

THE ROLE OF SOCIAL NETWORKS IN SHAPING HUMAN BEHAVIOUR

Asmita Debbarma¹.

¹ Research scholar of Annamalai University, Tamil Nadu, India
Department of Political Science & Public Administration
*Correspondence Email : asmitadebbarma63@gmail.com

Abstract

The paper delves into the multifaceted influence of social networks on human behaviour, encompassing traditional and digital platforms. It explores the psychological dynamics within these networks, detailing the impact of social validation, peer pressure, and conformity on individual behaviour and identity projection. The evolution from traditional interpersonal connections to the digital revolution of social media platforms is analysed, highlighting their societal implications, including cultural, political, and economic influences. Challenges such as misinformation, privacy concerns, and mental health implications are discussed alongside suggestions for responsible usage, emphasizing digital literacy, diverse content consumption, and enhanced regulation. The paper concludes by envisioning future trends, focusing on emerging technologies, personalization, and ethical considerations crucial for the responsible evolution of social networking platforms.

Keywords : *Social Media; Social Networks; Digital Age; Human Behaviour; Societal Implications*

1. INTRODUCTION

Social networks serve as the intricate tapestry woven from the threads of human connections, intertwining relationships, interactions, and influences that define our social existence. These networks, spanning from intimate personal ties to expansive digital communities, encapsulate the essence of human interaction, enabling the exchange of emotions, information, and support. The evolution of social networks, particularly in the digital age, has redefined the landscape of human connection, reshaping the dynamics of how individuals communicate, perceive the world, and shape their behaviour. Social networks encompass both offline and online realms. Traditional social networks comprise face-to-face interactions within families, friendships, communities, and societal structures. These networks have long played a fundamental role in shaping individuals' beliefs, attitudes, and behaviours. They provide the framework for cultural transmission, where norms, values, and traditions are passed down through generations. Moreover, these interpersonal connections act as sources of social support, fostering emotional well-being and providing a sense of belonging.

The emergence of digital technology has ushered in a new era of social networking, expanding the horizons of human connectivity. Online platforms, such as social media networks, have become hubs of interaction, allowing individuals to transcend geographical boundaries and engage in unprecedented ways like Facebook, Twitter, Instagram, and other digital platforms have revolutionized communication, enabling instantaneous connections and information sharing on a global scale. These platforms facilitate diverse forms of engagement, from sharing personal experiences to participating in collective movements and disseminating information across vast networks of users. The significance of social networks lies in their profound impact on human behaviour. These networks serve as conduits for the construction of identities, shaping how individuals perceive themselves and others. They influence decision-making processes, guiding choices in areas such as consumer behaviour, political affiliations, and lifestyle preferences. Moreover, social networks play an important role in the formation of opinions and attitudes, often amplifying certain viewpoints or ideologies within specific circles.

The social networks tap into fundamental aspects of human behaviour. The need for social validation and acceptance within these networks drives individuals to conform to prevailing norms

THE ROLE OF SOCIAL NETWORKS IN SHAPING HUMAN BEHAVIOUR

Asmita Debbarma1.

and expectations. The influence of peer pressure, coupled with the desire for belongingness, can significantly impact individual choices and actions. Social networks also enable individuals to curate and present specific facets of their lives, contributing to the construction of online personas that may differ from their offline identities. Understanding the multifaceted role of social networks is paramount in navigating the complexities of human interaction in contemporary society. The intertwining of technological advancements with social networks has presented both opportunities and challenges. While these platforms foster connectivity and information dissemination, they also raise concerns about privacy, mental health implications, and the spread of misinformation. The article aims to explore the intricate mechanisms by which social networks, both offline and online, shape the human behaviour. It will delve deeper into the psychological, sociological, and technological dimensions, dissecting the profound influence of these networks on individual choices, interactions, and societal dynamics.

Evolution of Social Networks

The evolution of social networks spans a historical trajectory from the traditional paradigms of interpersonal connections to the digital revolution that has profoundly reshaped the landscape of human interaction. In the realm of traditional social networks, interactions predominantly unfolded through face-to-face engagements within families, communities, and societal structures. These networks have rooted in personal relationships and community ties, served as the bedrock for cultural transmission, shaping individual behaviours, beliefs, and societal norms. They provided the scaffolding for socialization, fostering a sense of identity, belongingness, and emotional support within local and extended social circles. However, the emergence of digital networks marked a seismic shift in the way individuals connect and communicate. With the advent of the internet and the subsequent proliferation of social media platforms, such as Facebook, Twitter, Instagram, and others, social networks transcended geographical constraints, ushering in an era of unprecedented connectivity.

Digital networks revolutionized human interaction by offering an expansive and borderless platform for engagement. These platforms democratized communication, enabling instantaneous connections across vast distances, and providing avenues for diverse forms of interaction and content sharing. Social media platforms became conduits for information dissemination, allowing users to share personal experiences, opinions, and engage in a myriad of conversations spanning cultural, political, and social domains. The digital era blurred the boundaries between the private and public spheres, allowing individuals to curate and present their identities, beliefs, and experiences to a global audience. Consequently, this global interconnectedness reshaped the dynamics of influence, amplifying voices, fostering collective movements, and challenging established norms. However, amid this digital renaissance, several challenges emerged.

Privacy concerns became prevalent as personal information became more accessible and vulnerable to exploitation. The rapid spread of misinformation and echo chambers within online networks created challenges in discerning credible information and contributed to polarization. Furthermore, the constant connectivity facilitated by digital networks posed implications for mental health, with concerns about excessive screen time, cyberbullying, and the impact of curated online personas on self-esteem and well-being. The evolution of social networks from intimate, localized traditional networks to the vast, interconnected digital ecosystems has redefined the dynamics of human interaction. Understanding this evolution is pivotal in comprehending the multifaceted ways in which social networks influence individual behaviour, societal structures, and the intricate fabric of our interconnected world.

Psychological Dynamics of Social Networks

Social networks serve as dynamic platforms where psychological forces like social validation, peer pressure, and conformity wield significant influence on individual behaviour, shaping interactions and self-presentation within these digital environments. Social validation, a core psychological need, drives individuals to seek recognition, acceptance, and affirmation from

their social circles. Within social networks, this manifests in the pursuit of likes, comments, shares, or other forms of engagement that signify approval or appreciation. Users tend to align their behaviours, choices, and content presentation to cater to the accepted norms within their network, seeking validation through positive responses and interactions. This quest for validation shapes behaviour, guiding individuals to modify their online conduct to elicit favourable reactions, reinforcing their sense of belonging and acceptance within the network.

Peer pressure and conformity play pivotal roles in influencing behaviour within social networks. Human beings are inherently inclined to conform to group norms and tend to adopt behaviours, opinions, and attitudes of influential peers or groups. In the digital sphere, these influences are amplified, as trends and opinions gain traction through mechanisms of social validation and conformity. Individuals often succumb to the pressure of conforming to prevailing behaviours, preferences, or ideologies within their network, even if they diverge from their personal inclinations or beliefs. The fear of social exclusion or isolation within the network can drive individuals to align their actions with accepted norms, reflecting the powerful impact of peer pressure on behaviour within social networks. Moreover, social networks serve as arenas for constructing and presenting social identities, influencing self-presentation. The users curate and project specific facets of their lives, crafting digital personas that may differ from their offline identities. The desire for social acceptance and the need to fit into particular social groups or communities prompt individuals to mold their online personas. This curated presentation often blurs the line between authentic self-expression and strategic self-presentation aimed at eliciting social validation. It strategically shares content, photos, and narratives that align with the desired image or expectations of their social network, constructing a digital identity that garners acceptance and reinforces their perceived sense of belonging within the network.

This interplay between social validation, peer pressure, conformity, and self-presentation within social networks significantly influences how individuals navigate these digital spaces. The psychological dynamics foster an environment where individuals modulate their behaviours and presentations to conform to perceived norms and garner social approval. This intricate web of psychological forces shapes the fabric of interactions, decision-making processes, and the portrayal of one's identity within the digital realm, underscoring the profound impact of human psychology on social networking dynamics. The psychological dynamics within social networks sheds light on how individuals engage, interact, and present themselves within these complex digital environments. The amalgamation of social validation, peer pressure, conformity, and self-presentation weaves a tapestry of influences that dictate behaviour, perception, and identity projection, illuminating the nuanced and multifaceted nature of human interaction within these interconnected digital spaces.

THE ROLE OF SOCIAL NETWORKS IN SHAPING HUMAN BEHAVIOUR

Asmita Debbarmal.

Social Media and Behaviour

Social media platforms have significantly reshaped human behaviour, influencing how individuals communicate, share information, and engage with content. These platforms exert considerable influence on behaviour, fostering specific actions and reactions among the users. Features like likes, comments, shares, and algorithms that prioritize certain content encourage behaviours aimed at seeking validation through engagement, creating curated content for attention, or engaging with trending topics to maintain relevance within the online community. This shaping of behaviour reflects the intricate design and dynamics of social media platforms that dictate user engagement patterns.

The impact of prolonged social media usage on mental health has become a topic of concern. The studies suggest a correlation between increased social media exposure and heightened feelings of anxiety, depression, loneliness, and diminished self-esteem. The constant exposure to meticulously structured and idealized representations of others' lives leads to unfavourable social comparisons, contributing to a decline in mental well-being among the users. Additionally, the addictive nature of social media, characterized by the continuous scroll and notifications, can exacerbate these negative effects on mental health. While social media facilitates connections across geographical distances, it also significantly influences interpersonal relationships and communication dynamics. Digital communication platforms, while enabling convenient connectivity, sometimes erode the depth of face-to-face interactions. The reliance on digital communication can lead to misinterpretation of messages, reduced non-verbal cues, and the absence of physical presence, potentially hindering the quality of communication and fostering misunderstandings or superficial interactions. This shift in communication patterns raises questions about the long-term impact on the depth and quality of interpersonal relationships within the digital age.

Moreover, social media serves as a powerful conduit for the dissemination of information, enabling rapid sharing of news, opinions, and content across vast networks. However, this rapid spread also amplifies the dissemination of misinformation, false narratives, and rumours. The virality of misinformation can have severe consequences, fuelling public panic, spreading falsehoods, and even influencing political or societal beliefs. Addressing the implications of misinformation on public opinion, social cohesion, and individual decision-making processes has become an increasingly critical concern in today's digitally connected society. Social media exerts a profound influence on human behaviour, mental health, interpersonal relationships, communication patterns, and the dissemination of information. While it facilitates connectivity and information exchange, its adverse effects on mental well-being, interpersonal connections, and the unchecked spread of misinformation necessitate critical evaluation and responsible usage to mitigate its negative impacts on individuals and society.

The ubiquitous nature of social media in contemporary society has raised significant concerns about its multifaceted impacts, necessitating a more nuanced examination of its effects on individuals and communities. Beyond shaping behaviour and mental health, social media's influence on societal constructs and the spread of information continues to evolve and pose challenges. One of the pronounced effects is the transformation of societal perceptions and beliefs. Social media platforms have become arenas for the exchange of diverse viewpoints and ideologies. However, the algorithmic curation of content tailored to user preferences often leads to echo chambers and filter bubbles, reinforcing existing beliefs and polarizing opinions. This phenomenon contributes to the fragmentation of society into distinct ideological factions, hindering meaningful dialogue and understanding between divergent viewpoints. Furthermore, social media's role in facilitating social activism and collective mobilization cannot be understated. Movements and causes garner immense traction through the amplification and mobilization capabilities of social media platforms. The ability to raise awareness, organize protests, and foster collective action has led to significant societal changes and heightened social consciousness on various issues.

However, the unchecked dissemination of false information and misinformation through social media poses a grave threat to societal stability. The proliferation of misinformation can sow seeds of discord, amplify societal tensions, and undermine trust in institutions, ultimately eroding the fabric of social cohesion. Addressing the challenges posed by misinformation demands collective efforts from technology companies, fact-checking organizations, and individuals to promote media literacy, critical thinking, and responsible sharing of information. Social media's impact transcends individual behaviour and interpersonal dynamics, permeating societal structures and information dissemination. While it offers connectivity, amplifies activism, and empowers marginalized voices, its influence on societal beliefs, polarization, and the spread of misinformation necessitates proactive measures to harness its potential for positive change while mitigating its negative repercussions. The impact of social media on individuals, communities, and society is pivotal in shaping policies, fostering digital literacy, and promoting responsible usage. The advantages of balancing the connectivity and activism with the challenges of misinformation and societal polarization requires collaborative efforts to navigate the evolving landscape of social media's role in our lives. By fostering informed engagement, critical thinking, and ethical use of social media, societies can harness its potential as a force for positive change while mitigating its detrimental effects on societal cohesion and well-being.

Societal Implications

Social networks serve as influential platforms that intricately shape societal norms and values by mediating the dissemination of information, opinions, and cultural ideologies. These platforms play an important role in shaping societal conversations, challenging traditional norms, and amplifying voices that were historically marginalized. While social networks enable the exchange of diverse viewpoints, the rapid circulation of content can lead to shifts in societal values, sometimes challenging established norms. The democratization of content creation and sharing enables users to challenge prevailing ideas, reshaping societal perceptions of acceptable behaviours and values, albeit in a constantly evolving and dynamic manner. Beyond cultural influence, the impact of social networks extends to significant political, economic, and cultural realms. Politically, these platforms are instrumental in redefining the landscape of public discourse and civic engagement. They serve as forums for political activism, awareness campaigns, and grassroots movements, allowing individuals to mobilize around social causes, organize protests, and influence policy discussions. The accessibility of social media platforms has democratized political engagement, enabled broader participation, and reshaped the dynamics between citizens and their governments.

Economically, social networks have become vital components of the digital economy. These platforms serve as advertising and marketing hubs, utilizing user-generated data to tailor advertisements, drive consumer behaviour, and shape market trends. The influential role of social media influencers and brand ambassadors in endorsing products or services illustrates the economic impact and potential of these platforms in driving commercial activities and consumer preferences. Culturally, social networks foster an interconnected global community. They facilitate cross-cultural interactions, breaking down geographical barriers, and enabling individuals from diverse backgrounds to engage, share experiences, and collaborate. However, this global interconnectedness also raises questions about cultural homogenization versus cultural diversity and the impact of globalization on local cultures.

Moreover, the pervasiveness of social networks raises significant concerns about privacy norms and ethical considerations. The collection, use, and potential exploitation of user data by these platforms prompt debates about individual privacy rights, data security, and the ethical implications of data-driven targeting for advertising or behavioural manipulation. Additionally, issues of online harassment, cyberbullying, and the dissemination of harmful content highlight the ethical challenges in maintaining a safe and responsible online environment. In navigating these societal implications, comprehensive understanding, informed discussions, and proactive measures are imperative. Developing robust policies, promoting digital literacy, ensuring data privacy, and fostering ethical guidelines are essential to harnessing the positive potentials of social networks

THE ROLE OF SOCIAL NETWORKS IN SHAPING HUMAN BEHAVIOUR*Asmita Debbarmal.*

while mitigating their adverse impacts on societal values, individual rights, and well-being. Striking a balance between innovation and ethical use of these platforms will be pivotal in shaping a responsible digital future that aligns with societal values and aspirations.

Future Trends and Considerations

The trajectory of social networks in the future is poised for significant transformation, largely propelled by advancements in technology and evolving user preferences. Augmented Reality (AR) and Virtual Reality (VR) integration stand as pivotal forces driving this evolution. These immersive technologies are poised to revolutionize social interactions by offering users heightened experiences that bridge the gap between the physical and digital realms. Ephemeral content and instant communication, exemplified by the success of platforms like Snapchat and Instagram, will continue to shape interactions. This trend emphasizes the allure of real-time, authentic, and transient content sharing, fostering a sense of immediacy and spontaneity in engagements. A prominent trend shaping the future of social networks is the escalating emphasis on personalization and algorithmic tailoring. The platforms are increasingly focusing on refining algorithms to deliver content tailored to individual preferences. While this fosters deeper user engagement, concerns loom over the reinforcement of filter bubbles and the potential limitation of exposure to diverse viewpoints. Simultaneously, the emergence of platforms catering to specific interests and communities is anticipated. This trend emphasizes the need for more specialized experiences, enabling users to connect within their areas of interest and passions.

Moreover, the landscape of social networking may witness a surge in audio-based interactions, exemplified by the rise of platforms like Clubhouse and Twitter Spaces. These platforms offer a unique auditory experience, fostering real-time conversations, debates, and networking opportunities. The integration of artificial intelligence (AI) and chatbots is predicted to further enhance user experiences. AI-driven algorithms aim to personalize interactions, automate customer service, and optimize content recommendation systems. However, the ethical considerations surrounding AI biases, user privacy, and data security will remain critical in navigating this integration. Additionally, the utilization of blockchain technology within social networks is gaining traction, primarily aimed at addressing issues related to data security, authentication, and content ownership. Blockchain's decentralized nature holds promise in safeguarding user privacy, ensuring authenticity, and preventing manipulation or tampering of content. As social networks evolve, considerations surrounding privacy, data security, ethical use of AI, content moderation, and the cultivation of healthy online communities become increasingly crucial. The adoption to change user needs while addressing ethical and societal concerns will be fundamental in shaping the future landscape of social networking platforms, ensuring they continue to serve as avenues for meaningful connections, diverse interactions, and responsible digital engagement.

The digital landscape of social media platforms demands a multifaceted approach to responsible usage and mitigation of negative influences. The foundation of responsible usage lies in empowering users with digital literacy skills and critical thinking abilities. Digital literacy education is fundamental, equipping individuals with the capacity to discern credible information, verify sources, and comprehend online risks. Encouraging diverse content consumption stands as a pivotal strategy, mitigating the formation of echo chambers and filter bubbles. By promoting exposure to a spectrum of perspectives and ideologies, users gain a broader understanding of societal issues, fostering a more nuanced viewpoint and reducing the impact of biased content consumption. Furthermore, fostering civil discourse within digital spaces is imperative. Encouraging respectful discussions, fact-checking before sharing information, and promoting ethical guidelines in interactions contribute to a healthier online environment. Engaging in critical thinking exercises and valuing informed debates can help counteract the spread of misinformation or polarizing content. Mitigating negative influences involves proactive measures across various fronts. The stringent regulations and transparent policies concerning data privacy and content moderation are crucial.

Holding technology companies accountable for ethical practices and responsible use of user data helps maintain a safer online ecosystem. Implementing robust content moderation mechanisms and prompt action against abusive content, hate speech, or misinformation is pivotal in creating a secure and respectful digital environment. Encouraging users to report abusive content and facilitating swift responses from platforms contributes to a healthier online community. The fact-checking mechanisms play a pivotal role in combatting misinformation. Strengthening fact-checking initiatives within social media platforms or through independent organizations helps validate information and prevents the dissemination of false or misleading content. Additionally, fostering community-building initiatives can counteract negativity and division.

Promoting positive interactions, celebrating diversity, supporting marginalized communities, and combating hate speech collectively contribute to a more inclusive and respectful digital space. The Strategies for responsible usage and mitigation of negative influences require a collaborative effort among various stakeholders, including tech companies, policymakers, educators, and users. Educating individuals about online safety measures, recognizing, and avoiding scams or cyberbullying, helps in creating a safer online community. Encouraging responsible behaviour in interactions, comments, and content creation is instrumental in fostering a positive digital culture. The usage of responsible social media platforms hinges upon digital literacy education, critical thinking, diverse content consumption, and fostering civil discourse. Mitigating negative influences demands stringent regulations, robust content moderation, fact-checking mechanisms, community-building initiatives, and promoting positive interactions. Collaborative efforts are essential to cultivate a safer, more informed, and inclusive digital space that respects user privacy, promotes ethical practices, and encourages responsible engagement among users.

The complex issues arising within the realm of social media demands a multifaceted approach encompassing various potential solutions. Stricter regulatory frameworks, encompassing transparent policies on data privacy, content moderation, and algorithmic transparency, form a foundational step. The enhancing fact-checking mechanisms, whether through partnerships with independent organizations or within social media platforms, is pivotal to combat misinformation. The community engagement and education initiatives promoting digital literacy, critical thinking, and responsible digital citizenship empower users to navigate the online landscape discerningly. Emphasizing responsible content moderation practices, swift action against abusive content, and the enforcement of transparent guidelines contribute to fostering a safer digital environment. Encouraging ethical AI development, collaborating with civil society, empowering users with transparent control over their data, and fostering cross-platform collaborations augment efforts to create a more responsible digital ecosystem. These potential solutions, coupled with collaborative efforts among diverse stakeholders, pave the way for a safer, more transparent, and responsible digital space.

2. CONCLUSION

The exploration into the role of social networks in shaping human behaviour and society at large has underscored the intricate tapestry of connections, interactions, and influences that define our contemporary social existence. From the traditional paradigms of interpersonal relationships to the digital revolution of social media platforms, the evolution of social networks has profoundly redefined the dynamics of human interaction, communication, and societal norms. Throughout this exploration, it has become evident that social networks, both offline and online, play important roles in shaping individual behaviours, beliefs, and societal structures. Traditional networks, rooted in face-to-face interactions within families, communities, and societal frameworks, have historically served as the bedrock for cultural transmission and socialization. These networks foster a sense of identity, belongingness, and emotional support within local and extended social circles, contributing significantly to individual well-being and societal cohesion. The emergence of digital technology and social media platforms has propelled human connectivity into a borderless, interconnected realm. Platforms such as Facebook, Twitter, and Instagram have revolutionized communication by transcending geographical boundaries and enabling instantaneous global

THE ROLE OF SOCIAL NETWORKS IN SHAPING HUMAN BEHAVIOUR

Asmita Debbarmal.

connections. While these platforms offer unprecedented opportunities for interaction and information sharing, they have brought forth a myriad of challenges. Privacy concerns, the proliferation of misinformation, and mental health implications have emerged as significant challenges within the realm of social networks.

The constant connectivity facilitated by digital platforms has raised questions about data privacy and the ethical use of personal information. The unchecked dissemination of false information, fuelled by echo chambers and filter bubbles, has eroded trust in information sources and sown societal discord. Moreover, prolonged exposure to meticulously curated online personas has been linked to heightened feelings of anxiety, depression, and diminished self-esteem among users. However, amidst these challenges, suggestions for responsible usage and mitigation strategies have been put forth. Emphasizing digital literacy, critical thinking, and diverse content consumption stands as pivotal strategies to counteract misinformation and filter bubbles. Enhanced regulation concerning data privacy, content moderation, and algorithmic transparency is crucial to creating a safer digital environment. Promoting civil discourse, fact-checking mechanisms, and community-building initiatives contribute to fostering a more inclusive and respectful online space.

The future landscape of social networks is poised for transformation driven by emerging technologies like AR/VR integration, personalized content delivery, and the ethical integration of AI and blockchain. However, the responsible evolution of social networking platforms hinges upon a collaborative effort among various stakeholders. Educators, policymakers, tech companies, and users must work in tandem to harness the potential of social networks for positive societal impacts while mitigating their negative repercussions on individual well-being and societal cohesion. The complexities of social networks require a delicate balance between technological innovation and ethical practices. Encouraging responsible usage, fostering digital literacy, and enhancing regulation stand as imperative measures to steer social networks toward a future where they serve as avenues for meaningful connections and positive societal influences while mitigating their adverse impacts.

REFERENCES

- Adalı, S., & Golbeck, J. (2014). Predicting personality with social behavior: a comparative study. *Social Network Analysis and Mining*, 4, 1-20.
- Girard, Y., Hett, F., & Schunk, D. (2015). How individual characteristics shape the structure of social networks. *Journal of Economic Behavior & Organization*, 115, 197-216.
- Halko, S., & Kientz, J. A. (2010). Personality and persuasive technology: an exploratory study on health-promoting mobile applications. In *Persuasive Technology: 5th International Conference, PERSUASIVE 2010, Copenhagen, Denmark, June 7-10, 2010. Proceedings 5* (pp. 150-161). Springer Berlin Heidelberg.
- Kim, Y. A., & Song, H. S. (2011). Strategies for predicting local trust based on trust propagation in social networks. *Knowledge-Based Systems*, 24(8), 1360-1371.
- Lepri, B., Staiano, J., Shmueli, E., Pianesi, F., & Pentland, A. (2016). The role of personality in shaping social networks and mediating behavioral change. *User Modeling and User-Adapted Interaction*, 26, 143-175.
- Oyibo, K., Orji, R., & Vassileva, J. (2017, July). The influence of culture in the effect of age and gender on social influence in persuasive technology. In *Adjunct publication of the 25th conference on user modeling, adaptation and personalization* (pp. 47-52).
- Shmueli, E., Singh, V. K., Lepri, B., & Pentland, A. (2014). Sensing, understanding, and shaping social behavior. *IEEE Transactions on Computational Social Systems*, 1(1), 22-34.
- Tadesse, M. M., Lin, H., Xu, B., & Yang, L. (2018). Personality predictions based on user behavior on the facebook social media platform. *IEEE Access*, 6, 61959-61969.
- Ziegler, C. N. (2009). On propagating interpersonal trust in social networks. In *Computing with social trust* (pp. 133-168). London: Springer London.