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Abstract

This paper aims to examine the role of empathy in social media. With the increasing

prevalence of online connections and engagement, understanding the motivations behind

responses and interactions remains increasingly important for tracking trends on social media.

Utilizing an interdisciplinary framework that integrates psychological theories, sociological

viewpoints, and knowledge from the digital communication domain, this study aims to provide

valuable insights into the profound impact of empathy within the sphere of social media such as

how displays of empathy in online interactions can affect user engagement and participation. By

addressing this question of empathy in the role of social media, we aim to provide a

comprehensive understanding of the complex interplay between empathy and social media and

reveal its potential implications on emotional state and well-being.

Keywords: Social Media, Empathy, Online communication, Technology, Relationships

2

Contents

Introduction	4
Literature Review	6
Analysis	24
Ethical Implications	32
Policy Recommendations	34
Summary	35
References	40

Introduction

Living in what is now known as the digital age, social media platforms have become prevalent and continue to influence the way we communicate and connect with others daily. There are many forms of social media and within these spaces, there is an opportunity for social interaction, self-expression, and the exchange of ideas. When considering the impact of social media on relationship formation, communication, and information consumption, it is crucial to explore how these avenues might influence relationships and the capacity for empathy and understanding in these realms. Can the way we perceive one another be altered when information is presented through text rather than being heard or seen? When examining social media, empathy may play a role in the context of online interactions, emotional experiences, engagement, and overall emotional well-being.

In the field of cognitive science and philosophy, the study of empathy has gained significant attention due to its crucial role in social interactions, understanding others, and forming meaningful connections (Zahavi, 2008). Traditionally, empathy has been cultivated in many different learned experiences through face-to-face interactions, allowing the interpretations of emotions through body language, facial expressions, and vocal tones. With the ever-increasing use of social media, there has been a new way to look at interpersonal communication and express our needs, concerns, and feelings (McKenna et al., 2002). Understanding how empathy manifests itself is vital for tracking trends and discerning how social media platforms influence emotional experiences and psychological well-being. Through e-mail, chat rooms, instant messaging, newsgroups, and other means, people are sharing aspects of their daily lives, talking about interests with like-minded others, and staying connected with family and friends. Social interaction has become the primary use of home computers (e.g., Moore, 2000).

In today's digital world, social media has surfaced as a powerful tool that influences various aspects of society, including education. Higher education institutions are increasingly recognizing the need to address the impact of social media on campus life, student engagement, and academic discourse. Social media holds significant importance for college students for several reasons such as communication and networking, community building, awareness, activism, and receiving feedback and support by seeking advice and asking questions.

When it comes to exploring the challenges and potential benefits of empathy within the digital domain, a fundamental question arises: "What factors contribute to empathy about social media use among college students?" Examining subjects like cyberbullying and the magnification of negative emotions underscores the necessity of investigating ways to nurture empathy in the realm of social media. Understanding these findings could influence colleges' and universities' social media policies.

This paper aims to delve into the multifaceted dynamics of empathy within relationships, exploring its interconnectedness with attachment. It will venture into the realm of online relationships, dissecting their evolution and the associated communication patterns while dissecting the impact of social media on empathetic engagement, encompassing its potential benefits and consequences. This paper will examine various strategies for fostering empathy within the context of social media.

Literature Review

The Role of Empathy in Relationships

Empathy can be defined as the capacity to share and understand the emotional states of others (Kanske et al., 2015). When considering the concept of interpersonal relationships and how they translate to the online realm, some multiple similarities and distinctions emerge in terms of how these connections may change and interact within the online community, particularly concerning empathy. Exploring online relationships requires an understanding of how empathy plays a role whether online or face-to-face.

The study of empathy has gained significant attention due to its crucial role in social interactions, understanding others, and forming meaningful connections. Zahavi (2008) presents an analysis of empathy, focusing on two prominent theories: simulation theory and projection theory. Simulation theory submits that individuals understand and empathize with others by internally simulating or mirroring their experiences. On the other hand, the projection theory suggests that individuals project their mental states onto others, this theory assumes that others share similar experiences. These two theories offer a third perspective that highlights the limitations of both simulation and projection. This study acknowledges that simulation plays a crucial role in empathizing with others, as it allows individuals to mentally simulate the experiences of others, individuals project their mental states onto others if others share similar experiences.

When looking at critiquing both simulation and projection theories, Zahavi proposes a theoretical framework that emphasizes the role of pre-reflective self-awareness in empathy. He introduces the notion of "minimal self," which represents the most basic level of self-awareness that precedes any explicit self-identification or self-consciousness. Zahavi argues that empathy

requires a fundamental self-other differentiation that enables individuals to transcend the limitations of simulation and projection. This differentiation allows individuals to grasp the experiential perspective of others, even when their experiences differ from their own. There are basic levels of interpersonal understanding, in particular the understanding of emotional expressions that are not explicable in terms of simulation-plus-projection routines (Zahavi, 2008).

Using Zahavi's research there can be questions on the necessity of how physicality may or may not impact relationships when it comes to comprehending perspectives that are different from one's own. Absent the physical aspect, one might ask "How might online relationships or interactions potentially influence one's connections with others?" When it comes to physical cues, such as facial expressions, body language, and gestures, there is a crucial role that physicality plays in conveying emotions and intentions. The concept of minimal self implies an intention for self-awareness through perspective-taking, suggesting that the act of reading, viewing, and experiencing online relationships may not significantly influence empathy. When examining the quality and depth of human connections this invites us to consider whether digital communication may strengthen or weaken the bonds we share with individuals and how these interactions might alter the way we perceive and relate to others in the offline world. Physical proximity may facilitate the activation of mirror neurons, making it easier for people to "mirror" the emotions and experiences of those around them, leading to increased empathy. If empathy exists under Zahani's idea of minimal self without physicality, then there may be a question of the quality of relationships and empathy received online.

McKenna, Green, and Gleason (2002) examine quality in relationships when exploring the phenomenon of online relationship factors and what contributes to its appeal. The authors

emphasize the growing popularity of the internet as a medium for relationship formation and argue that individuals are drawn to online relationships due to several factors, including reduced social anxiety, increased control over self-presentation, and the ability to form connections with people from diverse backgrounds. This study works through multiple positive and challenging aspects of online relationships. There is a unique structure of the Internet that allows individuals to easily find others who share specialized interests. In contrast, it may be hard to find others who share one's interests in one's local area, and when people get to know one another traditionally, it takes time to establish whether they have commonalities and to what extent. The availability of meeting so many people allows the members to move quickly forward to find out what other key interests they might share and may provide a head start to relationships.

The implications of the several distinct qualities for relationship formation were addressed in this study. The research states that relationships will develop closeness and intimacy significantly faster over the internet than relationships begun offline, because of the greater ease of self-disclosure, as well as the founding of the relationship on more substantive bases, such as shared interests. This study examines the aspects of social interaction and intimacy with online relationships and argues that while the Internet can facilitate initial relationship formation, it may present challenges in establishing and maintaining long-term intimacy due to the deception and lack of nonverbal cues as well as its ability to form connections at an increased rate. These insights contribute to the ongoing discourse on the effects of digital communication on social dynamics (McKenna et al., 2002).

There are multiple perspectives on how the average individual develops relationships, but one constant factor is the essential requirement of empathy and understanding for these connections to form. Whether someone is connecting at an increased rate or slowly over time

there is continually a need for understanding and connection. Attachment theories posit that people's internal working models of past and present relationships guide behavior in attachment-related situations. Because the ability to provide a secure base for others is at least partially dependent on the ability to recognize their needs, individuals with secure attachments should be more likely to be empathic than individuals with insecure attachments (Britton & Fuendeling, 2005). To understand the overarching idea of relationships and online empathy, it's essential to possess a comprehensive understanding of how attachment and relationships interact with empathetic responses.

Development of Relationships

When examining how social interactions in relationships might relate to empathy, the theory of attachment is one way to look at empathetic responses. Britton and Fuendeling (2005) examine the relationship between different varieties of adult attachment and the components of empathy. The authors argue that adult attachment styles, rooted in early attachment experiences, may influence an individual's ability to empathize with others. Their study reviewed Attachment theory, proposed by Bowlby (Bowlby, 1969, as cited by Britton & Fuendeling, 2005) which suggests that early interactions between infants and their primary caregivers shape the development of internal working models of relationships. These working models subsequently influence individuals' behaviors and emotional responses in adult relationships.

Empathy is a multidimensional construct involving cognitive and affective components. Cognitive empathy refers to the ability to understand and accurately perceive others' thoughts and feelings, while affective empathy involves the capacity to share and resonate with others' emotional experiences. In this study, the importance of both components of cognitive and affective empathy was examined along with how these components play crucial roles in

interpersonal functioning, social relationships, and prosocial behaviors. This found that when examining Attachment theory, individuals with secure attachment styles are more likely to develop empathetic skills due to their positive early experiences with responsive and sensitive caregiving. In contrast, insecurely attached individuals may struggle with empathy due to unresolved attachment-related issues or lack of emotional availability (Britton & Fuendeling, 2005).

The significance of empathy is evident in social interactions, moral reasoning, and prosocial behavior. Each of these emotional, motivational, and cognitive facets of empathy depends on specific mechanisms that mirror the evolved abilities of humans and their ancestors to detect and respond to social signals vital for survival, reproduction, and maintaining well-being. There is an importance to empathy in development due to it being considered the emotional processing and guide for behavior. Empathy has been associated with various positive outcomes, such as increased cooperation, altruism, and the formation of meaningful social bonds. Research has also explored the potential benefits of empathy training programs in enhancing interpersonal relationships and reducing aggression. She expresses the importance of how empathetic reactions emerge early in life (Decety, 2015).

Development of Online Relationships

Forming connections on the internet has transformed the way connections and attachments are viewed and established in the digital age. In a world where geographical distances are no longer barriers to human interaction, the internet has become a powerful tool for fostering emotional bonds. These digital connections often begin with shared interests or common experiences, gradually evolving into meaningful relationships.

Manago et al. (2012) investigated the Facebook networks of college students, focusing on their size, composition, and characteristics. This study also examined the association between the structure of these networks, communication patterns, and individuals' well-being. Data was collected through online surveys from a sample of 384 undergraduate students, encompassing both males and females using a quantitative approach to collect and analyze data. The participants completed an online survey that consisted of questions regarding their Facebook usage, network size, composition, communication patterns, and well-being indicators.

There were several key findings such as the average network size of college students on Facebook was approximately 400 friends, with a considerable variation. Females tended to have larger networks than males, and students' networks primarily consisted of individuals from their college or university. There were two distinct communication patterns observed among college students. The first pattern involved maintaining larger numbers of weak ties, characterized by infrequent interactions. The second pattern included maintaining smaller numbers of strong ties, characterized by more frequent and intimate interactions. The study revealed that individuals with larger networks tended to exhibit more weak ties, while those with smaller networks tended to have more strong ties. This study also explored the association between individuals' Facebook networks and their well-being. The findings indicated that students with larger networks experienced higher levels of stress, while those with smaller networks reported higher levels of perceived social support and subjective well-being.

When looking at the study of Manago et al. it is clear that forming meaningful online relationships is not just about superficial interactions but involves deeper elements like trust and communication. Those students who felt less stress and reported meaningful relationships found more connection with their networks. When delving into the intricacies of relationships there is

a need for trust. Empathy is a critical underpinning of both trust and communication, as it allows individuals to connect on a more profound and genuine level, fostering more authentic and fulfilling online relationships (Manago et al., 2012).

JinJuan, et al. (2004) proposed that empathy plays a crucial role in developing trust in face-to-face interactions and suggest that the same principle applies to online environments. Through a series of experiments and surveys, this study reveals a nuanced relationship between empathy and online interpersonal trust. Findings from this study show that although empathy positively influences trust formation online, it is highly susceptible to contextual factors, technology-mediated communication limitations, and individual differences. The study further demonstrates that empathy's impact on trust is more pronounced when individuals perceive higher levels of interpersonal risk. To examine the relationship between empathy and online trust, the study involved participants engaging in hypothetical online scenarios, followed by a survey-based investigation using real-world online communication scenarios. The study explored the understanding of empathy and trust with the incorporation of social psychology theories. This study found that empathy influences initial trust: Participants in the high-empathy condition displayed significantly higher levels of initial trust compared to those in the low-empathy condition (JinJuan et al., 2004).

By highlighting the importance of empathy, the study emphasizes the need for online platforms and technologies to facilitate empathic communication, thereby enhancing the trust-building processes. These findings promote the importance of empathy in social networking platforms and how there is a fragility of online trust showing the need for genuine relationships in the digital realm.

Features of Social Media and The Influence of Empathetic Engagement

Potential Benefit

Online relationships possibly have potential benefits such as fostering meaningful connections and supporting emotional well-being in virtual spaces. Enhancing empathy in these online relationships may facilitate lasting connections and strengthen ongoing bonds.

Abdul-Mageed et al. (2017) investigate the potential for social media platforms to serve as valuable sources of information for understanding and predicting empathic responses associated with various mental health disorders. In this study, the focus relied on pathogenic empathy, which was referred to as empathic responses that may exacerbate psychological distress or promote negative behaviors. The study used a large dataset from Twitter and machine learning techniques to identify pathogenic empathy expressions related to self-harm, eating disorders, and depression.

The findings revealed that pathogenic empathy expressions were prevalent in the collected Twitter dataset related to self-harm, eating disorders, and depression. This suggests that social media platforms may serve as a potential source for understanding and monitoring mental health issues. The study also identified specific indicators associated with empathetic expressions. This is expressed as personal pronouns, negative emotions, and explicit descriptions of self-harming behaviors were found to be significant in predicting empathy. In essence, instances where individuals employed personal pronouns, conveyed negative emotions, or provided explicit details about self-harm were found to be notable markers indicative of empathetic engagement. This study examined the detection of empathy and its expressions in social media and determined that this may contribute to possibly aiding in early identification and intervention for individuals at risk of mental health disorders. By identifying linguistic markers associated with

empathy, there may be insights into the language patterns used in online communities where empathic responses may be harmful or detrimental to mental health (Abdul-Mageed et al., 2017).

Given the opportunities to connect with like-minded individuals online, there exists a potential for people to discover much-needed support to find others who share similar struggles, challenges, or experiences such as conditions of mental health, substance abuse, and connections to others offering hope and assistance to those who need it.

There have been a few studies that have looked at how social media has been used for positive growth and the need for increased awareness of how positive speech as well as positive regard for others can be influenced by social media. Hangartner et al. examine the effectiveness of empathy-based counterspeech in reducing racist hate speech on social media platforms. The study employs a rigorous field experiment approach to investigate the impact of different types of counter-speech interventions on online behavior. This study was conducted by using a field experiment on a social media platform to test the efficacy of empathy-based counter-speech in reducing racist hate speech. Participants were randomly assigned to one of three conditions: control, empathy-based counter-speech, or non-empathy-based counter-speech. Empathy-based counter-speech involved responding to racist comments with compassionate and understanding messages, while non-empathy-based counter-speech employed confrontational and argumentative replies.

The study found that empathy-based counter-speech led to a significant reduction in racist hate speech compared to both the control group and the non-empathy-based counter-speech group. Moreover, the positive effect of empathy-based counter-speech persisted even after the intervention had ended. The results indicate that promoting empathy and understanding through online interactions can effectively counteract the spread of racist hate speech. This

study looked at this data from a practical standpoint as to how this study may offer valuable insights for policymakers, social media platforms, and individuals concerned with combatting hate speech. There was an expectation of encouraging users to respond empathetically to hate speech rather than engaging in confrontational exchanges may lead to more productive conversations and a reduction in the prevalence of hate speech. The findings also emphasize the importance of promoting digital literacy and educating individuals about the potential impact of their online behavior. This study provided compelling evidence that empathy-based counterspeech can effectively reduce racist hate speech on social media platforms (Hangartner et al., 2021).

Blakemore and Agllias (2020) study the multifaceted ways in which social media usage influences students' empathetic understanding and interpersonal competencies. This study sheds light on the potential benefits of social media in facilitating empathetic connections and expanding students' cultural competence. Additionally, the study highlights the challenges posed by social media, such as the blurring of professional boundaries and the need for digital etiquette and professionalism. By examining students' perspectives, this study discovers the need for a balanced approach that harnesses the advantages of social media while addressing its inherent risks (Blakemore and Agllias, 2020).

There are negative stigmas towards social media addiction, cyberbullying, and a lack of inperson social interaction. The basic question for empathy comes down to, whether there are any
possible positive effects to social media and cultivating empathy through these forums. Vossen
and Valkenburg (2016) research on fostering social media and empathy points out that the advent
and widespread use of social media platforms have transformed the way adolescents interact and

communicate with one another causing concerns regarding the potential impact of social media on various aspects of adolescents' development, including empathy.

Vossen and Valkenburg's longitudinal study investigated the relationship between social media usage and adolescents' empathy over time. The study involved a sample of 1,292 Dutch adolescents aged between 13 and 15 years. Data was collected through self-report questionnaires at two different time points, with a one-year interval between them. The questionnaires assessed social media use and empathy levels, considering both affective empathy (emotional understanding) and cognitive empathy (perspective-taking). The results revealed that there were mixed effects of social media on adolescents' empathy. A positive association was found between social media use and cognitive empathy, suggesting that engaging in social media activities might enhance perspective-taking abilities among adolescents. However, the study also found a negative relationship between social media use and affective empathy, indicating a potential reduction in emotional understanding among adolescents who frequently use social media.

The impact of social media on empathy can be interpreted in several ways. There is a positive association between social media use and cognitive empathy that could be explained by the exposure to diverse perspectives and experiences facilitated by online interactions. This has also caused adolescents to possibly engage in more perspective-taking behavior by encountering different opinions and worldviews on social media platforms. On the other hand, the negative relationship between social media use and affective empathy suggests that excessive exposure to social media might hinder the development of emotional understanding. This could be attributed to the superficial nature of online interactions, which often lack the nonverbal cues and emotional depth present in face-to-face interactions. The constant exposure to curated and

idealized representations of others' lives on social media may lead to social comparison and decreased sensitivity toward others' emotions. These theories on how an increased amount of social media and a lack the nonverbal cues and emotional depth present in face-to-face interactions may potentially reduce emotional understanding among adolescents. This may be linked to the potential decrease in empathy leading to hate and bullying online. (Vossen & Valkenburg, 2016).

Potential Consequences

When considering the potential outcomes of reduced empathy in the digital domain, several concerns arise, including cyberbullying and the magnification of negative emotions, which may have detrimental effects on individuals as a whole. The lack of face-to-face communication in the digital realm can lead to misunderstandings, increased conflicts, and a diminished sense of connection. The constant exposure to negative content and the prevalence of online negative speech may contribute to the normalization of harmful behaviors and attitudes, decreasing empathy and compassion in online interactions.

Slonje and Smith (2008) investigate the themes of Cyberbullying and analyze the overlap between cyberbullying and traditional bullying, emphasizing that both forms of aggression share commonalities in terms of their underlying psychological and behavioral processes. The study surveyed 360 students between the ages of 12 and 20 in Sweden examined the nature of cyberbullying acts and came up with four categories, i.e., text message, email, phone call, and picture/video clip. This study found that cyberbullying tends to occur in the absence of face-to-face interaction, providing a sense of anonymity and reduced accountability for the perpetrator. Individuals involved in traditional bullying are more likely to engage in cyberbullying, which suggests an overlap in the underlying motivations in the behavioral patterns. However,

cyberbullying presents some unique characteristics, such as the potential for wider audience reach and the permanence of online content. Being a victim of cyberbullying in school was less, 5.3% at least once or twice, 2.8% more often; but is never less an appreciable fraction of overall school bullying. The most common type of bullying in the results was email victimization, but all four types were experienced by several pupils.

The survey found that gender differences in cyberbullying are few, the impacts are perceived as highly negative with picture/video being the most significant, and the victims most often chose to either tell their friends or none at all so adult awareness on cyberbullying among students is low. There were a few significant gender differences in this study as well. However, they found that girls were more likely to be email victims of cyberbullying (compared to those being bullied over text messages and/or phone calls). It was also found that the trend for boys was to be involved in cyberbullying, and as a male victim, text message bullying was significant. When victims reported on who had cyber-bullied them, if this was known (often it was not), boys were much more often referred to than girls. This study found that negative consequences of cyberbullying on victims include emotional distress, lowered self-esteem, increased loneliness, and academic difficulties. These consequences are similar to those experienced by victims of traditional bullying, albeit with some unique aspects associated with the online environment. (Slonje & Smith, 2008).

With cyberbullying, a lack of empathy is shown in those who mean to harm one another without fear of being outcasted or fear of not maintaining social norms. The study by Slonje and Smith is a great example of how bullying in any form may cause long-lasting effects however cyberbullying due to its overall ability to harm has severe consequences.

Hamuddin et al. delve into the motives behind cyberbullying behaviors among university students. The focus of this study remained on understanding the underlying motives behind cyberbullying behaviors among university students and examined various motives that drive individuals to engage in cyberbullying, particularly targeting friends or acquaintances. Several areas were studied; the desire for power and control, the need for retaliation and/or revenge, the act of amusement and entertainment, peer pressure and conformity, and then emotional disinhibition. Hamuddin et al. found that there was a significant motive behind cyberbullying among university students is the desire for power and control over others. The study found that cyberbullies may exploit their relationships with friends to establish dominance or exert their influence over them. Another area they found involved a response to perceived wrongdoings or conflicts between individuals and this being a way to retaliate against the individual. This study found that cyberbullies may resort to online aggression as a means to get back at their friends or acquaintances.

The study highlighted the act of seeking amusement and entertainment as a factor. The authors found that some individuals may engage in online aggression for their enjoyment, often not considering the harmful consequences it may have on their friends. The article also found that peer pressure and a need to conform to social norms can influence individuals to participate in cyberbullying activities, even against their friends. Fear of exclusion or a desire to fit in can lead individuals to engage in harmful online behaviors. Lastly, the authors revealed that emotional disinhibition plays a significant role in cyberbullying. When individuals are not face-to-face with their friends, they may feel a reduced sense of empathy and accountability, leading to the expression of aggressive and hurtful behavior online. This study reveals that understanding the motives behind cyberbullying may inform the development of prevention and

intervention strategies to decrease the overall targeted individuals. Fostering a culture of empathy, respect, and digital citizenship may help mitigate cyberbullying incidents. (Hamuddin et al., 2022).

When examining the elements that contribute to online aggression and the pleasure derived from it, it becomes evident that individuals engaged in such behavior often lack empathy. In the realm of virtual interactions, empathy is the ability to understand and share the feelings of others, and the absence of this leaves only an increase in aggressive behavior and a decrease in positive connections. A disconnection from empathy highlights the ongoing examination of online behavior, emphasizing the importance of addressing empathy deficits in the context of digital interactions.

Whittaker and Kowalski (2015) researched the rapid growth and widespread use of social media platforms and the effects of Cyberbullying. The prevalence, characteristics, and impacts of cyberbullying within the context of social media platforms were examined and the study found that social media was a prevalent medium for cyberbullying, with a majority of participants reporting exposure to cyberbullying incidents. This study identified various types of cyberbullying, including harassment, impersonation, exclusion, and spreading rumors or gossip. The findings also indicated that cyberbullying through social media had detrimental effects on victims, leading to emotional distress, decreased self-esteem, and school-related difficulties. This study found that schools and parents would benefit from prioritizing educating adolescents about responsible online behavior and providing support for victims. The development of effective interventions should consider the unique features of social media platforms and target both individual-level factors (e.g., empathy development, digital literacy) and systemic factors (e.g., platform policies, reporting mechanisms) to address cyberbullying effectively. By

recognizing the potential negative impact of cyberbullying on victims' well-being and the influential role of social media, society needs to take steps toward creating a safer online environment for all users (Whittaker & Kowalski, 2015).

Cyberbullying is one negative effect of social media. Another area that has been studied is the area of social media addiction, which has raised concerns about its impact on mental health and overall well-being. When examining social media and the multiple influences that having such forums at your fingertips regularly there is a need to examine how social media addiction can affect empathy. Social media addiction has emerged as a significant concern in recent years due to its widespread use among adolescents and its potential impact on mental health and wellbeing. There have been studies pointing out the negative consequences associated with excessive use of social media, including reduced attention span, increased loneliness, anxiety, depression, and impaired interpersonal relationships. Dalvi-Esfahani et al. research suggests a negative correlation between social media addiction and empathy, implying that excessive engagement with social media platforms may hinder the development and expression of empathic abilities. This study also dives into the moderating influence of personality traits on the relationship between social media addiction and empathy. Personality traits such as extraversion, neuroticism, openness, agreeableness, and conscientiousness have been studied extensively in the context of social media use and its consequences and it has been found that personality traits are believed to interact with social media addiction, shaping individuals' responses and outcomes. This study highlights the importance of considering individual differences when examining the impact of social media on psychological well-being (Dalvi-Esfahani et al., 2021).

Akram and Kumar (2017) highlight the potential positive effects of social media, such as enhanced connectivity, information sharing, and collaborative opportunities while

acknowledging the negative consequences, including privacy concerns, cyberbullying, and addiction. The article outlines several positive effects of social media on society. Firstly, social media platforms enable individuals to connect and communicate with friends, family, and colleagues from diverse geographical locations, enhancing social connectivity. Secondly, social media offers a platform for information sharing, allowing users to access news, knowledge, and resources rapidly. This facilitates learning, awareness, and empowerment. Additionally, social media platforms foster collaborative opportunities by facilitating group discussions, crowd-sourcing, and collective problem-solving.

In contrast, there were several negative effects found. Firstly, privacy concerns arise due to the extensive sharing of personal information, which can lead to identity theft and unauthorized access. Secondly, cyberbullying and online harassment have become prevalent, causing psychological distress, anxiety, and depression among victims. Social media can contribute to addiction and excessive usage, leading to reduced productivity and social isolation (Akram & Kumar, 2017).

This literature examining the consequences of social media highlights troubling issues such as cyberbullying, addiction, and harassment, which seem to be linked to a lack of empathy. Cyberbullying, involving the use of electronic communication for intimidation, can lead to emotional distress among victims, with perpetrators often failing to grasp the real emotional impact of their actions. Additionally, social media addiction can cause individuals to prioritize online interactions over face-to-face relationships, potentially diminishing their ability to empathize with others. These challenges show the complex relationship between social media use and empathy. With these negative uses of social media, there may be potential ways of cultivating empathy in social media.

Potential avenues for cultivating empathy in social media

When exploring the impact of social media on empathy, there are several strategies for cultivating empathy within the digital realm. These include nurturing meaningful online connections, encouraging the sharing of empathetic content, and creating digital environments that promote open dialogue and understanding. When addressing perceptions in society of empathy, there are numerous approaches to consider for improving the negative aspects mentioned previously in this literature review.

Having a similar experience to someone in need might affect empathic accuracy, empathic concern, and perceived empathy. Hodges et al. conducted a series of experiments to investigate the impact of shared experiences on empathy. They hypothesized that individuals who had undergone a similar experience as another person would exhibit higher levels of empathic accuracy, empathic concern, and perceived empathy towards that person. The researchers recruited participants and manipulated their experiences to create a condition of shared experience. In one experiment, a group of participants were led to believe that they shared a particular personal experience (e.g., a challenging academic task) with someone who needed assistance. The researchers found that participants in the shared experience condition demonstrated greater empathic accuracy, as measured by their ability to accurately assess the person's needs, thoughts, and feelings. In another experiment, the authors investigated the effect of shared experience on empathic concern, which they defined as the emotional response to another person's distress. Participants who believed they shared a personal experience with another reported higher levels of empathic concern compared to those in the control condition, suggesting that shared experiences enhance emotional empathy.

The study also investigated perceived empathy or the perception of one's empathic abilities. Participants in the shared experience condition rated themselves as more empathic compared to those in the control condition. This finding indicates that shared experiences may influence individuals' self-perceptions of their empathic capacities. This study showed that shared experiences may increase the salience of one's own emotions and cognitions related to the experience, leading to a stronger emotional connection and a better understanding of the other person's perspective (Hodges et al., 2010).

Analysis

When fostering empathetic interactions on social media platforms, establishing meaningful connections plays a pivotal role. Employing positive language and sharing relatable experiences can significantly enhance the development of empathy in online interactions.

Building connections with others, using words that promote positivity, and sharing personal anecdotes can all contribute to a more empathetic online environment. Empathy on social media is about building connections, using language that uplifts, sharing experiences, actively listening, and respecting diverse perspectives. By practicing these elements, individuals can contribute to a more empathetic and supportive online community where people feel heard, understood, and valued. Exploring the significance of empathy is a discovery of connection to the concept of attachment and its influence across various types of relationships. Empathy, as a complex and multifaceted emotional and cognitive capacity, exerts a significant impact on the dynamics and quality of interpersonal connections. By looking deeper into the connection between empathy and attachment, we can gain valuable insights into emotional connections, enriching an understanding of how empathy plays a vital role in relationships.

The development of online relationships shares similarities with traditional face-to-face connections. In both contexts, effective communication plays a pivotal role, serving as the foundation upon which bonds are built. Online and offline relationships thrive when there is a sense of like-mindedness between individuals. Just as in face-to-face interactions, finding common interests, values, and goals can be a catalyst for deepening connections in the digital realm. While the medium may differ, the core elements that underpin the development of meaningful relationships remain remarkably consistent. Effective communication, like-mindedness, understanding, and empathy are essential building blocks that enable both online and face-to-face connections to flourish and endure

Social media encompasses a multitude of facets that impact both positively and negatively. On the positive side, it serves as an avenue for fostering connections and relationships, transcending geographical boundaries. Social media also offers a unique opportunity to broaden one's horizons by exposing individuals to diverse perspectives, cultures, and ideas they might otherwise never encounter, thereby nurturing empathy and understanding. However, the darker facets of social media the prevalence of cyberbullying, harassment, and addiction need to be addressed when viewing its impact on empathy.

Social media platforms have revolutionized communication, offering new avenues for engagement, information dissemination, and community building. On college campuses, students, faculty, and staff are active participants in digital online environments. When exploring how empathy and social media relate 5 theories will be explored; Theory of Mind, Emotional Contagion Theory, Cognitive Load Theory, Social Identity Theory, and Social Information Processing Theory.

Theory of Mind (ToM)

The concept of "Theory of Mind" (ToM) refers to the ability to attribute mental states, such as beliefs, intentions, and desires, to oneself and others, and to understand that these mental states can influence behavior (Leslie, et al., 2004). When examining how social media platforms influence users' development of theory of mind, skills can either enhance or hinder their ability to empathize with others online. Conceptual understanding involves grasping the idea that others have beliefs and desires that can differ from one's own. Operational understanding, on the other hand, involves the ability to accurately predict and explain behavior based on these mental states (Leslie et al., 2004).

Dvash and Shamay-Tsoory (2014) introduce the concept that both ToM and empathy are not unitary constructs, but rather multifaceted phenomena. In their exploration of the neurological foundations of empathy, the authors highlight that empathy encompasses cognitive empathy (understanding another's emotional state) and affective empathy (sharing and resonating with another's emotional state). When it comes to college students and their empathy with social media, theory of mind can play a significant role in shaping their interactions and relationships online. College students with a well-developed theory of mind are more likely to accurately interpret and understand the emotions and intentions conveyed through text, images, and other forms of online communication. This can enhance their ability to empathize with others' experiences and respond appropriately, leading to more meaningful and supportive interactions on social media platforms.

Social media often exposes individuals to a diverse range of perspectives, opinions, and experiences. A strong theory of mind enables college students to appreciate these differences and understand where others are coming from, even if their viewpoints differ. This can foster

respectful dialogues and reduce misunderstandings or conflicts. Faculty and staff engagement on social media platforms further contributes to this dynamic by providing additional layers of insight and expertise. Faculty members can share diverse academic perspectives, contribute to public discussions, and engage with students in a more informal and accessible manner. Staff members, too, play a role in creating a well-rounded online environment, sharing institutional updates, and facilitating communication channels that promote understanding and collaboration among the entire educational community. In this way, social media becomes a multifaceted tool that enhances not only student interactions but also the overall educational experience.

Emotional Contagion Theory

Emotional Contagion Theory refers to the phenomenon of emotions spreading from person to person within a social network. Emotions are a fundamental aspect of human interaction and communication, and in the digital age, social networks have become a prominent platform for sharing and expressing emotions (Kramer et al., 2014). When taking the perspective of Emotional Contagion Theory, one can predict that emotions are transmitted through social media due to the overall interactions and communication explored by its users.

ECT is a two-step model that affords an elegant account of human social responses to the perception of both another's goal-directed action and another's expressive action: in the former case, the observer is taken to automatically share (or resonate with) the agent's goal or intention (Ferrara & Yang, 2015). An example of ECT is as follows; when an agent performs a goal-directed instrumental action, their intention can be construed as the cause of their bodily movements. Similarly, an agent's emotion can be construed as the cause of their expressive behavior. These emotions can be transmitted through words or within image-based social networks, where emotions expressed through images can have a profound impact on the

emotional states of users within these networks. The notion of "social roles," represents the different positions individuals occupy within their social network, such as friends, family members, or colleagues (Ferrara & Yang, 2015).

The theory of emotional contagion has significant relevance to college students and their empathy with social media, as it sheds light on how emotions can be transmitted and experienced through online platforms. The central hypothesis of the study is that emotion contagion is influenced by users' social roles and their emotional connections. When considering faculty, staff, and student engagement, this model becomes even more intricate. Faculty members, through their online presence, can impact the emotional atmosphere of academic discussions and interactions. Staff engagement on social media platforms adds another layer, influencing the emotional tone of institutional updates and communications. For students, the theory of emotional contagion becomes a lens through which their online interactions within academic and social contexts can be better understood, emphasizing the potential for emotional resonance and shared experiences among diverse social roles within the educational community.

Cognitive Load Theory (CLT)

Cognitive load theory is the total amount of mental effort required to process information during learning. It comprises three types: intrinsic load (related to the inherent complexity of the material), extraneous load (due to instructional design factors), and germane load (associated with meaningful processing for learning). The fundamental tenet of CLT is that optimal learning occurs when instructional design minimizes extraneous load and promotes effective processing of intrinsic and germane loads (Van Merrienboer & Sweller, 2005).

The concept of Cognitive load theory suggests that learners have limited working memory capacity. The design and features of social media platforms can have an impact on

users' cognitive load. CLT has implications for various educational contexts, including college students' engagement with social media and their empathy levels When this load influences student's ability to process and express empathy it can lead to reduced learning and comprehension. The implications of Cognitive Load Theory are particularly significant within various educational contexts, including how college students engage with social media and their levels of empathy. When students are exposed to information and interactions on social media, their cognitive load can increase substantially, affecting their ability to process and understand complex subjects. When students are expected to perform and multitask on a collegiate level information consumption that social media encourages can lead to reduced cognitive resources being available for empathetic engagement.

When examining faculty, staff, and student engagement, the influence of Cognitive Load Theory takes on a more nuanced dimension. Faculty members, utilizing social media for communication and instruction, actively contribute to shaping students' cognitive load. Similarly, staff engagement, especially in the dissemination of information through social platforms, plays a significant role in molding the cognitive environment within educational institutions. For students, the challenge lies in finding a balance between information consumption on social media and the cognitive resources required for empathetic engagement. Consequently, the principles of Cognitive Load Theory become essential for comprehending the intricate dynamics of engagement across the diverse roles within the educational community.

Social Identity Theory

Social Identity Theory focuses on the processes through which individuals develop and maintain their self-concepts. At its core, identity theory posits that individuals seek consistency and coherence in their identities, striving to align their identities (self-concept) with their role

identities (social positions). The theory emphasizes that role identities encompass a wide range of social roles individuals occupy, such as being a student, a parent, or a professional. The balance between personal and role identities is essential for maintaining a stable sense of self and managing one's emotions and behaviors (Stets & Burke, 2000). Social identity theory, rooted in the work of Tajfel and Turner, posits that people categorize themselves and others into social groups, leading to in-group favoritism and potential out-group discrimination (Stets & Burke, 2000).

On social media, this can manifest as students showing more empathy and support to those who belong to their in-group, while potentially displaying less empathy or even hostility towards those in out-groups. This bias can limit empathetic interactions with individuals from different backgrounds. Social media can provide opportunities for college students to connect with individuals from diverse backgrounds. When considering faculty, staff, and student engagement, the impact of Social Identity Theory (SIT) becomes even more intricate. Faculty members, through their online presence, can influence the social dynamics among students and contribute to the shaping of in-group and out-group perceptions. Staff engagement on social media platforms adds another layer, potentially influencing the broader institutional environment and shaping the dynamics of social identity interactions.

While SIT might lead to initial hesitations due to group differences, engaging in meaningful interactions with out-group members can challenge stereotypes and increase empathy by fostering a more nuanced understanding of others' experiences. Educational institutions can play a role in promoting empathy and reducing in-group bias among college students.

Incorporating discussions on SIT and its implications for online interactions can encourage

students to be more aware of their biases and actively seek out opportunities to empathize with individuals from various social identity groups.

Social Information Processing Theory

Social information processing theory explains how people get to know one another online, without nonverbal cues, and how they develop and manage relationships in a computer-mediated environment (Walther, 2008). This theory seeks to explain how individuals perceive, interpret, and respond to social information, particularly in computer-mediated communication (CMC) contexts. The theory suggests that individuals use various cues and strategies to form impressions of others and to develop relationships in online environments.

Users process and interpret social information on social media in many different ways.

When using the Social Information Processing Theory there can be an interpretation of how these processes relate to the development and displays of empathy. The diverse ways that users engage with and make sense of social information on social media platforms can make a powerful impact on online interactions. In the context of college students, this theory can be examined concerning the fostering of empathy.

This digital environment may challenge traditional forms of emotional expression due to the absence of nonverbal cues. As such, college students might resort to creative linguistic strategies, such as using specific emojis or crafting thoughtful responses, to convey empathy effectively. These dynamic highlights the limitations of social media and the depth of emotional connections. Faculty members, through their use of social media for communication and interaction with students, contribute to the dynamics of social information processing. Staff engagement, particularly in disseminating information and facilitating online interactions, plays a significant role in shaping the digital environment within educational institutions. For students,

the theory becomes a lens through which the fostering of empathy can be examined within the unique context of the college experience.

Ethical Implications

There needs to be careful ethical reasoning to consider answering the question, "What factors contribute to empathy about social media in the college population?"

Social media landscapes are constantly evolving, presenting us with new opportunities and challenges. In this dynamic environment, it is crucial to stay informed about emerging dilemmas, such as issues related to privacy, misinformation, and online harassment, as well as cultural changes that impact the way we communicate and build relationships online. By being aware and updated on these shifts, individuals and society as a whole can adapt their approaches to digital communication and relationships.

When using empathy in social media, there are several ethical considerations to keep in mind to ensure responsible and respectful engagement. The emotional well-being of an individual and the use of empathy are powerful tools, and in doing so it's essential to prioritize the emotional well-being of both recipients in any online relationship. To understand the potential impact of engaging with emotionally challenging content appropriate boundaries support and resources are needed. Boundaries and Self-care are important when taking into consideration practicing empathy in social media due to the ability for this to become emotionally demanding. Facets such as addiction and cyberbullying can play a role in emotional challenges. There are several possible problematic ideas to consider when examining emotions and empathy such as the manipulation of emotions. Content awareness and the inability to check facts online may often lead to these manipulations of emotions and therefore manipulation of empathy in online relationships.

When looking at the impact of social media on several cultures there also needs to be a cultural understanding of education and sensitivity. Social media platforms allow individuals to connect with others who are different in many ways related to age, and culture, it is important to recognize and respect cultural differences when expressing empathy. Different cultures may have varying ways of expressing and perceiving emotions and there is a possibility for potential biases or assumptions. There is a need for responsible communication, being mindful of communication styles, and the use of respectful and non-judgmental language to avoid making assumptions or generalizations about individuals' experiences.

In the face of these ethical dilemmas, there is a pressing need for ongoing education and dialogue. This includes not only educating individuals about the potential consequences of actions on social media but also being able to engage in meaningful conversations about empathy and its responsible application in the digital realm. Promoting empathy and ethical behavior in online communities can contribute to a more inclusive, respectful, and harmonious digital world where people can connect and communicate in ways that enrich their lives rather than harm them. There is a potential for positive growth using social media, with ongoing education and awareness this possibility can exist. Social media landscapes have a responsibility to be constantly evolving, by staying informed about emerging dilemmas as well as cultural changes in approaches to communication and relationships. When these approaches are adapted accordingly this need to add to the contribution of growth. With all of these ethical dilemmas, there is a need to engage in ongoing education and dialogue to improve the understanding of empathy and its responsible application in the digital realm.

Policy Recommendations

When exploring the impact of social media on empathy, there are several strategies for cultivating empathy within the digital realm. These include nurturing meaningful online connections, encouraging the sharing of empathetic content, and creating digital environments that promote open dialogue and understanding. Educational institutions can play a role in promoting digital literacy and educating individuals about the potential impact of their online behavior by promoting empathy and reducing in-group bias among college students.

Educational institutions can encourage students to be more aware of their biases and actively seek out opportunities to empathize with individuals from various social identity groups by incorporating discussions on online interactions. With these discussions and educational platforms encouragement and promotion of understanding can allow for an increase in empathy.

Since social media platforms have controlled online communication they have revolutionized overall communication among its users, offering new avenues for engagement, information dissemination, and community building. On college campuses, students, faculty, and staff are active participants in this digital sphere, creating a dynamic online environment. However, the unregulated use of social media can lead to issues such as cyberbullying, privacy breaches, misinformation, and distraction. A well-structured social media policy can provide a framework to harness the positive aspects of digital engagement while addressing these concerns. There also needs to be an ability for institutions to integrate empathy training and digital citizenship programs into school curricula, teaching students about the responsible use of social media and the positive impact of empathetic communication.

The ongoing support of institutions to offer resources and tools to empower users to navigate and respond to negative interactions with empathy, such as tutorials on conflict

resolution, active listening, and positive communication strategies is of major importance. There are many supports such as counseling centers and campus safety among many universities that when used can promote better health and safety however there needs to be a user-friendly reporting mechanism for users who experience online harassment or abuse, ensuring prompt investigation and appropriate action. Establishing these support networks can help users who require emotional support or counseling as a result of negative experiences on social media.

Whenever the conversation of change and the impact of the promotion of empathy is at stake there needs to be added conversations of transparency and accountability. This can be accomplished in many ways, one being providing regular public reports on the efforts and progress made in promoting empathy on social media platforms, establishing clear policies on data privacy and user consent, and ensuring that user data is protected and used responsibly and encouraging independent audits or external evaluations of platforms' efforts to promote empathy, transparency, and accountability.

There may be several benefits to the addition of a University Social Media Policy. A social media policy promotes responsible online behavior by setting clear guidelines for interactions, promoting respect, and discouraging harmful activities. Establishing guidelines for official institutional social media accounts can improve communication with the campus community, ensuring consistent messaging and timely updates. A well-defined policy can facilitate the integration of social media into educational practices, encouraging collaborative learning, knowledge sharing, and academic networking.

Summary

This paper dove into the multifaceted dynamics of empathy within relationships and explored its interconnectedness with attachment. It ventured into the realm of online relationships, dissecting their evolution and the associated communication patterns, dissected the impact of

social media on empathetic engagement, encompassing its potential benefits and consequences, and examined various strategies for fostering empathy within the context of social media.

In today's digital world, social media has surfaced as a powerful tool that influences various aspects of society, including education. Higher education institutions are increasingly recognizing the need to address the impact of social media on campus life, student engagement, and academic discourse. Social media holds significant importance for college students for several reasons such as communication and networking, community building, awareness, activism, and receiving feedback and support by seeking advice and asking questions. When delving into the difficulties and possible advantages of empathy in the digital realm, the question presented was: "What factors contribute to empathy about social media use among college students?" Examining subjects like cyberbullying and the magnification of negative emotions examines the necessity of investigating ways to nurture empathy in the realm of social media.

Social media platforms have become prevalent and continue to influence the way we communicate and connect with others daily. There are many forms of social media and with these spaces, there is an opportunity for social interaction, self-expression, and the exchange of ideas. This paper examined the multifaceted dynamics of empathy within relationships, exploring its interconnectedness with attachment. It ventured into the realm of online relationships, dissecting their evolution and the associated communication patterns while dissecting the impact of social media on empathetic engagement, encompassing its potential benefits and consequences.

Empathy has many advantages including recognizing shared experiences that enhance empathetic connections. In the development of relationships, empathy plays a pivotal role in understanding and perceiving others' thoughts and feelings. Relationships due to several factors

reduce social anxiety, increase control over self-presentation, and have the ability to form connections with people from diverse backgrounds (Kanske et al., 2015). This factor only increases when looking at online relationships due to its ability to draw on individuals from multiple backgrounds.

The development of empathy takes on unique dimensions, particularly concerning elements like trust and connection. Online interactions have several patterns in how trust and connections play similar and different roles in fostering relationships. In establishing relationships in virtual spaces there allows for different experiences to encourage different forms of relationships. Trust and connections in relationships have been shown to improve overall happiness and decrease stress (Zahavi, 2008). The digital landscape offers a diverse platform for building empathy, emphasizing the roles of trust and meaningful connections in enhancing emotional fulfillment and reducing the burdens of stress.

There are many potential benefits to encouraging the use of empathy when cultivating relationships online. Social media can be used to promote empathy towards subjects such as mental health or forging connections that wouldn't be possible due to geographical barriers. In the context of mental health, online platforms provide a safe haven for individuals to share their experiences and challenges (Abdul-Mageed et al., 2017). Empathy used under these platforms can decrease the sense of isolation often associated with mental health issues. Social media can add to campaigns, discussions, and personal narratives to encourage empathy with others' ongoing struggles which allows for a sense of unity and compassion within the digital communities. The ongoing encouragement of empathy online enhances individual relationships and also promotes compassion. Other potential benefits involve the increase in empathy to decrease hate speech to enhance perspective-taking.

There are also potential consequences to the lack of empathy online and how this plays a role in relationships. The persistent prevalence of adverse phenomena like cyberbullying continues to play a role in the lack of positive communication online. These negative communication styles highlight a concerning absence of empathy within digital interactions which is shown in the excessive use of negative harassment, hate speech, and bullying online that seems to show a complete lack of empathy (Hamuddin et al., 2022).

Another negative impact of social media is the addiction to experiencing emotions triggered by others' opinions, life choices, and constant comparisons with peers. The constant exposure to others' lives on social media can foster a culture of comparison. There is a history of people measuring their success, appearance, and achievements against the seemingly perfect lives portrayed by others online. This constant comparative mindset can lead to feelings of envy, insecurity, and low self-worth (Dalvi-Esfahani et al., 2021). The pressure to conform to societal standards and fit into the narrow definitions of success as portrayed online can intensify these negative emotions. These negative emotions allow for an overall decrease in empathy and compassion towards self and others.

There are several avenues for cultivating empathy on social media that may allow for building connections through shared experiences. Several areas of social media have encouraged growth in individuals who wish to be a part of a positive community allowing for an increase in empathy such as storytelling, support groups support communities, and educational content. This shows social media to become a space where empathy can thrive and foster meaningful connections among people from various backgrounds and cultures.

When exploring the impact of social media on empathy, there are several strategies for cultivating empathy within the digital realm. These include nurturing meaningful online

connections, encouraging the sharing of empathetic content, and creating digital environments that promote open dialogue and understanding. Educational institutions can play a role in the importance of promoting digital literacy and educating individuals about the potential impact of their online behavior by promoting empathy and reducing in-group bias among college students.

Educational institutions can encourage students to be more aware of their biases and actively seek out opportunities to empathize with individuals from various social identity groups by incorporating discussions on online interactions. Through engaging in meaningful discussions and leveraging educational platforms, there is an opportunity to actively foster and promote a deeper understanding, ultimately contributing to a notable enhancement in empathy.

References

- Abdul-Mageed, M., Buffone, A., Peng, H., Eichstaedt, J., & Ungar, L. (2017, May). Recognizing pathogenic empathy in social media. In *Proceedings of the International AAAI*Conference on Web and Social Media (Vol. 11, No. 1, pp. 448-451).
- Akram, W., & Kumar, R. (2017). A study on the positive and negative effects of social media on society. *International Journal of Computer Sciences and Engineering*, 5(10), 351-354.
- Blakemore, T., & Agllias, K. (2020). Social media, empathy, and interpersonal skills: social work students' reflections in the digital era. *Social Work Education*, *39*(2), 200–213.
- Britton, P. C., & Fuendeling, J. M. (2005). The relations among varieties of adult attachment and the components of empathy. *The Journal of social psychology*, *145*(5), 519-530.
- Dalvi-Esfahani, M., Niknafs, A., Alaedini, Z., Ahmadabadi, H. B., Kuss, D. J., & Ramayah, T. (2021). Social Media Addiction and Empathy: Moderating impact of personality traits among high school students. Telematics and Informatics, 57, 101516.
- Decety, J. (2015). The neural pathways, development and functions of empathy. *Current Opinion in Behavioral Sciences*, 3, 1-6.
- Dvash, J., & Shamay-Tsoory, S. G. (2014). Theory of mind and empathy as multidimensional constructs: Neurological foundations. *Topics in Language Disorders*, *34*(4), 282-295.
- Ferrara, E., & Yang, Z. (2015). Measuring emotional contagion in social media. *PloS one*, *10*(11), e0142390.
- Hamuddin, B., Syahdan, S., Rahman, F., Rianita, D., & Derin, T. (2022). Do They Truly Intend to Harm Their Friends?: The Motives Beyond Cyberbullying among University Students.In Research Anthology on Combating Cyber-Aggression and Online Negativity (pp. 775-788). IGI Global.

- Hangartner, D., Gennaro, G., Alasiri, S., Bahrich, N., Bornhoft, A., Boucher, J., ... & Donnay, K.
 (2021). Empathy-based counterspeech can reduce racist hate speech in a social media field experiment. *Proceedings of the National Academy of Sciences*, 118(50), e2116310118
- Hodges, S. D., Kiel, K. J., Kramer, A. I., Veach, D., & Villanueva, B. (2010). Giving birth to empathy: The effects of similar experience on empathic accuracy, empathic concern, and perceived empathy. Personality and Social Psychology Bulletin, 36, 398-409.
- JinJuan F., Lazar, J., & Preece, J. (2004). Empathy and online interpersonal trust: A fragile relationship. Behaviour & Information Technology, 23, 97-106.
- Kramer, A. D., Guillory, J. E., & Hancock, J. T. (2014). Experimental evidence of massive-scale emotional contagion through social networks. Proceedings of the National academy of Sciences of the United States of America, 111(24), 8788.
- Kanske, P., Böckler, A., & Singer, T. (2015). Models, mechanisms and moderators dissociating empathy and theory of mind. *Social Behavior from Rodents to Humans: Neural Foundations and Clinical Implications*, 193-206.
- Leslie, A. M., Friedman, O., & German, T. P. (2004). Core mechanisms in 'theory of mind'. *Trends in cognitive sciences*, 8(12), 528-533.
- Manago, A.M., Taylor, T., & Greenfield, P.M. (2012). Me and my 400 friends: The anatomy of college students' facebook networks, their communication patterns, and well-being.

 Developmental Psychology, 48, 369–380.
- McKenna, K., Green, A., & Gleason, M. (2002). Relationship formation on the internet: What's the big attraction? Journal of Social Issues, 58, 9-31.

- Slonje, R., & Smith, P. K. (2008). Cyberbullying: Another main type of bullying?. *Scandinavian journal of psychology*, 49(2), 147-154.
- Stets, J. E., & Burke, P. J. (2000). Identity theory and social identity theory. *Social psychology* quarterly, 224-237.
- Van Merrienboer, J. J., & Sweller, J. (2005). Cognitive load theory and complex learning:

 Recent developments and future directions. Educational psychology review, 17, 147-177.
- Vossen, H. G., & Valkenburg, P. M. (2016). Do social media foster or curtail adolescents' empathy? A longitudinal study. *Computers in Human Behavior*, 63, 118-124.
- Walther, J. B. (2008). Social information processing theory. *Engaging theories in interpersonal* communication: Multiple perspectives, 391.
- Whittaker, E., & Kowalski, R. M. (2015). Cyberbullying via social media. *Journal of school violence*, 14(1), 11-29.
- Zahavi, D. (2008). Simulation, projection and empathy. Consciousness and Cognition, 17, 514-522.