12-7-2022

Social Media's Stockholm Syndrome: A Literature Review of User's Love and Hate

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Full research paper

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Abstract

Social Media (SM) users have many reasons to hate the technology (i.e., fake news, cyberbullying) and thus, to discontinue its use. Yet, billions of people use SM daily and cannot escape it. We posit that many users simultaneously love and hate SM. In the Stockholm Syndrome, such a duality of love and hate is documented for the victims to their hostage-taker. The question that comes to mind is whether SM is holding its users hostage by affording and amplifying a similar love-hate duality? In a scoping literature review of 370 articles, we apply the Stockholm Syndrome's three tensions (i.e., closeness-distance, kindness-hostility, dependence-resistance) to published works about SM use. The result is a taxonomy of SM tensions that explains why and how users "love hating and hate loving" the technology. We conclude with future research topics to better understand the factors that pull and push users away from SM.

Keywords Social media, Duality of love-hate, Stockholm Syndrome, Use tensions, Literature review

1 Introduction

Social media (SM) is one of the most widely used social technologies in the world, accounting for a quarter of the time users spend online. SM user statistics are impressive, with Facebook having 2.9 billion users, who spend more than 2 hours per day using it (Meta Platforms, Inc. 2022). The large user base attracts companies and governments (Butler and Matook 2015). In Australia, 85% of firms have a SM presence, and 52% regularly advertise on it. Many government agencies use SM to promote policies and for communications during disasters (i.e., floods (Leong et al. 2015)). No doubt, everyone loves SM.

However, there is another side to the SM love story. Many users hate SM because of the harm it creates. For example, Facebook was involved in the Cambridge Analytica scandal (Granville 2018), where 85 million users' data was illegally obtained. SM is also known for spreading fake news (Moravec et al. 2020) and cyberbullying (Lowry et al. 2016). Considering these adverse events, researchers show users discontinue SM use, either temporarily (Osatuyi and Turel 2020) or permanently (Maier et al. 2015). Thus, the literature demonstrates that user behaviours are conflicting, but has yet to contrast - with a cohesive framework - what pulls and pushes away SM users.

To address this gap, we need to understand why users love and hate SM. The emotions of love and hate are key behavioural drivers of many actions (Aumer 2016). Prior research shows that emotions are highly relevant in forming, maintaining, and resolving relationships because of the feelings they create towards the other partner (Butler and Matook 2015). Being in love means continuing a relationship, whereas feeling hate towards the partner means a desire to end it. The same principles about love and hate may also apply to SM and users' decisions to stay or leave.

Unfortunately, it is not that simple because humans experience a multitude of emotions (Gergely et al. 2007). Often a person experiences conflicting emotions at different points in time towards the same person, object, or idea (Jin et al. 2017). Thus, SM users can experience both love and hate for SM. This phenomenon is conceptualized as *emotional complexity* (Lindquist and Barrett 2008). The theoretical framework of such an emotional complexity is captured in the *Stockholm Syndrome,* where hostage victims experience both love and hate towards their captors (Rizo-Martinez 2018).

The Stockholm Syndrome describes emotional tensions in response to the paradoxical duality of love and hate (Graham et al. 2001). The tensions explain how in the case of the hostage situation, the victims felt simultaneously *close and distant* to the hostage-taker, why the victim had *kind and hostile* emotions, and how the victim felt *dependent and independent* of the captor (de Fabrique et al. 2007). Research posits that a person resorts to dialectic management to cope with the abuse.

In this study, we examine published research on the extent to which it describes the love-hate phenomena, particularly how SM creates (1) closeness-distance, (2) kindness-hostility, and (3) dependence-resistance. We conduct a *scoping review* (Paré et al. 2015) to answer our research question: *"Why do users love and hate SM contributing to the use decisions of the technology?"*. The results are presented within the three tensions to delineate the influence of users on SM and vice versa. The resulting taxonomy of SM tensions explains what SM's pull and push factors are.

We end the paper with recommendations for future research that are forward-looking into a SM world with less hate created by the technology and with users enjoying the benefits of SM. The proposed topics integrate multiple IS research domains, such as IS development, artificial intelligence, and ethics. To stay true to the duality, every proposed topic should be looked at from both sides. SM is taking users hostage, and more research is needed to understand why and how users "*love hating and hate loving*" it.

2 Background and Theoretical Framework

2.1 Emotional Complexity

Humans experience diverse emotions, and ample research attempted to comprehend them since ancient times (Aumer 2016). Understanding emotions is important because of their impact on human life. Emotions influence human relationships with significant others (Kearns and Smith 2018) and impact human behaviors and decision-making (Luo and Yu 2015).

Human emotions are complex and object-centred (Gergely et al. 2007). Emotions are directed towards different objects, people, or places. Human cognition first relates each object to one specific emotion. In a romantic relationship, love is the primarily associated emotion (Jin et al. 2017). However, humans also feel multiple emotions towards the same object, which can be complementary or contradictory (Jin

et al. 2017). The ability to feel opposite emotions towards the same object is known as *emotional complexity* (Lindquist and Barrett 2008), such as simultaneously loving and hating.

Feeling love and hate simultaneously is a paradox because they are stereotypes of opposite emotions. The Western conception of romantic relationships focuses on unconditional love (Aumer 2006). Hence, the coexistence of love and hate is considered inappropriate and contentious. However, the paradox of feeling *hate-in-love* and *love-in-hate* is more frequent than believed. The emotional complexity of feeling opposite emotions helps us develop healthy relations. Thus, balancing opposite emotions allows us to be critical and flexible, especially to make decisions (Luo and Yu 2015).

A paradox or duality of emotions can be experienced in different relations. The love-hate duality appears in mother-child relationships (Kearns and Smith 2018). Love is the predominant emotion, but negative feelings are also possible. The relation boss-employee also depicts emotional duality (Vadera and Pratt 2013), triggering simultaneous positive and negative emotions. Finally, in the relationship between hostage-takers and victims, the preeminent emotions are negative ones, like fear (Graham 1994). Yet, victims can have positive feelings, which is a key factor for Stockholm Syndrome.

2.2 Understanding Emotional Complexity: The Stockholm Syndrome

We draw on the Stockholm Syndrome as our theoretical framework to understand emotional complexity. The syndrome theorizes the psychological experience in which a hostage victim develops a positive bond with their captors (Rizo-Martínez 2018). This emotional bond is considered a paradoxical situation (Graham et al. 2001). The paradox refers to the positive feelings towards the captor, which contrasts with the fear and hate expected during a kidnap. This psychological phenomenon is a survival strategy (Gordon 2005). It is an adaptive response that gives the victim hope of surviving the hostage.

The Stockholm Syndrome originated in a hostage situation in the Sveriges Kreditbank in Stockholm, Sweden, in 1973. Two criminals took four hostages in a bank robbery and held them in a vault for six days. It was later reported (Lang 1974) that during the kidnap, the captors were kind to the hostages and shared their food while calming them when they were scared. Captors and victims were confined in the same space and engaged in personal conversations. These factors made victims feel their captors were protecting them. Victims and captors developed a friendly bond and perceived the police outside the bank as enemies. Victims felt the hostage was not ending due to the inefficient work of the police. They also noticed that the kidnappers did not hurt them but believed the police might kill them to end the hostage. This case initiated research about paradoxical response of hostage victims.

The Stockholm Syndrome is applied to broader research contexts beyond kidnap. It serves as the theoretical framework for research on abusive romantic relationships (Graham et al. 2001), terrorist attacks (Gordon 2005), and government-voter behaviour (Haydaroğlu 2017). Common across these studies is the victims' emotional responses due to feelings of power imbalance (Graham et al. 2001).

Captives do not always develop an emotional bond with their captors. Certain factors trigger the development of Stockholm Syndrome, including the kidnap's characteristics and the captors' attitudes and actions (Rizo-Martínez 2018). Analysing these factors allows for understanding the paradoxical Stockholm Syndrome, represented by a tension between two opposites emotions, love and hate. This overarching paradox manifests as three tensions, which we present next.

2.3 Tensions in Stockholm Syndrome

Closeness–Distance: The tension between closeness and distance depicts the tension of **emotions** between captors and victims. Relationship science shows that *physical proximity* enhances feelings of emotional closeness between individuals (Estlein and Lavee 2021). When daily interactions occur between hostage victims and captors, a positive bond is likely to occur between them. The feeling of emotional closeness strengthens when personal contact endures over *significant periods of time* in a confined space (de Fabrique et al. 2007). For example, when captives are kept in the same room as their captors.

Victims' reports suggest that when captors execute *acts of violence or* taunting towards hostages, victims develop strong negative responses towards the kidnappers. This results in the perception of emotional distance (Turner 1985). The perception intensifies when hostages are allowed to *negotiate* with their captors. Hostages pretend to be cooperative and friendly to gain bargaining power. To negotiate without losing objectivity, captives need to be emotionally detached from their captors (Speckhard et al. 2005).

Kindness–Hostility: This tension refers to the victim's emotional struggles because of the opposite **behaviours** of the kidnappers. By definition, a hostage situation is characterized by fear and

uncertainty (Graham 1994). But victims who develop Stockholm Syndrome are exposed to fluctuations in captors' behaviors. Kindness is perceived when captors *avoid hurting* victims (de Fabrique et al. 2007). There is also a psychological impact where the captor's *kind gestures* overrule the impact of terror (Graham 1994).

Simultaneously, certain behaviors enhance a hostile environment. During a kidnap, there is a constant perception of *threat to survival*. Any aggressive behavior from the captors, especially during the initial stages of the kidnap, decreases the hope of survival (Graham 1994). Hostility is also enhanced by *aggressive attitudes*, like direct threats of physical, sexual, or emotional abuse (Namnyak et al. 2008).

Dependence–Resistance: This tension refers to victims' response to **power** differences, represented by dependence and resistance. Victims require *assistance and permission* from their captors to undertake any task, like eating or using the toilet (Speckhard et al. 2005), creating a strong dependence. Additionally, victims are physically and emotionally isolated from the outside world. They only access *captors' perspectives* (Graham 1994), increasing victims' dependency and captors' power.

Simultaneously, victims seek *cognitive strategies* to offer resistance and increase their hope of survival. Requesting unneeded things from the captors, keeping a mental track of hours, and rationalizing the kidnap, are examples of coping strategies (Strentz 1987). These tactics strengthen victims' perception of gaining power over the situation. Moreover, connecting with other captives fosters *in-group cohesion* (Giebels et al. 2005). Victims' alliances break the power imbalance between hostage-takers and victims.

3 Methodology

We conduct a comprehensive and systematic review of the available literature on SM use by undertaking a *scoping review* (Paré et al. 2015). A scoping review adopts an exploratory approach by summarising the scope and volume of existing literature. From a knowledge-building perspective, the scoping review method facilitates identifying research gaps and proposing a research agenda (Schryen et al. 2020).

The first step of the review is to identify available literature in leading IS journals. It involves selecting a database (Business Source Complete) and journals for the search. We aim at high-quality peer-review articles to provide a representative overview of the topic (Paré et al. 2015). Our search focus on five leading IS journals (*European Journal of Information Systems, Information Systems Research, Journal of Management Information Systems, Journal of the Association for Information Systems, and MIS Quarterly*), extending to other journals through a backward chaining technique.

The second step is to define our search string and timeframe. We define keywords and operators to access relevant literature. Our search criteria aim for articles that include the words "social media" OR "social network*" either in the Title, OR Abstract, OR Keywords. We also delimit the timeframe to papers published after 2004. As Facebook is the SM with more users worldwide (Meta Platforms, Inc. 2022), we identify the year Facebook was created as a milestone in SM research. The first publication mentioning Facebook in an IS-leading journal appeared four years later in *ISR* (Agarwal et al. 2008). After applying our search criteria and deleting duplicate articles, our sample size is composed of 370 articles. For each journal, we retrieve the PDF file and EndNote file of the references to undertake a backward-forward search later. Sample details are the following: EJIS=32 articles, ISR=102 articles, *JMIS*= 93 articles, JAIS= 39 articles; MISQ= 89 articles; backward-forward search=15 articles.

The third step is conducting the analysis. We first summarise each paper's basic information in a table, including title, year of publication, journal, and author's name. Then, we analysed each paper based on the three tensions. The analysis was undertaken by two authors, who engaged in detailed discussions at regular intervals. As this type of qualitative analysis is prone to analysis bias, the authors worked disciplined to help with objectivity in a subjective process (Schryen et al. 2020). For example, papers were classified in a table to ensure a systematic process. In addition, memo-writing techniques to record thoughts and questions were used.

4 Results

We propose the following framework after examining 370 research articles investigating SM use in the five leading IS journals. By personalizing SM, we analyse users' relation with SM as a human relationship. We then pose the question of whether SM is keeping users as hostages. Following the Stockholm Syndrome's principles, users experience a love-hate relationship due to the three tensions. The tensions explain the paradox between loving and hating SM simultaneously, leading to the development of Stockholm Syndrome. In the following, we delineate how prior research explained why users love or hate SM drawing on the tensions in the Stockholm Syndrome (see Tables 1, 2, and 3).

4.1 Social Media Tension Closeness – Distance

Research about the love pole (see Table 1) promotes users' **positive emotional responses** to using SM in diverse contexts, like online **healthcare communities**. Research shows that users are more willing to share their health experiences in an environment where they help others experiencing a similar disease (Fichman et al. 2011). Health-related social networks facilitate collaborative care and improve patients' well-being. The emotional support provided increases users' love feeling towards SM.

SM also proves to be useful in enhancing **customer satisfaction.** Customers make better-informed purchase decisions when assisted by online sellers (Chen et al. 2014). Several companies also implement SM customer support services (e.g., on Facebook). Interacting with representatives on a public and real-time basis improves the quality of customer service help (Gunarathne et al. 2017). These customer service advantages increase users' love and closeness for SM.

Other studies focusing on 'love through closeness' examine users' positive feelings after **increasing the time spent** on SM. SM offers several distractions while holding users captive, i.e., showing photos and videos. These features satisfy users' hedonic emotions, like enjoyment and curiosity (Hu et al. 2015). Hence, users increase their time and engagement on SM. The time spent varies across age, country, and occupation, based on users' self-reported information (Kwon et al. 2016). Regardless of the specific number of hours, associating pleasure with time on the platform creates feelings of closeness to SM.

Tension	Love Pole	Hate Pole
Closeness-Distance	• Emotional support in health-related social networks (Fichman et al. 2011). • SM enhances customer satisfaction (Chen et al. 2014, Gunarathne et al. 2017). • Time spent on SM relates to positive emotions (Hu et al. 2015, Kwon et al. 2016).	• SM use leads to negative emotional responses (i.e., envy, depression, stress) (Krasnova et al. 2015, Turel and Serenko 2012). • SM use fosters loneliness and isolation (Chen et al. 2014, Matook et al. 2015).

Table 1. The love-hate paradox of social media based on the closeness-distance tension

Research about the hate pole and the distance SM creates shows that SM also leads to **negative emotional responses, like envy, depression, or stress**. Users portray the most positive aspects of their life on SM, which are not a faithful representation of reality. Therefore, social comparison between users (Krasnova et al. 2015) fosters unrealistic expectations. This misperception of others leads to feelings of depression, psychological stress (Turel and Serenko 2012), or envy (Krasnova et al. 2015). These negative feelings generate emotional distance between SM and their captive users.

IS research look at the impact of SM on **loneliness and isolation.** Users adopt an observer role when they read posts or scroll through others' profiles. This passive role, known as social surveillance, fosters loneliness (Matook et al. 2015). Conversely, active behaviour also leads to feeling lonely. Posting videos or news does not increase users' social capital and support (Chen et al. 2014). By spending time uploading SM content, users isolate from the outside world. Thus, both passive and active behaviours increase loneliness. Taken together, it creates feelings of emotional distance from the SM-captors.

4.2 Social Media Tension Kindness – Hostility

Research regarding the love pole by promoting SM kindness (Table 2) looks at SM **interventions to decrease the spread of fake news**. Among SM mitigating features, we found *fake news flags* (Moravec et al. 2020), and *source ratings* (Kim et al. 2019). Despite being captive, users are positioned in the love pole towards SM due to the technology's kind behaviour.

A second factor showing kidnappers' kindness, is SM's key role in activism, enabling **social empowerment and collective action**. Users with no voice are heard, and social movements are created around shared concerns. SM provides new organizing mechanisms for collective action, which is key to societal transformation (Vaast et al. 2017). Throughout a crisis, SM acts as a reporting tool, i.e., during Thailand's flood of 2011, SM facilitated the organization of first responders (Leong et al. 2015). Users are SM captives, but they love their captors due to their kind and helpful behaviour.

Thirdly, SM is a tool that **supports users in their job process**. While SM holds users hostage, victims benefit from SM functionality in the workplace. Enterprise SM improves job outcomes by strengthening teams' performance and communication (Krancher et al. 2018). Specific professions also benefit from SM use, i.e., marketing teams promote campaigns and personalized advertisements on SM

(Vaghefi et al. 2021). These examples show SM's helpful behaviour, leading users to love SM in the workplace.

Tension	Love Pole	Hate Pole
Kindness-Hostility	• SM is kind when it intervenes to decrease fake news (Kim et al. 2019, Moravec et al. 2020). • SM enables social empowerment and collective action (Leong et al. 2015, Vaast et al. 2017). • SM supports users in their job process (Krancher et al. 2018, Vaghefi et al. 2021).	• SM distributing fake news depicts hostility (King et al. 2021, Laato et al. 2020). • Privacy invasion makes users lose trust in SM (Choi et al. 2015, Esswein et al. 2004, Gerlach et al. 2015). • SM enables cyberbullying (Lowry et al. 2016, Wright 2018). • SM is hostile by enabling AI manipulation (Riemer and Peter 2021, Ross et al. 2019).

Table 2. The love-hate paradox of social media based on the kindness-hostility tension

Research about the hate pole and SM hostility describe SM's negative behaviour regarding **fake news.** Anonymity in SM enables the dissemination of misinformation, and fake news headlines are carefully written to trigger emotional responses in readers (King et al. 2021). Information overload also facilitates unverified information sharing, like during the COVID-19 pandemic (Laato et al. 2020). SM enabling the distribution of fake news depicts hostile behaviour, which pushes users away.

Another factor depicting captors' hostility is **SM invading users' privacy.** A first risk involves users obtaining easy access to their peers' information. Peers then disseminate private information, leading to embarrassing exposure (Choi et al. 2015). A second risk relies on weak privacy settings. SM contains a massive repository of data, allowing companies to monetize personal information and exchange it (Esswein et al. 2004, Gerlach et al. 2015). Therefore, SM allowing privacy invasion represents a hostile behaviour, making users lose trust in SM.

Many studies depict how SM fosters deviant behaviours, like **cyberbullying**. The SM Cyberbullying Model (Lowry et al. 2016) examines how SM features facilitate online bullying by enabling anonymity, ubiquitous communication, and lack of monitoring. Cyberbullying affects children, teenagers, and adults, creating mental health issues like depression and anxiety (Wright 2018). As SM is perceived as a hostile environment that enables cyberbullying, captive victims have been pushed away from SM.

Lastly, IS research focuses on the role of **AI in manipulating SM users**. Bots curate and distribute information at high speed, manipulating content and communications. SM bots manipulate users' opinions in two out of three cases (Ross et al. 2019). Moreover, SM algorithms determine which content users are exposed to. By restricting information showcases, AI influences users' decisions and thoughts (Riemer and Peter 2021). SM enabling AI manipulation exemplifies how users lose trust in their captors.

4.3 Social Media Tension Dependence – Resistance

Research supporting the love pole by promoting SM dependence (Table 3) finds that users love SM because it enables **forming and strengthening interpersonal relationships.** Social interaction is a major activity in SM, increasing users' gratification (Chiu and Huang 2015). SM features facilitate relationship building through interest groups, event invitations, and chat functions. These features promote feelings of belonging, support, and affiliation (Yu et al. 2015). Hence, users develop a positive dependency on their captors because SM is a central environment to socialize.

Moreover, research shows the role of SM in **creating, accessing, and sharing information**. Like in the Stockholm Syndrome, users are victims who depend on their SM-captor for information. However, users develop positive feelings because SM provides timely and easy access to information. First, SM enables decentralized and immediate content sharing (Shi et al. 2014). Second, SM facilitates knowledge collaboration by providing a platform for user-generated content (Agarwal et al. 2008). Hence, SM accessibility allows users to satisfy their need for information, creating a positive dependency on SM.

Research about the hate pole and SM resistance notes that **SM addiction** increases hate for the technology. Excessive dependence refers to victims being overly connected, perceiving SM as central to who they are. Addiction symptoms include excessive reliance on SM, which conflicts with victims' routines and relationships (Turel and Serenko 2012). SM offers constant stimulus and reinforcements,

triggering feelings of urgency and enhancing compulsive use (Wang and Lee 2020). Users addicted to SM can gain power back by presenting resistance to their hostage-taker's compulsive dependency.

Tension	Love Pole	Hate Pole
Dependence-Resistance	• Users depend on SM to form and strengthen interpersonal relationships (Chiu and Huang 2015, Yu et al. 2015).	• Users' excessive dependency leads to SM addiction (Turel and Serenko 2012, Wang and Lee 2020).
	• SM enables information creation, access, and sharing, making users dependent (Agarwal et al. 2008, Shi et al. 2014).	• Users resist SM power by reducing or discontinuing SM use (Maier et al. 2015, Osatuyi and Turel 2020).

Table 3. The love-hate paradox of social media based on the dependence-resistance tension

Several studies focus on users who decide to **reduce or discontinue SM use.** Limiting SM use is a corrective action to combat excessive use (Maier et al. 2015). Some apps send users messages or statistics about usage habits. These notifications enhance users' awareness and desire to gain control over overuse (Osatuyi and Turel 2020). A more radical action is to discontinue SM use, resisting SM's power. Discontinuing decisions can be fostered by guilt, stress, or social overload exhaustion (Maier et al. 2015). Users' aversive feelings encourage them to take action to resist their hostage taker's power.

5 Future Research Topics

The findings of our literature review provide insights into areas for future research on SM because of (1) gaps in the current body of SM research, and (2) suggested extensions by authors on existing topics. The topics are framed in the three SM Stockholm Syndrome tensions while focusing on three levels of action. The first action area refers to *technology*, including AI and controlled technology. The second action area comprises *institutions*, like industries, organizations, and society in general. The third area includes research on *humans*, conceptualized as individuals or crowds. Figure 1 shows the topics.

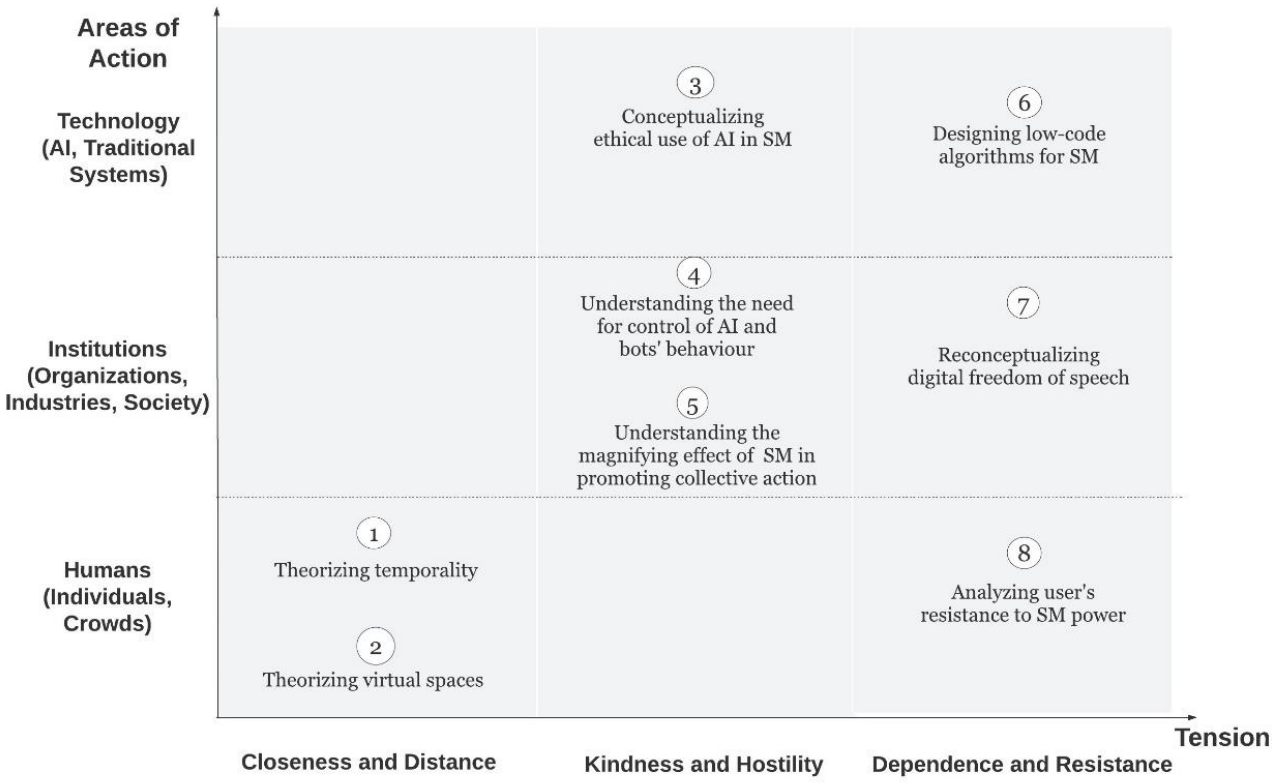

Figure 1: Topics for future research based on SM Stockholm Syndrome tensions

5.1 Topics related to the Tension of Closeness – Distance

5.1.1 Topic #1: Theorizing Temporality

The Stockholm Syndrome posits that shared time is a critical factor in developing a love-hate relationship. We propose research to deeply theorize temporality as a factor for SM use. Indeed, current research only draws on a simplistic lens of frequency of use to conclude how much time users spend on SM (Kwon et al. 2016). We suggest research to examine how SM's evolving features impact temporality and the perception of long-term and short-term behaviour. SM was used to share experiences that remain permanently in users' profiles. Nonetheless, SM now promotes sharing pictures and videos in the form of stories (i.e., Instagram, Facebook, Snapchat), which disappear after 24 hours. These new features impact users' notion of constant vs. variable time and the meaning of long-term vs. short-term.

5.1.2 Topic #2: Theorizing Virtual Spaces

The Stockholm Syndrome posits that shared spaces aid in the love-hate relationship. We highlight prior research examining how SM features make users feel closer to the technology. The literature shows that SM evokes interaction and provides users with emotional support, increasing users' positive feelings towards the technology (Hu et al. 2015). However, we identify a research gap regarding immersing in the virtual space. Many SM platforms (i.e., Meta, Second Life) propose not only connecting but also immersing in the virtual world of SM. The metaverse includes SM avatars that enable users to develop a virtual life parallel to the physical world. In this context, researchers may investigate the changing role and features of SM as an immersive virtual environment. How will the metaverse's virtual space impact users' love-hate duality? Does immersive SM make users feel close or distant from the technology?

5.2 Topics related to the Tension of Kindness – Hostility

5.2.1 Topic #3: Conceptualizing Ethical Use of Artificial Intelligence in SM

The Stockholm Syndrome depicts hostage takers' contradictory behaviour of being simultaneously kind and hostile to victims. This paper reviews research on AI manipulation in SM (Riemer and Peter 2021, Ross et al. 2019). Nonetheless, there is a research gap regarding technology's kindness when applying AI ethically. Ethical use refers to applying AI to ensure it does not harm SM users. Research may examine the positive applications of AI to counteract hostile behaviour. For example, how the use of AI to detect data privacy threats in companies can be extended to individual users to protect their SM private data. Additionally, how to apply bots' ability to widespread massive amounts of information for altruistic purposes instead of using them to manipulate political content.

5.2.2 Topic #4: Understanding the Need for Control of AI and Bots' Behaviour

The Stockholm Syndrome explains that victims fight back against the hostile behaviours of the hostage taker. In the context of SM, policies and intervention measures are tools used to battle the negative consequences of AI manipulation (Riemer and Peter 2021). However, we identify a lack of research about legislation applied to AI's harmful actions. It is challenging for governments to keep pace with AI's fast-growing development. Current laws penalize individual users, but there are few efforts to control AI and bots' harmful behaviour. Researchers need to examine the limited existing policies from different countries, as well as new ways to determine ways to penalize AI and bots' actions. Research in this area will assist policymakers in creating and updating legislation to control AI's hostile behaviour.

5.2.3 Topic #5: Understanding the Magnifying Effect of SM in Promoting Collective Action

As described in the Stockholm Syndrome, captors' kind gestures during a kidnap contribute to the victims' love-hate duality. Comparably, existing research shows SM kindness by highlighting its role in promoting social empowerment. However, there is a research gap in the magnifying effect SM can have in promoting collective action. The concept of SM firestorms shows the harmful effect of SM. Word-of-mouth in the digital space can multiply adverse effects, destroying companies' brands or people's trust. Some research shows that SM firestorm comments are supportive of the victim (Matook et al. 2022). Thus, we ask if it is possible to determine what aspects of SM support positive firestorms. The research may focus on theorizing SM affordances relevant to firestorms to foster collective actions.

5.3 Topics related to the Tension of Dependence – Resistance

5.3.1 Topic #6: Designing Low-code Algorithms for SM

The Stockholm Syndrome highlights how victims depend on their captors to access information and the strategies victims apply to break the power imbalance. Current research on SM supports the same dynamic between users and SM (Riemer and Peter 2021, Shi et al. 2014). However, this paper identifies a research gap regarding SM users' potential to design low-code algorithms (Matook et al., 2021). This opportunity aims to help users resist and gain power back over the content they access in SM. Designing low-code platforms enables non-IT experts to develop their own apps and algorithms, reducing the manipulating powers of SM platform operators. Researchers may examine how to design low-code algorithmic artifacts (Schlieter al., 2019).

5.3.2 Topic #7: Reconceptualizing Digital Freedom of Speech

The Stockholm Syndrome explains that victims only access their captor's views and information. Similarly, SM users depend on SM to access and share information. SM platforms support freedom of speech, and prior research showed the benefits of SM information accessibility and distribution (Shi et al. 2014). Nevertheless, expressions of freedom of speech on SM (hate speech, calls for violence, bullying) resulted in physical and emotional harm. In the name of "free speech", SM platforms distribute user content, even that which is defamatory, hostile, and harmful. Hence, we propose to reconceptualize 'freedom of speech' in virtual environments to define a new concept of 'digital freedom of speech'. The ubiquitous nature of SM means a reach in a users personal life and SM platforms need to set stricter limits to content and its distribution, to prevent harm done in the name of free speech.

5.3.3 Topic #8: Analysing User's Resistance to SM Power

As described in the Stockholm Syndrome, victims develop strategies to resist their captor's power. In the context of SM, research shows that users resist modern technologies, such as AI robots and SM by either temporally or permanently disconnecting (Maier et al. 2015, Osatuyi and Turel 2020, Wang et al. 2021). SM hostility and the hate they create should be reasons for users to leave SM; a means to stop using it. However, more research is required to analyse why users do not stop using it or relapse after deciding to quit. Researchers can focus on how the love-hate duality contributes to other resistance dualities, like *discontinuing intention-discontinuing behaviour* or *discontinuing use-relapsing use*. Analysing users' resistance is key to understand our proposed research topic on how to best restart SM.

6 Conclusion

Prior research suggests that people simultaneously love and hate SM, even leading companies to adopt SM without rationally justifiable needs of the firm (Krell et al. 2011). We find that the risks and disadvantages of SM use are not strong enough to motivate every user to discontinue using the social technology. Drawing on the Stockholm Syndrome research framework, we contemplate that SM is holding users hostage by creating a duality of love and hate.

If users continue to "*love SM in hate and hate it in love*", then researchers have the responsibility to lead the way in researching the technology further. We must engage in explaining and predicting motivation and goals, dynamic effects, and implications in the three areas of technology, institutions, and humans. Findings of our future research guide practitioners and policymakers on how to best 'restart SM'. Our future research will expand the journal scope in the review, for example, *Information Systems Journal*, but also domain-specific outlets such as *The Journal of Social Media in Society*.

It was a surprising finding that research about the hate pole had received overproportioned attention. We support scholars in their pursuit to understand the risks and harm of SM. However, users tell scholars that there is love for the technology, and less research critically examined love for SM. Maybe Elon Musk was thinking about this when he posted on Twitter, "*Let's have less hate and more love.*"[1]

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Acknowledgements

Sabine Matook benefited from support from the Australian Research Council (DP160100431). While undertaking this research, Nadia Bello Rinaudo was supported by a University of Queensland Research Training Tuition Fee Offset and a University of Queensland Research Training Stipend Earmarked. The authors also wish to acknowledge the reviewers for their valuable suggestions and insightful comments, which helped to improve this manuscript.