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Social Media as the Pulse of National Security Threats: A Framework for Studying How Social Media Influences Young People's Safety and Security Situation Picture

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Abstract: Social media is becoming more and more of a security threat. Dissatisfaction with the content and quality of the information flow is increasing not only at the nation-state level, but also at the level of people's everyday lives. Social media is one of the key channels for distributing disinformation and it has become a key instrument for influencing political activity in particular. It is difficult to single out individual contributors or culprits when it comes to the dissemination of disinformation due to the rhizomatic nature of the internet and the Western approach to using social media. The same principles such as ease of access to the network, democracy, freedom of speech, and knowledge equality have also made it easier to distribute disinformation. Presidents Trump and Putin have created a new global power order by using information for their own political purposes. At the same time, small countries like Finland have become increasingly dependent on the global information flow, and are likewise increasingly subjected to the proliferation of disinformation. Hence, social media has become an ever-more crucial factor in terms of national security as well as citizens' daily lives.

This study focuses on social media as a platform for disinformation distribution, and aims to mirror the theoretical evolution of social media in the Finnish discussion about national security. The empirical data will be collected by surveying young Finns who will take part in compulsory military service. In this paper, we create the framework for the research project, which explores young people's agency in social media. We specifically address issues related to information influence, propaganda, and disinformation. Our perspective is on society's comprehensive security and we seek to investigate the way in which social media influences young people's safety and security situation picture. In addition, we explore whether the discussion in social media influences attitudes towards both personal safety and national security. The study is part of a broader Academy of Finland research project entitled "Media and Society".

Keywords: disinformation, security, social media, society, young people, generalized trust

1. Introduction

Social media has become a mainstream resource for young people; it is a core part of their everyday reality and not just a peripheral place to visit and share ideas with others. Young people's connections and networks in social media also provide them with the opportunity to engage in different types of political discussions in society. Notably, the excessive use of social media is also connected to mental problems, insecurity and poor life management (Salmela-Aro et al., 2017), as well as to problems with identity formation (Mannerström et al., 2018).

By the same token, social media has also become a security threat. Distributing disinformation and exerting an influence at all levels and in all sectors of society is the new global power order in the rhizome of the internet. Reports released by the US Senate's Intelligence Committee revealed attempts by Russia's Internet Research Agency (IRA), a Russian social-media propaganda machine, to divide Americans and influence the 2016 presidential elections via disinformation efforts. They showed that IRA had become conversant with American trolling culture and was reaching its targets through YouTube, Instagram, Facebook, and Twitter. The influence campaign involved 187 million 'engagements'. They also found that IRA trolls had used comical memes to

change people's minds. A meme is a powerful tool of cultural influence that is capable of changing people's values and behaviour. According to the report, "over the past five years, disinformation has evolved from a nuisance into high-stakes information war" (Lyngaas, 2018; Thompson & Lapowsky, 2018).

This paper is part of a larger Academy of Finland research programme entitled "Agents – Young People's Agency in Social Media", the main objective of which is to examine how young people (aged 13–19) act in social media environments both as influencers and targets of influence, focusing on both the good and the bad effects – the light and dark sides – of their agency. Our role in this multi-disciplinary consortium is to include the military science discipline and to study the dark side of young people's agency in social media. We approach the subject from the perspective of society's comprehensive security and investigate whether activities in social media influence attitudes towards personal and national security, and young people's safety and security situation picture. Due to the predominant role that trust plays in stable societies, we consider that the institution-centric approach to generalized trust can provide good theoretical premises for studying the connection between social media and perceived national security threats among young people.

Several research methods will be used during the four-year project, and data collected by other members of the research consortium will be at our disposal. In addition, the consortium will jointly conduct a nationally representative survey among young people aged 13–19 in two phases. We will gather data by holding security cafés and individual/focus group interviews in 2019 and 2021, and by collaborating with police officers working with young people and social media. We will also collaborate closely with other national security institutions with whom we share concerns about the influence of social media agency. During the research project, we will also make use of international contributions and mobility data collected by key universities.

Collaborative methods such as security cafés work well when gathering data on adolescents of call-up age and conscripts, as they embrace the ideals of deliberative democracy and enable information derived from versatile and wide-ranging small group discussions to be integrated and crystallized into a common viewpoint (Raisio et al., 2017). The opportunities afforded by deliberative democracy are often connected to so-called wicked problems (Hurlbert and Gupta, 2015; Raisio and Vartiainen, 2015). The security café method is based on the world café method, where café refers to a cosy and informal atmosphere for discussions. During this process, it is essential that small groups are facilitated and every participant is encouraged not only to take an active role in the discussion but also to be an active listener (Carson, 2011; Raisio et al., 2017). Each security café will have five facilitated heterogeneous small groups with five to seven participants, and the discussions will be recorded. During the security cafés, each participant will also fill in an idea rating sheet, which is a transparent and participatory tool for decision-making (Diceman, 2010).

A key aim of this paper is to create aspects of the theoretical framework for our forthcoming research. To this end, we will specifically address issues related to young people in social media and the effect of information influencing, propaganda, and disinformation on national security.

2. Comprehensive security and generalized trust

The Finnish concept of comprehensive security entails securing society's vital functions through collaboration between the authorities, the business community, non-governmental organizations and citizens (Security Strategy for Society, 2017). According to the concept, the role of psychological resilience, one of the vital functions, has been underlined as a fundamental factor underpinning the security of Finnish society. Citizens' trust in each other and official institutions, also known as 'generalized trust' (Rothstein & Stolle, 2008), has a major impact on society's susceptibility to disinformation and resilience in the event of disruptions after the realization of a threat (City of Helsinki, 2018, 8). In this context, building trust towards the government and policy-implementing bodies, such as the police, military or court, is necessary for maintaining social order and avoiding serious clashes. Generalized trust is seen as an important precondition for a stable and peaceful society where people tend to cooperate rather than defect (Putnam, 2000; Zak & Knack, 2001; Rothstein & Stolle, 2003). It is suggested that societies with higher public trust, such as those in the Nordic countries, are perceived to be more resistant to information influence, as generalized trust promotes a sense of security and facilitates cooperation and interaction among citizens (City of Helsinki, 2018; Committee on Foreign Relations, 2018; Pamment et al., 2018). Generalized trust is usually also a reliable indicator of social cohesion (Stolle, 2002). If many people have the feeling that others cannot be trusted, it will be more difficult for a community

to pursue collective-action efforts and to provide for collective goods. In the social sphere, generalized trust facilitates life in diverse societies, fosters acts of tolerance, and acceptance of otherness (Uslaner, 2002). Generalized trust extends beyond the boundaries of face-to-face interaction and incorporates people who are not personally known to each other (Uslaner, 2002). As opposed to society-centred approaches to generalized trust (Fukuyama, 2001; Putnam, 2000), the institutional approach suggests that the state's institutions facilitate the development and creation of generalized trust, providing a space with benefits to encourage trust and reciprocity (Rothstein and Stolle, 2008; Kumlin & Rothstein, 2010). These institutions not only facilitate, but also maintain existing generalized trust (Rothstein & Stolle, 2008). If people perceive government institutions as functioning properly and fair, they are likely to perceive society as being safer and more secure, as well as to believe that most people have reason to behave honestly, and hence that most people can be trusted (Newton, 2007; Rothstein & Stolle, 2008; Berg & Johansson, 2016).

One of the key factors affecting the subjective experience of safety and security among young people is the trust that they have towards institutions that provide security (Limnell & Rantapelkonen, 2017). Information is a key issue when it comes to building and establishing trust between the government and the general public (Håkansson & Witmer, 2015). The public perception of the security authorities is a function of the information to which citizens are exposed, and the criteria by which the public evaluate the actual performance, accountability and transparency of the authorities (Blind, 2007; Kasher, 2003; Boda, 2017). In citizens' everyday lives, the police have the most visible presence among the safety and security authorities, and a high level of trust in the police force is a significant resource in Finland (95% of the population) (Ministry of the Interior, 2018; City of Helsinki, 2018). Nevertheless, in the complex information environment, targeted information campaigns can have an impact on how trustworthy the national security and safety bodies are perceived to be by citizens (Pamment et al., 2018). In the liberal Western society, opinion formation takes place in the public sphere (Gripsrud et al., 2010), in which different narratives can strongly influence the opinion of the masses and undermine the authority and trustworthiness of the government and public institutions (Håkansson & Witmer, 2015; Pamment et al., 2018; City of Helsinki, 2018). Therefore, it is important to consider why citizens place their trust in national authorities and how information influence activities can exploit this.

This also raises the important question of why public sector communication often fails. This is primarily due to an over-reliance on anonymous institutional communication and neglecting the need for personal engagement via social media. In other words, there is a lack of information based on contextual considerations and a lack of understanding about micro-level communication networks at the individual level (Canel & Luoma-aho, 2018, 4). Citizens, and young people in particular, don't want to communicate with anonymous institutions, but rather engage personally 'face-to-face' and enter into a dialogue with authorities about issues that matter to them. Citizens live in a kind of 'social foam', in which they are simultaneously interconnected and isolated, with several different conditions and atmospheres shaping their behaviour and expectations (Canel & Luoma-aho, 2018, 6). Any perceived experiences of unfair treatment or not getting what is rightfully theirs can escalate a minor grievance into a major crisis, typical of social media platforms (Canel & Luoma-aho, 2018, 10).

Public authors also need to take into account that the distinction between private messages and public messages has disintegrated. Often in a crisis situation, a private message sent by an institution employee can suddenly turn into a public message. A typical example of a so-called whistle-blower case concerned Julian Assange, computer programmer and editor of WikiLeaks. Assange founded WikiLeaks in 2006, and came to international attention in 2010 when WikiLeaks published a series of leaks including the *Collateral Murder* video (April 2010), the Afghanistan war logs (July 2010), the Iraq war logs (October 2010), and Cablegate (November 2010). Assange's story is a prime example of the communication possibilities that exist in the information age to blur classical barriers and categories based on legal and moral traditions (WikiLeaks, 2018).

If we want to understand the modern ways of creating trust and safety among young people, as well as security at the national level, we need to look at the environments in which they form their perceptions of reality and the world.

3. Young people in social media

Video streaming, livestreaming, snapping and vlogging are forms of youth agency on digital media platforms. Through these channels, young people share and document their everyday lives in real time in various (visual)

social media environments. Consequently, terms like ‘Facebook Eye’ have been coined to describe the tendency to perform and become visible through the constant gaze of the other(s) (Jurgenson, 2014). According to a recent survey among US teens, authenticity and intimacy enhance attention and views (Ault, 2014) in social media environments. Performances by the private authentic self are the most valuable commodities for becoming a social media celebrity (Jerslev, 2016). Indeed, a considerable part of the DIY culture (Jenkins, 2006) of the internet and social media builds on the idea of authenticity and real-life representations, which are characteristic of social media activities (Hjarvard, 2013).

In order to understand the agency of young people in constructing their identities, we should understand that the versatile digital social realities they are surrounded by are by no means unified. Many of the new digital/social media attention economies build on the central currencies of intimacy and authenticity (Raun, 2018, 104), and terms like ‘Instafamous’ (Marwick, 2015) are used to describe the cultural drive towards attractive but fake self-representation. The question of currency is crucial. In many social media environments, positive and entertaining self-disclosures are what enhance social attention and increase the feeling of connection (Utz, 2015). However, there are an equal number of varied digital social realities in which negative affect is expressed and produced (Berryman et al., 2018). As argued, the currencies on which these digital realities are built are always “a negotiation of technological affordances, cultural norms and regulation” (Raun, 2018, 104).

It is suggested that the agency on digital social media platforms is a type of “networked individualism” (Rainie & Wellman, 2012; Quinn & Papacharissi, 2017) that can be explained from the point of view of social connection (Sassi, 2002; Anttiroiko, 2003). However, the methods of building this agency vary drastically, as a recent national study on young people’s digital user profiles shows (Karakainen & Karakainen, 2018). The most active users were males, active in gaming environments, in information seeking/sharing, and in social sharing. They also used various digital platforms widely. Females were the most active group in social sharing, and they also used a fairly wide range of digital environments for information seeking. Interestingly, the most passive group, who joined very few digital environments and rarely, consisted of young males. Just as the methods of building agency and “the authentic” vary, the means of information influence are also manifold.

Information influencing activities have malicious intentions, aimed at affecting the perceptions, behaviour, and decisions of the target group. The different techniques are geared towards exploiting shortcuts in our thinking either by learning about us through the data we share, or by applying ‘nudges’ that manipulate our cognitive biases (Pamment & Agardh-Twetman, 2018, 5). Adolescents are also targets of political, commercial and social information intended to influence their opinions and actions. While sharing their personal data in social media, they are not necessarily fully cognizant of how their data is actually being used. They also have difficulties in differentiating between objective journalistic content and opinion-based information (Tuukkanen & Wilska, 2015). Young people with weak digital skills are often more fragile and vulnerable than their more highly skilled peers, and thus easily exposed to hostile actors, adversaries or trolls that use social media for their own ends. Social media is also exploited by cyber-bullies, as well as by perpetrators of more extreme violence (Peterson & Densley, 2017; Norri-Sederholm et al., 2018).

The increasing influence of bloggers and vloggers is argued to be a sign of a “demotic turn” in society, enabling people to gain charismatic authority and to form person cults, duly affecting the worldviews and values of their followers (Turner, 2010). In some communities, person cults may be more harmful and based on crime and hate or extreme ideologies (Keipi et al., 2017). One example is the so-called radical right-wing political movement in the US and Europe, whereby young and often unemployed men spend their time on social media sites and become influenced by Fascist ideology. Nowadays, social media also offers platforms for the dissemination of propaganda, hoaxes, and fake news to dupe the public (Agarwal & Bandeli, 2018). Social media can also be used as a weapon for destructive and defensive purposes, characterized by the phrase ‘information warfare’ (Munro, 2005). Weaponized information is one way to destabilize the population. The best protection against this depends on users’ own action and knowledge (Forno, 2018). This is particularly important in the case of adolescents, who are in the process of constructing their identities and worldviews.

4. Discussion

Social media has altered the way we become informed and form opinions. Our perspective in this paper is that the malicious use of social media is posing more and more of a security threat. Among other things, it is one of

the key channels for distributing disinformation, a key tool for influence in politics, and a platform for cyber violence. Weaponized information is one way to foster polarization and consequently to destabilize a population. Citizens, and particularly young people who use social media applications on a daily basis for long periods of time, may be constantly exposed to information influencing.

To better understand the connection between social media and security, it is of paramount importance to understand the plethora of digital social realities that young people are surrounded by. Different currencies, such as intimacy and authenticity, are used in different ways to enhance social attention and a feeling of connection. Studying the relationship between identity formation and different social media platforms can provide good premises for understanding young people's multi-faceted forms of agency in social media. Furthermore, we argue that due to the predominant role that trust plays in stable societies, the institution-centric approach to generalized trust can provide a good theoretical basis for the study. Trust towards policy-implementing bodies, such as the police, is important in creating generalized trust and has a major impact on how individuals perceive their personal and national security.

However, the inherent challenge posed by social media for the public sector is that it is a space that is impossible to govern; its strengths lie in speed of communication, freedom of speech, and lack of centralized control. Any personal experience of unfair treatment can escalate a small issue into a major crisis in social media. Furthermore, young social media citizens do not trust the classical one-way communication channels (TV, radio, newspapers) as such. Instead, they use various communication platforms and channels simultaneously to create their own media mix. Hence, it is crucial to learn more about how trust can be built within these particular contexts, and how various digital social realities are used to undermine the authority and trustworthiness of public institutions.

In this paper, we have described aspects of a theoretical framework for studying how the social media agency of young people shapes their understanding and situation picture of national and personal safety and security in the context of Finland's comprehensive security. The framework will be used in the forthcoming research project, where the results are expected to contribute to the academic debate on the relationship between social media and one's sense of safety and security, and to produce new multi-disciplinary scientific knowledge on young people's multi-faceted forms of agency in this sphere. We also expect to identify and understand the mechanisms that advance, restrict and regulate young people's ways of processing and understanding the current flows of (dis)information in social media. The outcomes are expected to enhance the national preventive efforts in sustaining young people's sense of safety and security, thereby ensuring comprehensive security.

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6. References

- Anttiroiko, A-V. (2003) "Kansalaisten osallistuminen, osallisuus ja vaikuttaminen tietoyhteiskunnassa" [Citizen participation, being involved and exerting an influence in the information society], in P. Bäcklund (ed.) *Tietoyhteiskunnan osallistuva kansalainen. Tapaus Nettimaunula* [A participating citizen in the information society. The Nettimaunula Case], Helsingin kaupungin tietokeskus, Helsinki, pp. 11–31.
- Agarwal, N. and Bandeli, K.K. (2018) "Examining strategic integration of social media platforms in disinformation campaign coordination", *Defence Strategic Communication*, Vol 4, Spring, pp. 173–206.
- Ault, S. (2014) "Survey: YouTube stars more popular than mainstream celebs among US teens", *Variety* 5 August.
- Berg, M. and Johansson, T. (2016) "Trust and safety in the segregated city: contextualizing the relationship between institutional trust, crime-related insecurity and generalized trust", *Scandinavian Political Studies*, Vol 39, No. 4, pp. 458–48.
- Berryman, R. and Kavka, M. (2018) "Crying on YouTube: Vlogs, self-exposure and the productivity of negative affect", *Convergence*, Vol 24, No. 1, pp. 85–98.

- Blind, P.K. (2006) Building trust in government in the twenty-first century: Review of literature and emerging issues, *UNDESA 7th Global Forum on Reinventing Government, 26–29 June 2007, Vienna*, United Nations Dept. of Economic Social Affairs (UNDESA), New York.
- Boda, Z. and Medve-Balint, G. (2017) “How perception and personal contact matter: the individual determinants of trust in police in Hungary”, *Policing Society*, Vol 27, No. 7, pp. 732–749.
- Canel, M-J. and Luoma-aho, V. (2018) *Public Sector Communication. Closing Gaps Between Citizens and Public Organizations*, Blackwell, USA.
- Carson, L. and Hartz-Karp, J. (2005) “Adapting and combining deliberative designs”, in J. Gastil and P. Levine(eds.) *The deliberative democracy handbook*, Jossey-Bass, San Francisco, pp. 120–138.
- City of Helsinki (2018) “Helsinki in the era of hybrid threats – Hybrid influencing and the city”, Publications of the Central Administration, Helsinki, Vol 22.
- Committee on Foreign Relations (2018) “Putin’s Asymmetric Assault on Democracy in Russia and Europe: Implications for U.S. National Security”, *Washington DC: United States Senate*, January 10, 2018.
- Diceman, J. (2010) *Dotmocracy Handbook: A simple tool to help large groups find agreement*, [online], <http://library.uniteddiversity.coop/Decision Making and Democracy/dotmocracy handbook.pdf>.
- Forno, R. (2018) “Weaponized information seeks a new target in cyberspace: Users’ minds”, [online], <https://theconversation-com.cdn.ampproject.org/c/s/theconversation.com/amp/weaponized-information-seeks-a-new-target-in-cyberspace-users-minds-100069>.
- Fukuyama, F. (2001) “Social Capital, Civil Society and Development”, *Third World Quarterly*, Vol 22, No. 1, pp. 7–20.
- Gripsrud, J., Moe, H., Molander, A. & Murdock, G. (eds.) (2010) *The Idea of the Public Sphere: A Reader*, Lexington Books, Plymouth.
- Hjarvard, S. (2013) *The Mediatization of Culture and Society*, Routledge, London.
- Hurlbert, M. and Gupta, J. (2015) “The Split Ladder of Participation: A Diagnostic, Strategic, and Evaluation tool to Assess When Participation Is Necessary”, *Environmental Science & Policy*, Vol. 50, June, pp. 100–113.
- Håkansson, P. & Witmer, H. (2015) “Social Media and Trust — A Systematic Literature Review”, *Journal of Business and Economics*, Vol 6, No. 3, pp. 517–524.
- Kasher, A. (2003) “Public trust in a military force”, *Journal of Military Ethics*, Vol 2, No. 1, pp. 20–45.
- Jenkins, H. (2006) *Convergence Culture; Where old and new media collide*. New York University Press, New York.
- Jerslev, A. (2016) “Media Times In the Time of the Microcelebrity: Celebification and the YouTuber Zoella”, *International Journal of Communication*, Vol 10, No. 19, pp. 5233–5251.
- Jurgenson, N. (2012) “The Facebook Eye”, *The Atlantic*, 13 January, <http://www.theatlantic.com/technology/archive/2012/01/the-facebook-eye/251377/>.
- Karakainen, S-S., and Karakainen, M-T. (2018) “Tulevaisuuden toivot – Digitaalisten medioiden käyttö nuorten osallisuuden ja osaamisen lähteenä” [Hopes for the future – The use of digital media as a source of youth inclusion and competence], *Media & Viestintä*, Vol 41, No. 4, <https://journal.fi/mediaviestinta/article/view/77458>.
- Keipi, T., Näsi, M., Oksanen, A. and Räsänen, P. (2017) *Online Hate and Harmful Content*, Routledge, Abingdon.
- Knack, S. and Keefer, P. (1997) “Does Social Capital Have an Economic Payoff? A Cross-Country Investigation”, *Quarterly Journal of Economics*, Vol 112, No. 4, pp. 1251–1288.
- Kumlin, S. and Rothstein, B. (2010) “Questioning the New Liberal Dilemma: Immigrants, Social Networks, and Institutional Fairness”, *Comparative Politics*, Vol 43, No. 1, pp. 63–80.
- Limnell, J. & Rantapelkonen, J. (2017) *Pelottaako? Nuoret ja turvallisuuden tulevaisuus* [Are you afraid? Young people and the future of safety and security], Docendo, Helsinki.
- Lyngaas, S. (2018) “Russian disinformation ops were bigger than we thought”, *Cyberscoop*, [online], <https://www.cyberscoop.com/russian-information-operations-senate-intelligence-committee/>.
- Mannerström, R., Hietajärvi, L., Muotka, J., and Salmela-Aro, K. (2018) “Identity profiles and digital engagement among Finnish high school students”, *Cyberpsychology*, Vol. 12, No. 1. doi:10.5817/CP2018-1-2
- Marwick, A. E. (2015) “Instafame: Luxury selfies in the attention economy”, *Public culture*, Vol 27.1, No. 75, pp. 137–160.
- Ministry of the Interior (2018) “Police prioritise their duties well and are successful in performing them”, Press Release, 13.6.2018, [online], https://intermin.fi/en/article/-/asset_publisher/poliisi-priorisoi-tehtaviaan-oikein-ja-onnistuu-niissa-hyvin.
- Munro, I. (2005) *Information Warfare in Business. Strategies of control and resistance in the network society*. Routledge, London.

- Newton, K. (2007) "Social and Political Trust", in R. J. Dalton and H. D. Klingemann (eds.) *The Oxford Handbook of Political Behaviour*, Oxford University Press, Oxford.
- Norri-Sederholm, T., Huhtinen, A-M. and Paakkonen, H. (2018) "Ensuring Public Safety Organisations' Information Flow and Situation Picture in Hybrid Environments", *International Journal of Cyber Warfare and Terrorism*, Vol. 8, No. 1, pp. 12–24.
- Pamment, J. and Agardh-Twetman, H. (2018) *The role of communicators in countering the malicious use of social media*, NATO Strategic Communications Centre of Excellence.
- Pamment, J., Nothhaft, H., Agardh-Twetman, H. and Fjällhed, A. (2018) "Countering Information Influence Activities: The State of the Art, version 1.4", 1 July, Department of Strategic Communication, Lund University, [online], 27 Dec 2018, <https://www.msb.se/RibData/Filer/pdf/28697.pdf>.
- Peterson, J. and Densley, J. (2017) "Cyber violence: What do we know and where do we go from here?", *Aggression and Violent Behaviour*, Vol. 3, pp. 193–200.
- Putnam, R. D. (2000) *Bowling Alone: The Collapse and Revival of American Community*, Simon & Schuster, New York.
- Quinn, K. and Papacharissi, Z. (2017) Our Networked Selves: Personal Connection and Relational Maintenance in Social Media Use, *The SAGE Handbook of Social Media*, Sage, London.
- Rainie, L. & Wellman, B. (2012) *Networked individualism: The new social operating system*, MIT Press, Cambridge MA.
- Raisio, H. and Vartiainen, P. (2015) "Accelerating the Public's Learning Curve on Wicked Policy Issues: Results from Deliberative Forums on Euthanasia", *Policy Sciences*, Vol 48, No. 3, pp. 339–361.
- Raisio, H., Puustinen, A., Hyytiäinen, M. and Wiikinkoski, T. (2017) *Kansan pulssilla: Tarkastelussa deliberatiiviset turvallisuuskahvilat* [The people's pulse: Examining deliberative security cafés], University of Vaasa, Vaasa, Finland.
- Raun, T. (2018) "Capitalizing intimacy: New subcultural forms of micro-celebrity strategies and affective labour on YouTube", *Convergence*, Vol 24, No. 1, pp. 99–113.
- Rothstein, B., and Stolle, D. (2003) "Social Capital, Impartiality, and the Welfare State: An Institutional Approach", in M. Hooghe and D. Stolle (eds.) *Generating Social Capital: The Role of Voluntary Associations, Institutions and Government Policy*, Palgrave-Macmillan, New York.
- Rothstein, B., and Stolle, D. (2008) "The state and social capital", *Comparative Politics*, Vol 40, No. 4, pp. 441–459.
- Salmela-Aro, K., Upadyaya, A., Hakkarainen, K., Lonka, K. and Alho, K. (2017) "The Dark Side of Internet Use: Two Longitudinal Studies of Excessive Internet Use, Depressive Symptoms, School Burnout and Engagement Among Finnish Early and Late Adolescents", *Journal of Youth and Adolescence*, Vol. 46, No. 2, pp. 343–357.
- Sassi, S. (2002) "Kulttuurinen identiteetti ja osallisuus" [Cultural identity and participation], in P. Bäcklund, J. Häkli and H. Schulman (eds.) *Osalliset ja osaajat. Kansalaiset kaupungin suunnittelussa* [Participants and experts. Citizens in city planning], Gaudeamus, Helsinki, pp. 58–74.
- Security Strategy for Society (2017) Resolution of the Finnish Government, Vol 2, November 2017, The Security Committee, [online], 28 December 2018, https://turvallisuuskomitea.fi/wp-content/uploads/2018/04/YTS_2017_english.pdf.
- Thompson, I. and Lapowsky, I. (2018) "How Russian trolls used meme warfare to divide America", *Wired Security*, [online], 17 December 2018, <https://www.wired.com/story/russia-ira-propaganda-senate-report/>.
- Stolle, D. (2002) "Trusting Strangers: The Concept of Generalized Trust in Perspective", *Österreichische Zeitschrift für Politikwissenschaft*, Vol 4, No. 4, pp. 397–412.
- Turner, G. (2010) *Ordinary People and the Media: The Demotic Turn*, Sage, London.
- Tuukkanen, T. and Wilska, T-A. (2015) "Online environments in children's everyday life: Children's, parents' and teachers' points of view", *Young Consumers*, Vol 16, No. 1, pp. 3–16.
- Uslaner, E. (2002) *The Moral Foundation of Trust*, Cambridge University Press, New York.
- Utz, S. (2015) "The function of self-disclosure on social network sites: Not only intimate, but also positive and entertaining self-disclosures increase the feeling of connection", *Computers in Human Behavior*, 45, pp. 1–10.
- WikiLeaks. (2018) [online], https://en.wikipedia.org/wiki/Julian_Assange.
- Zak, P. J., & Knack, S. (2001) "Trust and Growth", *Economic Journal*, Vol 111, No 470, pp. 295–321.