8	9	10
v	social media by commenting on the post related to the issue	1		2	3	4	5	6	7	8	9	10
vi	social media by sharing the post related to the issue	1		2	3	4	5	6	7	8	9	10
vii	social media by liking (Reacting) the post relating to the issue	1		2	3	4	5	6	7	8	9	10
viii	social media by using a fake user name and profile	1		2	3	4	5	6	7	8	9	10

Please answer the following items on this page regarding the political issue. : Issue 02-
Military's Involvement in Political Affairs of Pakistan

7. **How important do you think the issue "military's involvement in political affairs" is to you?**

   Not very important   1 2 3 4 5 6 7 8 9 10   **Very Important**

8. **Does anyone of your immediate family currently serve or has served in armed forces?**

☐ Yes	☐ No

9. **Regarding "Military Involvement in Politics of Pakistan", do you think mostly people around you are in favor of it (circle the number as response on scale of 1 to 6, where 1 means most people favor it and 6 means oppose it)**

#		Favor					Oppose
i	Most of your family and friends	1	2	3	4	5	6
ii	Most of people in your country	1	2	3	4	5	6
iii	Most of people in your country, in10 years from now	1	2	3	4	5	6
	Thinking about all the different times you have seen this issue discussed on mass media , what do you think about opinion on media						
iv	Most of media (TV, Newspaper, Radio)	1	2	3	4	5	6
v	Most of the people in the social media (Facebook, Twitter, Youtube etc)	1	2	3	4	5	6
vi	What is your personal opinion? Do you mostly	1	2	3	4	5	6

10. **How sure are you of your own opinion about military's involvement in political affairs?**

   Not at all sure   1 2 3 4 5 6 7 8 9 10   **Very much sure**

11. **Imagine a situation when mostly people around you do not agree with your opinion on 'military's involvement in political affairs' how likely would you be to speak out your opinions if someone brings up the issue (encircle the number as response)**

		Not at all likely									Very much likely
I	among your friends at a party	1	2	3	4	5	6	7	8	9	10

Ii	in the company of strangers	1		2	3	4	5	6	7	8	9	10
Iii	among people in a political gathering	1		2	3	4	5	6	7	8	9	10
iv	social media by creating a new post about the issue	1		2	3	4	5	6	7	8	9	10
v	social media by commenting on the post related to the issue	1		2	3	4	5	6	7	8	9	10
vi	social media by sharing the post related to the issue	1		2	3	4	5	6	7	8	9	10
vii	social media by liking (Reacting) the post relating to the issue	1		2	3	4	5	6	7	8	9	10
viii	social media by using a fake user name and profile	1		2	3	4	5	6	7	8	9	10

Questions relating to media use, and attitudes.

12. Thinking of a typical day in your life, indicate how much time do you spend with different media in a day from news and entertainment?

	Less than30mins	*30-60 mins*	*60-90 mins*	*90-120 mins*	*120-150 mins*	*150 or more mins*
Television (including online version of same TV content)	☐	☐	☐	☐	☐	☐
Newspapers, Magazines, and other print media sources (including online version of the news medium)	☐	☐	☐	☐	☐	☐
Radio (including online version of the radio channels)	☐	☐	☐	☐	☐	☐
Social Media (Facebook, Twitter, and other social networking sites)	☐	☐	☐	☐	☐	☐
Any other media, Please Specify: _____	☐	☐	☐	☐	☐	☐

13. In your point of view, which is the most reliable Television News Channel that you trust and prefer watching?

☐ARY	☐GEO	☐Others (please specify) _____

14. Please indicate your degree of agreement /disagreement with the following statements:

		Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
i	I dislike participating in group discussions	☐	☐	☐	☐	☐
ii	I am tense and nervous while participating in group discussions	☐	☐	☐	☐	☐
iii	I am afraid to express myself at meetings	☐	☐	☐	☐	☐
iv	Communicating at meetings usually makes me uncomfortable	☐	☐	☐	☐	☐

v	It is scary to think about not being invited to social gatherings by people I know	□	□	□	□	□
vi	One of the worst things that could happen to me is to be excluded by people I know,	□	□	□	□	□
vii	It would bother me If no one wanted to be around me	□	□	□	□	□
viii	I dislike feeling left out of social functions, parties, or other social gatherings	□	□	□	□	□
ix	It is important to me to fit into the group I am with	□	□	□	□	□
x	I try to stay away from disagreement with others,	□	□	□	□	□
xi	I usually avoid open discussions of differences with others	□	□	□	□	□
xii	I try to keep my disagreement with others to myself to avoid hurt feelings	□	□	□	□	□
xiii	I try to avoid unpleasant exchanges with others,	□	□	□	□	□
xiv	I keep disagreements with others to myself to prevent disrupting my relationships with them,	□	□	□	□	□
xv	I generally avoid conflict situations with others	□	□	□	□	□
xvi	It is scary to think of online teasing/insulting	□	□	□	□	□
xvii	I dislike feeling of online spread of rumors about me	□	□	□	□	□
xviii	I dislike feeling of online exposure of private information about me	□	□	□	□	□
xix	One of the worst feeling is exclusion from online groups	□	□	□	□	□
xx	I am afraid of online threats	□	□	□	□	□

15. **How old were you on your last birthday** _____ years old

Gender:

☐ Male	☐ Female

16. Program Currently Enrolled in:

☐ Undergraduate	☐ Masters/ Mphil	☐ PhD

17. Your Institution:

☐IIUI	Any Other (Please Specify) : _____

18. **Your Department:** _____

19. **Your Semester** _____

20. **Last 2 digits of your Roll Number:** __ __

21. **What is your family's approximate monthly income from all sources**?

☐Less than 50000Rs	☐50000-100000Rs	☐100000-150000Rs
☐150000-200000Rs	☐More than 200000Rs	

22. Which Pakistani political party are you likely to support?

☐ PTI	☐ PML (N)	☐ PPP
☐ Others (Please specify party name) _____		

Plagiarism Report

Nadira Khanum PhD Media and Com Thesis

by Nadira Khanum