

Social Media Users' Willingness to Self-Censorship regarding Attitude towards State Institutions and Religious Beliefs in Pakistan



Asif Arshad	Ph.D. Candidate, Islamia University Bahawalpur asifarshadbhatti@gmail.com
Steven A. Beebe	Ph.D. University of Missouri-Columbia. Professor Emeritus, Texas State University, USA. sb03@txstate.edu
Muhammad Ans (Corresponding Author)	M. Phil Graduate, FMCS, UCP, Lahore. manskailani@gmail.com
Andleeb Ikhlaiq	Lecturer (HED) & Doctoral Student, SMCS, University of the Punjab, Lahore. andleebchattha123@gmail.com

Abstract: *This study examines the relationship between attitudes towards state institutions, religious beliefs, and willingness to engage in self-censorship through the mediating role of fear of isolation based on the Spiral of Silence Theory. Data was collected through a self-administered questionnaire from 600 respondents, using the purposive sampling technique, and analyzed using AMOS. Results revealed that attitudes towards state institutions and religious beliefs are significantly associated with willingness to self-censor. It was further found that attitude towards state institutions is positively associated with the contextual fear of isolation. Moreover, dispositional/contextual fear of isolation significantly predicted the willingness to self-censor. Dispositional/contextual fear of isolation was found to play a significant mediating role between the relationship of attitude strength towards state institutions/religious beliefs and willingness to self-censor.*

Keywords: Spiral Of Silence, Fear Of Isolation, Willingness To Self-Censorship, Attitude Strength, Social Networking Sites, State Institutions, Religious Beliefs

Introduction

Research has found that the attitudes and beliefs of those who hold a majority opinion can affect the disclosure of attitudes and beliefs from those who are perceived to hold minority opinions (Chen, 2018; Gearhart & Zhang, 2014; Henningsen et al., 2006; Janis, 1973; Kwon et al., 2015; McQuail, 2010; Noelle-Neumann, 1974; Yun & Park, 2011). Noelle-Neumann's (1974) Spiral of Silence (SoS) Theory postulates that individuals constantly monitor their opinion environment, such as those within their interpersonal networks, and may suppress their privately held opinions due to the fear of isolation (FoI). Neumann (1977) further suggested that "most people are afraid of becoming isolated from their environment"

(p.144) as it is a basic human instinct to be integrated into a social group (Ahmed et al., 2021; Beebe & Masterson, 2020).

There is considerable literature that explores the role of group processes on the public expression of ideas and opinions (Beck et al., 2022). Specifically, the theory of groupthink predicts that majority opinions are the most likely to be expressed in a small group with those holding minority opinions remaining silent (Beebe & Masterson, 2020; Henningsen et al., 2006; Janis, 1973). Additional research offers clues as to when group members express their opinions and share information with the entire group (Galinsky & Kray, 2004; Wittenbaum et al., 2004). People in groups, in interpersonal contexts, and online may prefer to remain silent

if they perceive that their opinions are incongruent with the perceived majority opinions (Janis, 1973). In addition, individuals are more willing to express their views if they perceive their attitudes and beliefs are consistent with the majority position (McQuail, 2010). Subsequently, the dominant opinion is reinforced and the minority opinion is diminished. In the words of Neumann (1974), “the tendency of the one to speak up and the other to be silent starts off a spiralling process, which increasingly establishes one opinion as the prevailing one” (P.44).

Fear of isolation (FoI) is a key predictor of the spiraling process. FoI is regarded as the fear of being socially excluded, which then triggers the spiral of silence (Neumann & Petersen, 2004). Both dispositional and contextual fear of isolation have a potential psychological effect on the human psyche in the form of willingness to engage in self-censorship (Fox & Holt, 2018). Hayes et al. (2005) defined self-censorship as “the withholding of one’s true opinion from an audience perceived to disagree with that opinion” (p. 298). To reduce fear-based exclusion, individuals learn to self-censor their views. However, due to personality characteristics such as a high willingness to communicate, some “hardcore” individuals are likely to express their opinions, even when in the minority (Riasati & Noordin, 2011).

The theoretical assumptions of SoS may help explain why some individuals repress their expressions of attitudes, beliefs, and opinions on social media in Pakistan. Article 19 of the constitution of the Islamic Republic of Pakistan which, in theory, gives the right of freedom of expression/speech to each citizen. However, the practical application of this constitutional right is that those who hold majority opinions are more likely to freely exercise this right. Whereas people who hold minority positions may withhold their true opinion and remain silent due to the fear of isolation.

The fear of isolation may help explain contemporary trends in the expression and suppression of public opinion. More precisely, the debate about the role of religion in politics

has polarized public opinion into majority and minority positions. Censorship of liberal, progressive, and enlightened voices in mainstream media, in the name of integrity, security, and defence of Pakistan may be the result of perceptions of majority and minority expressed opinions. When taking a hard line against state policies, social media activists may face serious obstacles including harassment, threats, abduction, intimidation, assault, and arbitrary arrest. In Pakistan, outspoken individuals with entrenched, although minority positions, are sometimes soft targets of rhetorical epithets from some state institutions and right-wing extremist groups. Law enforcement agencies using cyber laws give the appearance of protecting the interest of ‘sacred cows’ who consider themselves above the law. The current policies of the state and the role of extremist groups may therefore contribute to a climate of fear which subsequently results in self-censorship among social media users. Looking at the current circumstances in Pakistan, it may appear that ‘Digital Martial law’ has been enforced as evidenced by Reporters Without Borders ranking Pakistan 157 out of 180 countries in its latest press freedom index.

Recently, research scholars have studied the spiral of silence phenomenon in the context of social media (Chen, 2018; Gearhart & Zhang, 2014; Kwon et al., 2015; Yun & Park, 2011). The contemporary polarized social environment in Pakistan affords a suitable opportunity to examine the SoS phenomenon in the context of social media. Several outcomes, including the abduction of bloggers, enforced disappearances of social media activists, the brutal lynching of Mashal Khan, and Arshad Sharif’s assassination have not only further polarized public opinion but also empowered the confrontational social environment that is likely to induce self-censorship. Research may help us understand whether and how the spiral of silence assumptions may explain the content on social networking sites (SNS) in Pakistan.

This study seeks to add insights to the literature by examining whether a stronger attitude towards state institutions and religious beliefs stimulates the willingness to self-censor one's

expressed attitudes and beliefs. Neumann (1993) suggested the research issue under investigation for testing SoS assumptions should be controversial and contain a strong moral component. Criticizing state policies and expressing moderate views on sensitive religious issues exacerbate the potential for trouble. For these reasons, the tenets of the spiral of silence will be examined in wake of state institutions and religious extremism that appear to polarize public opinion in Pakistan. Moreover, it is useful to investigate the indirect effects of fear of isolation on the relationship between attitude strength and willingness to engage in self-censorship.

Objectives

The primary objectives of this study are:

- To examine the association between social media users' attitudes towards state institutions and willingness to engage in self-censorship.
- To identify the relationship between social media users' attitudes towards religious beliefs and willingness to engage in self-censorship.
- To explore the relationship between social media users' attitudes towards state institutions and dispositional/contextual fear of isolation.
- To assess the effects of social media users' attitudes towards religious beliefs and dispositional/contextual fear of isolation.
- To assess the impact of dispositional/contextual fear of isolation on willingness to engage in self-censorship.
- To investigate the dispositional/contextual fear of isolation as a mediating influence between the relationship of attitude towards state institutions and willingness to engage in self-censorship.
- To investigate the dispositional/contextual fear of isolation as a mediating influence between the relationship of attitude towards religious beliefs and willingness to engage in self-censorship.

Literature Review

Several studies using the SoS framework serve as a theoretical background for exploring the objectives of this study. Scholars have tested the SoS theory in different cultural and political contexts. The current study adopts the SoS framework to empirically verify assumptions of this theory and assesses its applicability to social media messages.

Neumann (1974), when originally proposing SoS theory, used multi-subject surveys and collected data through structured interviews from 2000 respondents. Her primary focus was to examine public opinion on a range of different controversial issues. Confirming her theory, she found that fear of isolation is a key predictor of an individual expressing their public opinion. The respondents who perceived their attitudes aligning with the majority group had expressed their views with less fear. As a result, the majority opinion gains more ground and alternatives become weaker, which results in the spiraling effect increased silence.

Several additional research studies have verified the assumptions of the SoS framework. Hayes et al. (2011) in their study found that fear of isolation stimulates individuals to seek more information about the social environment. Their study concluded that those who had a fear of social isolation were more likely to select a specific information channel for receiving information about majority opinions. Earlier, Hayes et al. (2005) conducted an experimental study to measure individual differences regarding willingness to self-censorship among 742 respondents. The results suggest that the majority of the respondents were more willing to express their views in a friendly environment. Additionally, the influence of willingness to self-censorship was higher on opinion expression, especially in a hostile environment. Before voicing their opinion publicly, the majority of respondents first assessed the attitudes, beliefs, and opinions of others.

Additional research explores the relationship between fear of isolation and willingness to engage in self-censorship. Fox and Holt (2018) examined users' willingness to self-censorship

regarding police discrimination on Facebook among a sample of 399 respondents. Results revealed a positive association between fear of isolation and self-censorship. Moreover, attitude strength was found to be negatively associated with self-censorship. Similarly, Chen (2018) examined the application of SoS to social media use. The results suggest that fear of social isolation encourages withdrawal behavior by increasing willingness to self-censorship on social networking sites. Research by Wu and Atkin (2018) and Kim (2012) found that fear of isolation is negatively associated with willingness to express ideas and opinions. Matthes et al. (2012) studied cross-cultural SoS and also found a strong relationship between fear of isolation and willingness to self-censorship in all countries except China. In another study, Kushin et al. (2019) found a negative relationship between fear of isolation and willingness to express opinions.

Chan (2017) examined the willingness to express views in favor of a political party or candidate. The results suggest that respondents were more willing to express their views on Facebook while interacting with the homophiles peer network. In face-to-face interactions, those having a higher level of fear of social isolation were less willing to express their political preferences. Moreover, it was found that the indirect effect of fear of isolation through the willingness to self-censorship restrained expressions of support for a political party in both offline and online contexts. Similar results were observed by McDevitt et al. (2003) when they developed an online chat condition to test SoS in a computer-mediated communication environment. The results revealed that the SoS effect took place in the online environment as minority opinion holders withheld their true opinions. The fear of being socially excluded not only restrains individuals from expressing their true opinion, but also motivates them to monitor their social environment to ensure they are not expressing a viewpoint that may be at odds with others.

Neubaum and Krämer (2016) explored the reasons fear occurs by analyzing sanctions for expressing an unpopular opinion in both offline

and online settings. Findings revealed that respondents were more willing to express their opinion in face-to-face discussions; they had a higher fear of expressing an opposing viewpoint on the internet. They were, however, comfortable expressing their views in the offline setting without considering the sensitivity of the topic. Lee et al. (2014) assessed the willingness to express views on two controversial issues, gun possession, and climate change. Using an online survey, results indicated a positive association between fear of isolation and willingness to engage in self-censorship. Active or more assertive individuals were found to be more involved in expressing views compared to less assertive, passive people. Likewise, Gearhart and Zhang (2014) found that social media users who were more willing to self-censorship made fewer comments on Facebook.

A Pew research center report summarized in the analysis of Hampton et al. (2014) identified the SoS in the context of Edward Snowden's 2013 leaks on social media. The results found that the majority of respondents were less willing to express their views on this specific issue on SNS. Data revealed that 86% were amenable to expressing their opinions in face-to-face contexts, while only 42% of Facebook and Twitter users were willing to express their views on a specific issue. In both online and offline discussions, individuals showed greater interest in the debate of Snowden leaks after knowing that a majority will endorse their views on the issue. Participants were less willing to express their views on SNS as compared to interpersonal communication.

Lee and Kim (2014) examined journalists' willingness to express their views on Twitter obtaining data from 118 Korean journalists. In confirming the previous trends of the expression of opinions on SNS, the results found that journalists who felt the discrepancy in their opinion on controversial issues were less willing to express their views on Twitter. In addition, conservative journalists were less willing to discuss controversial issues. Journalists were also less willing to express their views on Twitter when they found their opinions divergent from majority opinion holders.

Similarly, a study conducted by Lang (2014) explicitly tested the Spiral of Silence Theory using a quasi-experimental design. Results indicated that fear of isolation is a significant predictor of opinion expression on Facebook. Those who experienced less fear were more likely to express their views on social network sites. People felt a greater fear of isolation in face-to-face discussions.

When examining views about religious beliefs, Croucher et al. (2014) considered the subjects' willingness to express their opinion in the US presidential election of 2008 within the framework of the SoS. Data were collected from 569 respondents using convenience sampling. The results showed that religion and religiosity had a significant influence on the willingness to express political views. Those who reported that they were more religious were more interested in discussing the ethnicity of Democratic party candidates. Religion and religiosity were found to be significant predictors of willingness to express opinions. In addition, Yun and Park (2011) studied the SoS phenomena in both anonymous and non-anonymous online contexts. The results found that respondents were more willing to post a comment in a friendly environment as compared to hostile conditions. Additionally, minority opinion holders were less willing to comment online due to fear of the dominant majority. Erichsen and Bolliger (2011) found similar results. They observed that international students who were in the minority had a higher level of fear of isolation and were less willing to express their views.

Baldassare and Katz (1996) analyzed the impacts of attitude strength on willingness to express views publicly by using secondary data

from four pre-election surveys. The results demonstrated that attitude strength played a crucial role in predicting willingness to speak out. People who had a great interest in politics were more willing to express their views publicly. The results further revealed that attitude strength was a dominant agent for breaking the spiral of silence.

Although the majority of studies find support for SoS Theory, the research findings have not been consistent. Salmon and Neuwirth (1990) found limited support for Neuman's hypothesis that individuals who consider their opinion compatible with the majority opinion holders would be more willing to speak out. There was no significant effect of opinion climates on willingness to speak out. Those who had knowledge and personal concerns about a particular issue were more willing to express their views. Similarly, the study of Porten-Che  and Eilders (2015) also found contrary results; individuals who see themselves in the minority were more likely to express their views.

Although there are exceptions, taken as a whole, research suggests a strong relationship between fear of isolation and willingness to self-censorship (Chen, 2018; Lee & Kim, 2014; Matthes et al., 2012; McDevitt et al., 2003) thus offering support for SoS theory. In addition, attitude strength appears to be a significant predictor of willingness to speak out (Baldassare & Katz, 1996; Fox & Holt, 2018). Yet no study has investigated the indirect effects of dispositional/contextual fear of isolation in the relationship between attitude strength and willingness to self-censorship. The current study seeks to address this research gap by empirically testing the hypothetical model shown in Figure 1.

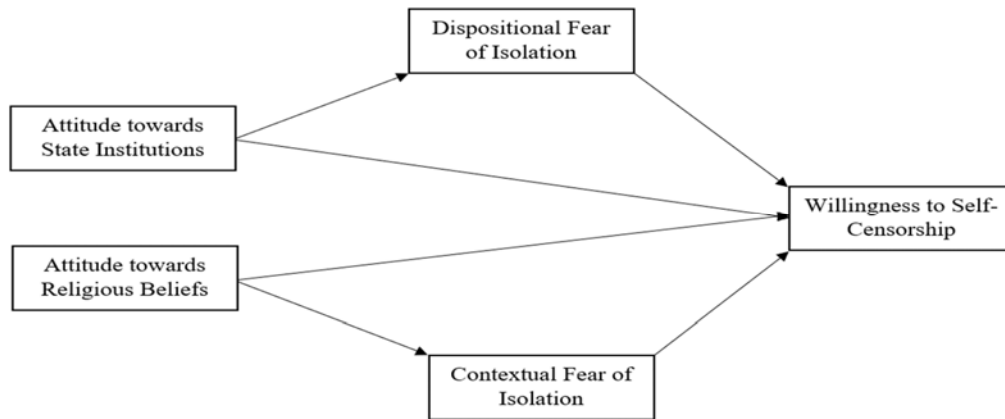


Figure 1: Proposed Hypothesized Model of the Study

Based on the reviewed literature, the researchers propose a hypothetical model (Figure 1), wherein it is presumed that attitude strength towards state institutions and religious beliefs would be directly associated with the willingness to engage in self-censorship. Furthermore, it was hypothesized that dispositional/contextual fear of isolation would mediate in the relationships between attitude strength towards state institutions/religious beliefs and willingness to engage in self-censorship.

Hypotheses

Consistent with the empirical literature on the SoS framework, this study poses the following hypotheses:

H₁: Attitude towards state institutions is a significant predictor of the willingness to self-censorship.

H₂: Attitude towards religious beliefs is a significant predictor of the willingness to self-censorship.

H₃: Attitude towards state institutions is significantly correlated with dispositional/contextual fear of isolation.

H₄: Attitude towards religious beliefs is significantly correlated with dispositional/contextual fear of isolation.

H₅: Dispositional/contextual fear of isolation is positively associated with willingness to self-censorship on SNS.

H₆: Dispositional/contextual fear of isolation

mediates the relationship between attitude towards state institutions and willingness to self-censorship.

H₇: Dispositional/contextual fear of isolation mediates the relationship between attitude towards religious beliefs and willingness to self-censorship.

Methodology

To assess the hypotheses, this study used a cross-sectional survey design to collect data through a self-administered questionnaire from 650 participants aged between 18 to 33. The participants were selected through purposive sampling technique from four educational institutes of Lahore. The questionnaire contained 61 close-ended items. Fifty questionnaires were excluded from the final analysis of data because these were not appropriately completed which resulted in 600 questionnaires that were submitted for analysis.

Measurement

Attitude towards State Institutions & Religious Beliefs

The attitude strength scale was adapted from Fox and Holt (2018) to measure attitudes towards state institutions (i.e. police, judiciary, and army) as well as religious beliefs. This scale included seven items such as: “If a rich person and a poor person were under consideration for the same crime, the cops would be more likely to suspect the poor person,” “The military is more likely to discriminate if the suspect is anti-army” and “Religious scholars who issue wrong verdicts or nominate the wrong person on blasphemy issue must be punished with the same

crime” (Cronbach’s $\alpha = .73$).

Dispositional Fear of Isolation

This study measured dispositional/trait fear of isolation using a scale developed by Hayes et al. (2011). The fear of isolation scale included five items such as: “One of the worst things that could happen to me is to be excluded by people I know” and “I dislike feeling left out of social functions, parties, or other social gatherings” (Cronbach’s $\alpha = .71$).

Contextual Fear of Isolation

By adapting the contextual fear of isolation scale developed by Neuwirth et al. (2007), this study measured context-specific fear of isolation regarding state institutions (i.e. police, judiciary, army) as well as religious beliefs. This scale included five items such as: “I feel I will lose friends or hurt relationships if I express my opinion about the army’s role in politics and their intervention in government policies on Facebook/Twitter,” “I worry about being isolated if people disagree with me if I express my opinion about religious institutions role in spreading extremism in the country on Facebook/Twitter” (Cronbach’s $\alpha = .81$).

Willingness to Self-censorship (WTSC)

WTSC was measured by adapting a scale developed by Hayes (2005). The willingness to self-censorship scale measures the extent individuals withhold their opinions especially when they do not discern that their opinion is consistent with the majority opinion. This scale included eight items such as: “It is difficult for me to express my opinion on Facebook/Twitter if I think others won’t agree with what I say” and “It is safer to keep quiet than publicly speak an opinion that you know most others don’t share on Facebook/Twitter” (Cronbach’s $\alpha = .83$).

Control Variables

Gender, locality, age, ethnicity, sect, qualification, and SNS usage were controlled in the final analysis of data.

Analytic Strategy

The data were analyzed using Structure Equation Modeling (SEM) with the help of

Analysis of Moment Structures (AMOS); the final model was run with all the significant predictors in order to test for the mediating effects of dispositional/contextual fear of isolation in the relationship between attitude towards state institution and religious beliefs with the willingness to self-censorship.

Results

Path analysis using complex SEM revealed that the final model provides an adequate fit with the data as the model fit indices including Chi-square ($\chi^2 = .95$, $p = .004$) and various fit indices (Comparative Fit Index = 1.00, Normed Fit Index = 1.00, Root Mean Square Error of Approximation = .000) are within the acceptable range. For all the analyses, bootstrap estimates were based on 2000 bootstrap samples with bias-corrected bootstrap 90% CI for the standardized effects was used to determine the significance of direct and indirect effects (Preacher & Hayes, 2008).

As presented in Figure 2, the model shows five significant direct effects, as attitude towards state institutions significantly predicted the willingness to self-censorship ($\beta = .28$, $p < .001$). Thus, H1 is supported.

H2 tested whether attitude towards religious beliefs would be positively associated with willingness to self-censorship. The results supporting H2 showed a positive correlation between attitude toward religious beliefs and willingness to self-censorship ($\beta = .20$, $p < .001$).

H3 is partially supported as attitude towards state institutions (political, judiciary, and army) did not predict dispositional fear of isolation ($\beta = .06$, $p > .05$) but positively predicted contextual fear of isolation ($\beta = .20$, $p < .001$).

The results did not specify a significant relationship between attitude towards religious beliefs and dispositional fear of isolation ($\beta = .00$, $p = 0.901$) as well as contextual fear of isolation ($\beta = .01$, $p = 0.840$). Thus, H4 is not supported.

Dispositional fear of isolation is positively predicting willingness to self-censorship ($\beta = .09$, $p < .05$) and the same is the case with the prediction of contextual fear of isolation for self-censorship ($\beta = .30$, $p < .001$). Therefore, H5 is

fully supported.

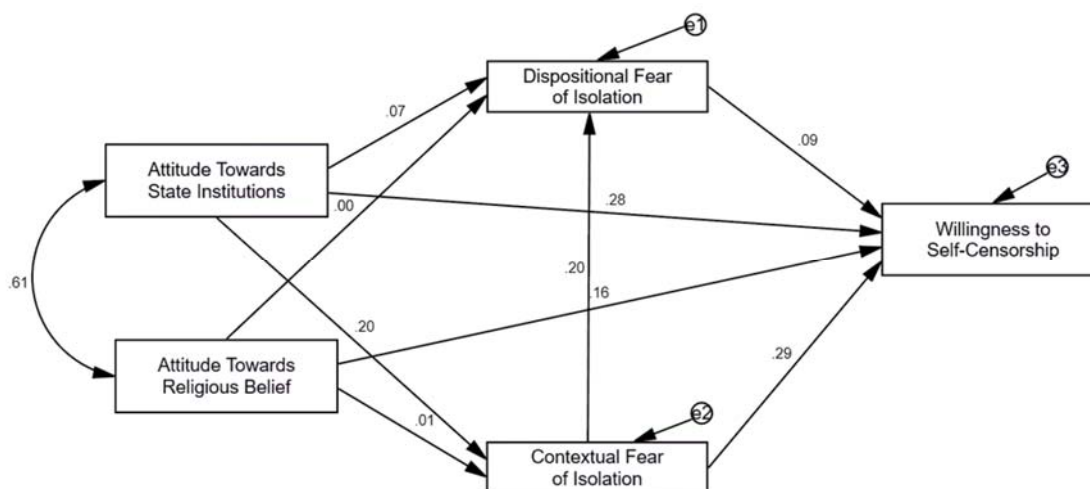


Figure 2. Showing the complex Multivariate Model Representing Standardized Regression Coefficients displaying the mediational model for Dispositional and Contextual Fear of Isolation for Willingness to Self-Censorship

For a significant mediational model, indirect effects were evaluated and the findings show a significant indirect effect of both mediating role of dispositional and contextual fear of isolation in the relationship between attitudes towards state institutions with the willingness to self-censorship ($\beta=.08$, $p<.001$, $CI=.045-.121$), hence the results show the partial mediating role of both mediators and therefore Hypothesis 6 is supported.

Only the indirect effect of dispositional fear of isolation in the relationship between attitudes towards religious beliefs with the willingness to self-censorship is significant ($\beta=.05$, $p<.05$, $CI=.025-.10$). The path coefficients of contextual fear of isolation and attitudes towards self-censorship is constrained to zero because of its non-significance as evident from initial model testing, so as per modification indices suggestion this path is constrained to zero for making model significance to the current study data. Hence, Hypothesis 7 is partially supported.

Discussion

This study explored the applicability of SoS theory in the social media environment by studying various factors hypothesized to impact the spiraling process, including attitude strength,

dispositional/contextual fear of isolation, and willingness to self-censorship. The Spiral of Silence theoretical framework predicts a powerful effect of the media in reflecting societal-level consequences. Despite considerable research on SoS theory, there have been relatively few studies which have investigated the spiralling process in online environment. The present study examined SoS theory in the social media environment using data from Pakistan.

The overall results of this study support SoS Theory. Consistent with previous studies (Chen, 2018; Fox & Holt, 2018; Lee & Kim, 2014), dispositional/contextual fear of isolation is found to be significantly correlated with willingness to self-censorship. Attitude towards state institutions is also found to have a significant relationship with the willingness to self-censorship. Contrary to H4, attitude towards religious beliefs was not found to be significantly correlated with dispositional/contextual fear of isolation. Likewise, attitude towards state institutions doesn't predict dispositional fear of isolation. However, the results of this study suggest a significant mediating role of dispositional/contextual fear of isolation in the relationship between attitude towards state institutions/religious beliefs and willingness to self-censorship.

As suggested by the SoS framework, fear of

isolation and fear of reprisal are two primary reasons for not disclosing opinions with others. Individuals are likely to hide their true opinion especially when they perceive that their opinions are in the minority (Baran & Davis, 2011), resulting in self-censoring their expressed views. The results of this study not only support the assumptions of SoS Theory but specifically verify the applicability of the SoS phenomenon in Pakistan. This study contributes to the existing SoS literature by testing this theory in the social media landscape, as well as exploring the mediating role of fear of isolation between attitude strength and willingness to engage in self-censorship. In addition to theoretical implications, this study provides empirical evidence to suggest the existence of the SoS phenomenon in Pakistani should be useful to policymakers/practitioners, legislators, and human rights activists to help explain the perceived deteriorating state of perceived free speech and the honest expression of attitudes and beliefs.

The current research studied the SoS phenomenon in the context of social media and helps to explain why individuals in Pakistan may self-censor their political views expressed on social media. Future studies may explore this phenomenon in face-to-face, interpersonal contexts. Furthermore, this study examined social media users' willingness to self-censorship regarding their attitude towards state institutions and religious beliefs. Additional research is needed to explore this phenomenon in other contexts such as related to issues of perceived blasphemy, minority opinions, and expressed support for human rights, as well as 'Aurat March'. The current study limits generalizability as participants' selection for data collection was made through the purposive sampling technique. Future studies may overcome this limitation by using probability sampling.

Conclusion

This study explored the relationship between attitudes towards state institutions /religious beliefs and willingness to self-censorship through the mediating role of

dispositional/contextual fear of isolation. Results, informed by the Spiral of Silence Theory, suggest that social media users' attitudes towards state institutions and religious beliefs significantly predicted the willingness to self-censorship. In addition, dispositional/contextual fear of isolation is found to have a significant relationship with willingness to self-censorship. This study also contributes to the existing literature of SoS by investigating the mediating role of dispositional/contextual fear of isolation between attitude strength and willingness to self-censorship.

References

- Ahmed, I., Beebe, S. A., & Ikhtlaq, A. (2021). News media use and civic engagement in the perspective of university students: social capital and civic accountability as mediating mechanism. *Pakistan Journal of Educational Research*, 4(1). <https://doi.org/10.52337/pjer.v4i1.54>
- Baldassare, M., & Katz, C. (1996). Measures of attitude strength as predictors of willingness to speak to the media. *Journalism & Mass Communication Quarterly*, 73(1), 147-158. <https://doi.org/10.1177/107769909607300113>
- Baran, S. J., & Davis, D. (2011). *Mass Communication Theory: Foundations, Ferment, and Future*. Delhi: Cengage Learning.
- Beck, S. J., Keyton, J. & Poole, M. S. (2022). *The Emerald Handbook of Group and Team Communication Research*. Emerald Publishing: United Kingdom
- Beebe, S. A. & Masterson, J. T. (2020). *Communicating in Small Groups: Principles and Practices*. Boston: Pearson.
- Chan, M. (2018). 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*, 21(1), 1–23.
<https://doi.org/10.1080/15205436.2017.1358819>
- Chen, H.T. (2018). Spiral of silence on social media and the moderating role of disagreement and publicness in the network: Analyzing expressive and withdrawal behaviors. *New Media & Society*, 20(10), 3917–3936.
<https://doi.org/10.1177/1461444818763384>
- Croucher, S. M., Spencer, A. T., & McKee, C. (2014). Religion, religiosity, sex, and willingness to express political opinions: A spiral of silence analysis of the 2008 U.S. presidential election. *Atlantic Journal of Communication*, 22(2), 111–123.
<https://doi.org/10.1080/15456870.2014.890001>
- Erichsen, E. A., & Bolliger, D. U. (2011). Towards understanding international graduate student isolation in traditional and online environments. *Educational Technology Research and Development*, 59(3), 309–326.
<https://doi.org/10.1007/s11423-010-9161-6>
- 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.
<https://doi.org/10.1080/15205436.2018.1442480>
- Galinsky, O & Kay, L. J. (2004). From thinking about what might have been to sharing what we know: The sharing in groups. *Journal of Experimental Social Psychology* 40(5), 606–618.
<https://doi.org/10.1016/j.jesp.2003.11.005>
- Gearhart, S., & Zhang, W. (2014). Gay bullying and online opinion expression. *Social Science Computer Review*, 32(1), 18–36.
<https://doi.org/10.1177/0894439313504261>
- Hampton, K. N., Rainie, H., Lu, W., Dwyer, M., Shin, I., & Purcell, K. (2014). *Social media and the 'spiral of silence'*. Retrieved from <https://www.pewinternet.org/2014/08/26/social-media-and-the-spiral-of-silence/>.
- Hayes, A. F. (2005). Validating the willingness to self-censor scale: Individual differences in the effect of the climate of opinion on opinion expression. *International Journal of Public Opinion Research*, 17(4), 443–455.
<https://doi.org/10.1093/ijpor/edh072>
- Hayes, A. F., Glynn, C. J., & Shanahan, J. (2005). Willingness to self-censor: A construct and measurement tool for public opinion research. *International Journal of Public Opinion Research*, 17(3), 298–323. <https://doi.org/10.1093/ijpor/edh073>
- Hayes, A. F., Matthes, J., & Eveland Jr, W. P. (2011). Stimulating the quasi-statistical organ: Fear of social isolation motivates the quest for knowledge of the opinion climate. *Communication Research*, 40(4), 439–462.
<https://doi.org/10.1177/0093650211428608>
- Henningsen D. D., Henningsen, M. L. H, Eden, J & Cruz, M. J. (2006). Examining the symptoms of groupthink and retrospective sensemaking. *Small Group Research* 37(1), 36–64.
<https://doi.org/10.1177/1046496405281772>
- Index, P. F. (2022). Reporters without borders. available at: <https://rsf.org/en/rsf-s-2022-world-press-freedom-index-new-era-polarisation>
- Janis, I. L. (1973). *Victims of Groupthink*. Boston: Houghton Mifflin.
- Kim, S. H. (2012). Testing fear of isolation as a causal mechanism: Spiral of silence and genetically modified (GM) foods in South Korea. *International Journal of Public Opinion Research*, 24(3), 306–324.

<https://doi.org/10.1093/ijpor/eds017>

- 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). <https://doi.org/10.1177/2056305119855139>
- Kwon, K. H., Moon, S. I., & Stefanone, M. A. (2015). Unspeaking on Facebook? Testing network effects on self-censorship of political expressions in social network sites. *Quality & Quantity*, 49(4), 1417-1435. <https://doi.org/10.1007/S11135-014-0078-8>
- Lang, K. (2014). *Opinion expression on social networking sites testing an adapted spiral of silence model for political discussion on Facebook*. University of Miami. Retrieved from https://scholarlyrepository.miami.edu/oa_dissertations/1341
- Lee, H., Oshita, T., Oh, H. J., & Hove, T. (2014). When do people speak out? Integrating the spiral of silence and the situational theory of problem solving. *Journal of Public Relations Research*, 26(3), 185–199. <https://doi.org/10.1080/1062726X.2013.864243>
- Lee, N. Y., & Kim, Y. (2014). The spiral of silence and journalists' outspokenness on Twitter. *Asian Journal of Communication*, 24(3), 262–278. <https://doi.org/10.1080/01292986.2014.885536>
- Matthes, J., Hayes, A. F., Rojas, H., Shen, F., Min, S.-J., & Dylko, I. B. (2012). Exemplifying a dispositional approach to cross-cultural spiral of silence research: Fear of social isolation and the inclination to self-censor. *International Journal of Public Opinion Research*, 24(3), 287–305. <https://doi.org/10.1093/ijpor/eds015>
- McDevitt, M., Kioussis, S., & Wahl-Jorgensen, K. (2003). Spiral of moderation: Opinion expression in computer-mediated discussion. *International Journal of Public Opinion Research*, 15(4), 454–470. Available at shorturl.at/iquG1
- McQuail, D. (2010). *McQuail's Mass Communication Theory*. Sage publications.
- Neubaum, G., & Krämer, N. C. (2016). What do we fear? Expected sanctions for expressing minority opinions in offline and online communication. *Communication Research*, 45(2), 139–164. <https://doi.org/10.1177/0093650215623837>
- Neuwirth, K., Frederick, E., & Mayo, C. (2007). The spiral of silence and fear of isolation. *Journal of Communication*, 57(3), 450–468. <https://doi.org/10.1111/j.1460-2466.2007.00352.x>
- Noelle-Neumann, E. (1974). The spiral of silence a theory of public opinion. *Journal of Communication*, 24(2), 43–51. <https://doi.org/10.1111/j.1460-2466.1974.tb00367.x>
- Noelle-Neumann, E. (1977). Turbulences in the climate of opinion: Methodological applications of the spiral of silence theory. *Public opinion quarterly*, 41(2), 143–158. <https://doi.org/10.1086/268371>
- Noelle-Neumann, E. (1993). *The spiral of silence: Public opinion, Our social skin* (2nd ed.). Chicago: University of Chicago Press.
- Noelle-Neumann, E., & Petersen, T. (2004). The spiral of silence and the social nature of man. *Handbook of political communication research*. Routledge.
- 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.
<https://doi.org/10.1016/j.scoms.2015.03.002>
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
<https://doi.org/10.3758/BRM.40.3.879>
- Riasati, M. J. & Noordin, N. (2011). Antecedents of willingness to communicate: A review of literature. *Studies in Literature and Language* 3(2).
<http://dx.doi.org/10.3968/n>
- Salmon, C. T., & Neuwirth, K. (1990). Perceptions of opinion “climates” and willingness to discuss the issue of abortion. *Journalism Quarterly*, 67(3), 567-577.
<https://doi.org/10.1177/1077699090006700312>
- Wittenbaum, G. M, Hollingshead, A.B & Botero, I. C. (2004). From cooperative to motivated information sharing in groups: Moving beyond the hidden profile paradigm, *Communication Monographs* 71(3), 286-310.
<https://doi.org/10.1080/0363452042000299894>
- Woong Yun, G., & Park, S.Y. (2011). Selective posting: Willingness to post a message online. *Journal of Computer-Mediated Communication*, 16(2), 201–227.
<https://doi.org/10.1111/j.1083-6101.2010.01533.x>
- Wu, T.Y., & Atkin, D. J. (2018). To comment or not to comment: Examining the influences of anonymity and social support on one’s willingness to express in online news discussions. *New Media & Society*, 20(12), 4512–4532.
<https://doi.org/10.1177/1461444818776629>