



Interdisciplinary Studies Journal

Volume 3, Number 1 2013

Special Issue on Security, Safety and Social Responsibility



LAUREA
UNIVERSITY OF APPLIED SCIENCES

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Editor-in-Chief

Tarja Laakkonen
Laurea University of Applied Sciences
isj@laurea.fi

Guest Editors

Jyri Paasonen
Laurea University of Applied Sciences

Minna Mattila
Laurea University of Applied Sciences

Cover picture

“Sopusoinnussa” (2008) by
Armi Jyrkkiö

ISSN 1799-2710 (online)

Editra Prima Oy, Helsinki 2013

LAUREA UNIVERSITY OF APPLIED SCIENCES
2013

ISJ

Interdisciplinary Studies Journal

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In This Issue

Foreword	5
<i>Minna Mattila</i>	
Different Views on Defining Safety, Security and Social Responsibility	7
<i>Minna Mattila</i>	
Gender: the Best Predictor of Criminal Behaviour?	21
<i>Tuomas Tammilehto</i>	
Violence in the Finnish Workplaces: A Review of Literature	31
<i>Simo Salminen</i>	
Navigator Help Desk in a Shopping Center TRIO Counseling Model as an Urban Education Model....	39
<i>Eija Mattila, Piia Suomi, Niina Koskelin & Pia Solin</i>	
Restoring a Community's Sense of Security after a Fire - the Residents' Meeting as Form of Community Intervention	52
<i>Tiina Korvenranta, Annika Manninen & Sointu Silvola</i>	
Lost in Navigation; Developing a Survival Kit for Lappish Wilderness without Communication Signals and Power Outlets	63
<i>Jyri Rajamäki & Juha Knuuttila</i>	
International Tax Planning, Tax Avoidance and Corporate Social Responsibility	73
<i>Reijo Knuutinen</i>	
Region's Socio-Demographic Characteristics as Interpreters of Crimes Directed to the Business Establishments	85
<i>Anssi Keinänen, Jyri Paasonen & Pasi Karppinen</i>	
Security, Safety and Social Responsibility as Laurea's Area of Focus	94
<i>Minna Mattila</i>	
Book review	
Steinberg, Richard M. Governance, Risk Management, and Compliance. It Can't Happen to Us – Avoiding Corporate Disaster While Driving Success	107
<i>Marita Salo</i>	
LbD in Practice	
Laurea Simulated Hospital – Technical Solutions to Simulate Real Life Medical and Nursing Situations	112
<i>Jorma Jokela, Annukka Puotiniemi & Seija Paasovaara</i>	

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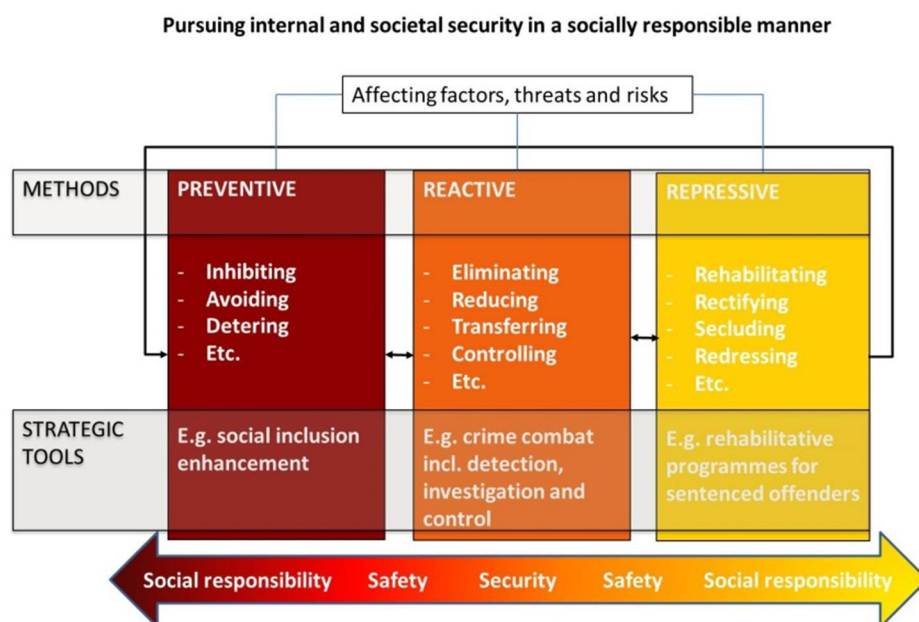
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Foreword

Minna Mattila, Guest Editor

This journal, *the Interdisciplinary Studies Journal (ISJ)*, is an international forum exploring the frontiers of innovation, creativity and development. This journal does not limit itself to traditions specifically associated with one discipline or school of thought *per se* but embraces consideration of emerging issues assessing novel terrains and encouraging change. ISJ aims to publish papers on diverse subjects related but not limited to service innovation and design, nursing and coping home, security/safety and social responsibility, and student entrepreneurship. The papers are expected to contribute to raising awareness and rethinking the concept of interdisciplinarity. ISJ serves to both industry and academic communities by advancing the premises for implementing research into practice. These quarterly journal issues are published under a distinguished list of editors, including special issues, comprising an expected annual volume of over 700 pages. ISJ is listed in the Ulrich's Periodicals Directory, and indexed and abstracted in the ProQuest.

The four focus areas in which Laurea will enhance the development of the region, students and partner organisations are defined in Laurea's strategy. In these four focus areas Laurea produces state-of-the-art competence for the benefit of its operating region. The Security, Safety and Social Responsibility focus area could be described through the human security paradigm which refers to a multidisciplinary approach towards understanding the concept of security. The human security is said to consist of several fields of study such as international relations, strategic and development studies, and human rights. In this focus area the security is seen as an enabler, outcome and integral part of other subject fields. Similarly, perception on social responsibility in this focus area goes well beyond the corporate social responsibility. In fact, one might refer to our understanding of social responsibility, which is to be taken here more as a way of doing something and approaching issues, as responsibility for the social development or societal responsibility.



The distinctive strength of Laurea University of Applied Sciences is its comprehensive research and educational activities covering well the broad field of security, safety and social responsibility from the preventive measures all the way through perhaps the more technologically-oriented reactive tools to the repressive methods such as rehabilitation. New skills and knowledge see the daylight in this focus area as the fields of Security Management, Correctional Services, Business Management incl. legal studies, Health Care and Social Services, Business Information Technology immerse their best practices under an interdisciplinary vision.

Security, Safety and Social Responsibility focus area concentrates on enhancing both the internal and societal security first and foremost. The aspects of social inclusion are particularly included as reducing social exclusion contributes to maintain security and safety in society. The trailblazer research and development projects, international and externally funded, representing this focus area are related but not limited to for example border security, cyber and information security, safety and security on campus and in the educational institutions, organisational security, and to social exclusion prevention (e.g. advancing public health and welfare, reducing security risks stemming from substance abuse, and safety of young adults).

The contributions in this unrefereed special issue on “Security, Safety and Social Responsibility” stem from both academics and practitioners. We are delighted to present to you a variety of research articles and practical papers representing the chosen subject fields covered by this special issue. **M. Mattila** discusses in her paper the different views on defining safety, security and social responsibility. The article by **Tammilehto** compiles different theories and views about offence indicators and examines how much emphasis criminology has put on the four variables that have been acknowledged to correlate with crime. **Salminen** examines violence at Finnish workplaces in his paper which is a literature review of Finnish studies on occupational violence. **E. Mattila et al.** present the various experiences based on the TRIO Counseling Model. The patent pending Navigator Help Desk presented in this paper promotes the health and welfare of its customers and aims to go from local to global. The purpose of the **Korvenranta et al.** paper is to introduce one form of community-based psychosocial support method. Fire is used as an example situation in this paper as it requires a special need for psychosocial support. **Rajamäki et al.** argue in their paper that GNSS-based tracking systems enable many possibilities for improved safety and security response especially in remote and sparsely populated areas. **Knuutinen** describes the contested concept of corporate social responsibility especially in the context of income taxation. Particularly, his paper reviews international tax planning and tax avoidance in the light of corporate social responsibility. **Keinänen et al.** study the effect of regional factors on establishments’ possibility of becoming a victim of a crime as well as the appearance of distraction elements in the immediate surroundings. The strength of their paper is that the information used for analyses about crimes is not based on registers but the companies’ own notifications. **M. Mattila** addresses safety, security and social responsibility as one of Laurea’s focus areas in R&D. In her paper, Mattila presents holistic, multidisciplinary viewpoints which are characteristic to this focus area. **Salo** examines in her book review the terms of corporate responsibility and governance, risk management and compliance as presented by Steinberg in his text (2011). Salo argues for example that the common nominator for both above mentioned ones is business ethics. **Jokela et al.** introduces Laurea Medical and Care Simulation Center, which is a multi-professional training center focusing on simulating Crisis Resource Management and Patient Safety technologies. Laurea is well-known for its development-based learning model Learning by Developing (LbD) and was appointed in its entirety by Finnish Higher Education Evaluation Council as a Centre of Excellence for 2010-2012 for student-centered R&D work integrated in learning.

Different Views on Defining Safety, Security and Social Responsibility

Dr Minna Mattila, Laurea University of Applied Sciences, LbD and Competence Management Services, Espoo, Finland

Abstract

Security is a contested concept lacking a widely approved definition. Sometimes it is defined through the closely related concepts of security culture, security atmosphere and security management. While security refers more to protecting oneself from planned acts of malicious mischief, safety is related more to preventing an unintentional course of events and/or unusual circumstances such as natural phenomena from damaging a person, an organisation or a nation. Social responsibility is an ordinary and contemporary concept and as such its definition appears to vary depending on the discourse and context. Social responsibility can be perceived for example through the trinity of economic, social and environmental development principles. The current literature does not provide a deep conceptual analysis for understanding and classifying these three concepts conjointly. This article aims to address the different views on defining safety, security and social responsibility, and thus contribute to clarifying the relations between these terms.

Keywords

Safety, Security, Social Responsibility

Discussing safety and security

The concept of security is by no means new, but security as a field of science is relatively young and immature, which is why also the conceptual analysis in the field is still in its infancies and meta-analytical approach of defining the used terminology is yet to be established. According to Acharya (2002), the security studies entered a new era after the 9/11 terrorist attacks, which is characterised by newly defined security threats and new means of warfare. Security remains still a so-called contested concept (Smith 2002) but it can be addressed for example through different schools of thought: constructivist, critical, feminist, and post-structuralist security studies, as well as the

Copenhagen School in security (see e.g. Balzacq 2011, 94-95) and human security.

Reiman et al. (2006, 2008; in Reiman 2008) present a view point bridging the concept of security together with the organisational effectiveness, operational quality and wellbeing at work. According to his work, the security studies and the development of security as a concept, dates all the way back to the Second World War Era when security was mostly seen as usability of technical systems. Starting from the 1980s, the nuances from attitudinal studies and behavioural science started blending in with the concept of security. Security as an outcome of the organisational variables and human factors interaction was first observed in early 2000. Today in the so-called

fourth cycle of security studies and development, Reiman et al. (2006, 2008; in Reiman 2008) define security mostly as an emergent attribute of a socio-technical system and a dynamic and continuous process.

Security has multiple meaning (see e.g. Sachs 2003). The complexity of this term has been well-described for example in Juha Vuori's (2006) presentation which alone presents 11 different

approaches to the concept of security. Ole Wæver (in Vuori 2006) has analysed the security sectors as societal, political, military, environmental or economic (see also e.g. Buzan 1983; Laitinen in Kupi et al. 2010). The different dimensions of security can be realised on international, national, regional, organisational or individual level (see also e.g. Buzan 1983; Hyvärinen 2002 in Kupi et al. 2010).

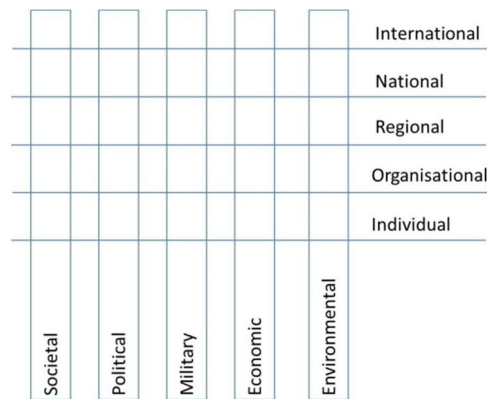


Figure 1 Conceptual layers

The different dimensions of security can be also modeled as a variety of security threats targeting any of the given sectors. A risk can be classified based on its occurrence or based on the nature of the events following the occurrence (Leppänen 2006, 31). The risks and threats affecting the perceived safety and security can be presented for example as follows (Kansallinen kyberturvallisuusstrategia...2011):

Objective risk, subjective risk and the stated risk together form so-called sense of safety, which is one of the five basic needs of a human-being defined by Maslow (see e.g. Jyrkämä 2009). While security refers more to protecting oneself from planned acts of malicious mischief, safety is related more to preventing an unintentional course of events and/or unusual circumstances such as natural phenomena from damaging a person, an organisation or a nation.

$$\text{Intention} \times \text{Capability} = \text{Threat}$$

$$\text{Probability} \times \text{Effect} = \text{Risk}$$

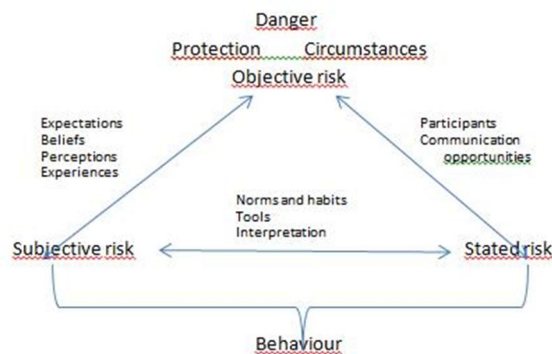


Figure 2 The relations between objective, subjective and stated risk (translated and adapted from Reiman 2008)

It has been written in the national Security Strategy for Society (2010, 15) that “it is not possible or even relevant to define clear boundaries between threats of different levels because of their interaction and interdependency”. For the very same reasons, it is not relevant to try to specifically draw lines between the different dimension of security and safety. When following today’s active discussion around the security topics, one cannot help but wonder, whether it is possible to create new fields of security by just joining the word ‘security’ to almost any noun: toy security, food security, furniture security, cosmetics security, and so forth.

Internal security may actualise in relation to an individual or to a community (group of people or

organisation). Good internal security is a result of a variety of factors, and it means that everybody can live without a fear of being unsafe (Internal Security Programme 2008, 6). Depending on the source, national security can be seen either as an integral part of the societal security, or not. Nevertheless, while the private and commercial security sector actors may try to remove the societal threats, in Finland the responsibility for securing the nation is always with the State. National security may contain parallel dimensions with the global security e.g. in the field of international relations (<http://definitions.uslegal.com/n/nationalsecurity/>). Cyber security appears to be common and cutting feature to all the different security layers.

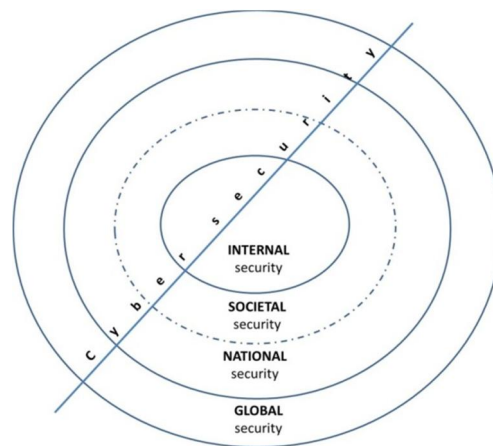


Figure 3 Security sectors

Each of the presented extents of security, comprise of several different subsectors and their actors. For example organisational security, which again contains at least 10 known other subsectors such as personnel security, information security and occupational safety, can be seen as part of internal security.

Security culture is a dynamic and adaptable state of affairs referring to organisation’s ability and willingness to understand what are secure and safe operations, what kind of dangers relate to organisational activities and how those can be prevented, and capability and willingness to operate safely by inhibiting dangers from realising and by advancing security in general, among other things. (Reiman et al. 2008, 3; 18-23).

Organisational culture and *security atmosphere* are closely related to the overall concept of security culture (Reiman et al. 2008, 20; 23-24). Even though the research in the fields of security atmosphere and security culture is very much intervened, on a conceptual level the term of security atmosphere is much older than the one of security culture. According to Guldenmun (2007 in Reiman et al. 2008, 23) security atmosphere is mostly present in the surface layer and mid-layers of the organisational culture whereas security culture would be mostly evidenced in the so-called deeper layers of the organisational culture.

Piisku et al. (2007) mapped in their thesis the perceptions of the top executives on security management. The Confederation of Finnish Industries defines *security management* as managerial leadership which takes into account the

security perspectives. Particularly, the Confederation of Finnish Industries approaches the security management from the organisational security view point; image, equity, personnel, knowledge reserves and operational environment including. Some of the typical security management tools are for example the security analyses, developing security guidelines, increasing knowledge on security and security auditing. (http://ek2.ek.fi/ytnk08/fi/yrittys_turvallisuus.php).

Government Resolutions on Security

Numerous Government adopted Resolutions on security and others similar have been published in Finland. Perhaps one of the latest ones is the third Internal Security Programme, whose title is A Safer Tomorrow. This programme aims to prevent, and present solutions to, challenges in everyday security. Two thirds of the proposed measures are preventive in nature (see Turvallisempi huominen – Sisäisen turvallisuuden ohjelma 2012, 26-56). The indicators of this programme monitor the trends in internal security. They are also used to monitor the implementation of the proposed measures. The indicators fall within the following categories (Turvallisempi huominen – Sisäisen turvallisuuden ohjelma 2012, 59-62):

- Safety and security in everyday life, in the home, and around the home
- Security on streets, in public spaces, and at educational institutions
- Safety and security in the workplace
- Safety on the move
- Safety of special needs groups
- Availability of crime victim services
- Referral of crime victims to services
- Safety of young people
- Business security
- Safety and security risks due to alcohol use

The Finnish Government Resolution "Security Strategy for Society" (2010) replaced the Resolution of 2006 on "Securing the Functions Vital to Society". The revised Resolution comes with an implementation plan. A special attention was paid to the preparedness of businesses towards the disturbance management, international dimensions of the societal security and crisis management. (see Yhteiskunnan

turvallisuusstrategia 2010). The possible disturbances presented in the strategy (in connection to threat scenarios) contain (Yhteiskunnan turvallisuusstrategia 2010, 80-81):

- Serious disturbances in the power supply
- Serious disturbances in the telecommunications and information systems – cyber threats
- Serious disturbances in transport logistics
- Serious disruptions in public utilities
- Serious disturbances in food supply
- Serious disturbances in the financial and payment systems
- Disruptions in the availability of public funding
- Serious disturbances in the health and welfare of the population
- Major accidents, extreme natural phenomena and environmental threats
- Terrorism and other criminality that endanger social order
- Serious disturbances in border security
- A political, economic and military pressure
- The use of military force

Furthermore, the above mentioned Security Strategy for Society (2010, 83-84) describes such strategic tasks which are in the core of securing society's vital functions. Each ministry is responsible for the development of at least two (2) strategic tasks but the more comprehensive responsibilities distribute mainly amongst seven (7) of the ministries as follows:

- Management of Government affairs, Prime Minister's Office
- International activity, Ministry for Foreign Affairs
- Finland's defence capability, Ministry of Defence
- Internal security, Ministry of the Interior
- Functioning of the economy and infrastructure, Ministry of Employment and the Economy
- The population's income security and capability to function, Ministry of Social Affairs and Health
- Psychological resilience to crisis, Ministry of Education and Culture

The Finland's Cyber security Strategy saw the daylight early this year (2013). This Government

Resolution builds upon the Security Strategy of Society, particularly what comes to securing the vital functions in society and defining the related threat scenarios. According to the Finland's Cyber security Strategy "cyber security means the desired end state in which the cyber domain is reliable and in which its functioning is ensured." (2013, 1). The direct cyber threats are mostly related to cyber vandalism and hacking. More severe cyber threats include tactical cyber warfare and strategic cyberwar. (Kansallinen kyberturvallisuusstrategia 2011).

National level working group memorandums defining the concepts of safety and security, are for example the National Strategy for Improving the Safety and Security in Business (2012) and the National Security Research Strategy (2009). The purpose of the before mentioned one, is to increase the possibilities of companies to practice their business without significant interference from criminal activities and accidents, or other serious disturbances (see Kansallinen strategia yrittöstoiminnan turvallisuuden parantamiseksi 2012). The latter one aims to identify the joint research interests of strategic importance in different administrative sectors (see Kansallinen turvallisuustutkimuksen strategia 2009).

Safety and Security as Businesses

The security market is fragmented (see e.g. Toimintasuunnitelma innovatiivisten ja kilpailukykyisten... 4, 2012; Kupi et al. 2010, 120). According to the European Commission, at least 27 different security markets exist within the EU and they all are split into numerous security sectors. On a global level, safety and security markets are perceived as independent markets, each of which is estimated to grow faster than 8 per cent annually (Ruttenbur 2008 and Freedonia Focus 2008 in Kupi et al. 2010). About 40 per cent of the overall security and safety markets' turnover is said to come from the alarm and guarding services (Kupi et al. 2010, 6). In Finland, the private security sector is in charge of providing commercial services in the field of safety and security, such as call-out services/response services, specialised guarding and security solutions (see e.g. Heinimäki 2009). Kupi et al. (2010, 121) estimate that the potential changes in legislation and policies might bridge the current gap between the public and the private

sector, thus enabling faster growth in the market potential of the security and safety business.

The global security market has grown nearly tenfold during 2001-2011 and continues to grow on an exponential speed – even faster than what the average GDP growth is (Toimintasuunnitelma innovatiivisen ja kilpailukykyisen... 2, 2012). The monetary value of the security and safety business related product and service markets is highest in the U.S. and Western Europe (Kupi et al. 2010, 6). However, recent market forecasts indicate that the market share of the European companies on the global security and safety markets is about to decrease. Without enhancing the competitiveness of the EU security industry, the market share drop could be around 60 per cent of the world market by year 2020 (Toimintasuunnitelma innovatiivisen ja kilpailukykyisen... 2, 2012). The security industries in the Asia-Pacific region, Middle East and African countries is estimated to pose the most significant growth potential (Global Security Services 2009 in Kupi et al. 2010, 5-6).

One way to define the concept of security is through the different business sectors. The Statistics Finland does not classify security industry as its own line of business. Similarly, the security industry is not covered as such in the main international statistical nomenclatures (NACE, Prodcom, etc.) (Toimintasuunnitelma innovatiivisten ja kilpailukykyisten... 4, 2012). VTT Technical Research Centre of Finland and the Aalto University has studied together the current structure of security industry as well as the business potential in the field of security (see Kupi et al. 2010). In this study, the security industry was seen to cover all such commercial activities which aimed at selling a solution, product or service by claiming it has value in ensuring one's security. The included companies were classified as security industry actors based on their own classification on whether or not they perceived themselves as operating in security business.

Besides approaching the concept of security by means of defining the security industry, one can also describe it through the business orientation of the companies operating in the security industry (Kupi et al. 2010, 20; Global Security Services 2009 in Kupi et al. 2010):

- Technology-based, e.g. biometrics, localisation services, encryption, recognition, tracking (RFID)
- Product-based, e.g. alarm, detection and CCTV systems, protective devices
- Service-based, e.g. guarding, monitoring, professional cash handling
- Counter-terror intelligence (including cyber security and communication)
- Crisis management/civil protection
- Physical security protection; and
- Protective clothing.

The technical aspects would appear to be in the core of security business (see e.g. http://www.cassidian.com/en_US/web/guest/our-business): security technology and devices in particular (see for detailed definitions e.g. www.tukes.fi). Thus, from the business point of view, 'security' could be perceived primarily to consist of controlling, and crime and disturbance prevention.

In literature, security business has said to comprise the following sectors (Ruttenbur 2008 ja Farrell et al. 2008 ja Global Homeland Security 2009 ja Wu et al. 2009 in Kupi et al. 2010):

- 'Security' (protecting oneself from planned acts of malicious mischief) and 'safety' (preventing an unintentional course of events and/or unusual circumstances such as natural phenomena from damaging anybody and/or anything)
- Real estate security
- Information security
- National security
- Risk management consulting services
- Protecting oneself from chemical, biological and radiological substances
- Security in logistics

The recent European Commission's Action Plan for an innovative and competitive Security Industry (see e.g. <http://ec.europa.eu/finland/news/press/120730.fi.htm>), covering security services which relate to the installation and maintenance of security devices, and excluding security services such as on site security personnel, presents that the EU security industry can be subdivided into the following sectors (Toimintasuunnitelma innovatiivisen ja kilpailukykyisen... 3-4; 13, 2012):

- Aviation security
- Maritime security
- Border security
- Critical infrastructure protection

The most potentially growing sectors in security business (products and services) are believed to lie within the field of logistics and transport with a 15 per cent expected growth rate, as well as in real estate and information security. Housing and commerce are, on the contrary, expected to grow least as part of the security services measured in annual turnover (Kupi et al. 2010, 7; 9; 41; 67, European Security Services 2008 in Kupi et al. 2010). The security services needed in commerce have been very much labour intensive, which explains the low growth expectancy, as the commerce in general is going through changes in terms of business models and trading (the transfer from physical stores to online communities). Furthermore, many of the security services have been nowadays automatised. For example, closed-circuit television (CCTV) systems are becoming more popular in stores and replacing the traditional "store detective" services.

Should we choose to take a closer look at the security industry's business potential through the customer segments, the absolutely most significant sector on both the European level as well as on the Global scale is so-called physical security protection (e.g. CCTV, access control equipment, intrusion and detection systems). Other large customer segments in security business are counter-terror intelligence, border security especially on the European level and critical infrastructure protection on the Global level. (Study on the Competitiveness 2009 in Kupi et al. 2010, 39).

It is worth noticing for that the buyers in security business still today mostly comprise of authorities forming a so-called institutional market, and even in the private purchaser markets the security requirements are likely to stem from legislative obligations (Toimintasuunnitelma innovatiivisen ja kilpailukykyisen... 5, 2012). For example, the seven (7) most powerful American security technology and solution buyers are all public authorities, e.g. The Border Guard and The Coastal Guard (<http://www.tekes.fi/fi/community/Uutiset/404/Uutinen/1325>).

According to Kupi et al. (2010, 6) the most essential customer segments of companies offering physical security protection related security systems and guarding services are finance and banking, public sector including Customs, Border Guard, aviation and rescue authorities, commerce and manufacturing. Also the operators in logistics and distribution as well as real estate companies are well-known customers of the Finnish security industry (Lanne et al. 2007 in Kupi et al. 2010, 6).

Discussing social responsibility

Social responsibility is an ordinary and contemporary concept. It is often regarded more of a representation of a concept and its definition appears to vary depending on the discourse and context (Yhteiskuntavastuun sosiaalinen ulottuvuus 2006, 2). The discussion about being held socially accountable started in the 30s. Thinking in a socially responsible manner was brought into the discussion in the 60s and 70s. So-called second phase in the social responsibility related discourse started in the 80s when social responsibility first appeared to contain dimensions from occupational safety and social security. (Takala 1996 in Yhteiskuntavastuun sosiaalinen ulottuvuus 2006, 12; Asbury et al. 2009, 19-29).

It has been postulated that the society and business life are so very much intervened that it is not possible to separate the social responsibility from the corporate (social) responsibility, and *vice versa*

(http://www.unescap.org/tid/publication/indpub2565_chap1.pdf). In common language social responsibility and corporate social responsibility are often used as synonyms. Up 'till 1980s, sustainability in business was understood as a subset in business ethics. Later on, aspects from sustainable environmental management were included. Today, corporate social responsibility involves all three of the before mentioned ones: social, ethical and environmental issues (Kallio 2004 ja Kallio et al. 2005 in Yhteiskuntavastuun sosiaalinen ulottuvuus 2006, 14). Social responsibility may also refer to the overall wellbeing and include economic aspects as well.

Social responsibility can be perceived as relations between individuals, one's responsibilities towards the surrounding society or society's responsibilities towards an individual. For example Palenius (2010) says that social responsibility can take a form of an active citizenship, and it can be exercised for example by voting in the elections and/or by participating in the third sector activities (also known as the voluntary sector).

Social and public policy is a related term to social responsibility. Social and public policy as a scientific discipline arrived to Finland from Germany in early 1900s (Rahkonen 2004). Social and public policy as a concept can be perceived in many different ways; it may refer for example towards creating society, describing or regulating it (Eräsaari 2004). In formal language, social and public policy can also be labeled as a "mechanism or a process to balance the satisfaction of needs and to exercise power" (Eräsaari 1996, 29 in Eräsaari 2004).

The National Institute for Health and Welfare publishes a periodical called "Yhteiskuntapolitiikka" (Social and Public Policy in English) which specialises in the research on health. Some excerpts from the articles published in this periodical, such as how social workers perceive their occupational safety and health or testing the age limit control methods in alcohol sale (see http://www.thl.fi/fi_FI/web/fi/ajankohtaista/lehdet/yhteiskuntapolitiikka), describe well how social and public policy, and social responsibility, relate to each other in the level of terminology.

Sustainable development calls for balance between its three dimensions: economical, social and ecological development (http://www.thl.fi/fi_FI/web/fi/ajankohtaista/lehdet/yhteiskuntapolitiikka); see also e.g. United Nations Economic and Social Commission for Asia and the Pacific Trade and Investment Division (<http://www.unescap.org/tid/>). This trinity of social responsibility is sometimes called the 3P-model: people, planet and profit (<http://www.developmentcrossing.com/profiles/bl ogs/corporate-social-responsibility-increases-your-bottom-line>).

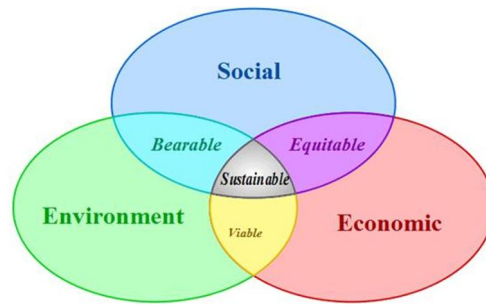


Figure 4 Trinity of social responsibility (adapted from <http://www.developmentcrossing.com/profiles/blogs/corporate-social-responsibility-increases-your-bottom-line>)

The success of social development depends on how well the other two dimensions (economic, environment) develop. Comprehensively speaking, the social dimension of the social responsibility comprises (Yhteiskuntavastuun sosiaalinen ulottuvuus 2006, 19-21):

- Human rights; discrimination, child and forced labour prevention, right to negotiate and to unionise including
- Good and practical conditions at work; diversity at work place, education, health, safety and security, equality including
- Bribery and corruption avoidance
- Ethical competition and pricing
- Charity campaigns

One of the known and current challenges in socially sustainable development in Finland is e.g. social exclusion stemming from unemployment and growing social differences (http://www.vihreapolku.info/kestava_kehitys/oppimateriaalit/kahdeksan_maapalloa/sosiaalinen_kestava_kehitys). In the Finnish context, the social dimension of social responsibility in discussions is connected to coping (at work, home, school), ageing employees, advancing worker skills and enhancement of occupational health. In the developing countries, perhaps the biggest social dimension challenge in executing the social responsibility is child labour exploitation. (Fagernäs 2004 in Yhteiskuntavastuun sosiaalinen ulottuvuus 2006, 19).

Economical responsibility	Environmental responsibility		Social responsibility	
Business and finance	Individual's actions	Product liability and production line	Human rights	Stakeholders Personnel Local community
International treaties, declarations and collaborative organs				
OECD agreements	International agreements		UN's declaration on human rights, fundamental rights (at work) by ILO	
EU's stakeholder forum				
Corporate Governance				
OECD principles of righteous management				
Operational principles and policies				
UN's Global Compact				
OECD's code of conduct for multinational corporations				
Sustainable development charter by International Chamber of Commerce				
Memorandums EWC, Social Accountability International SAI				
Management systems, standards and indexes				
AA 1000, stakeholder interaction focused process standard				
EMAS		ISO 14000, SA8000 work and human rights standard		
Reporting				
Global Reporting Initiative GRI, the responsible stock exchange; Dow Jones index, Sustainability Index and FTSE4Good				
(modified from Niskala et al. 2004)				

Table 1 Different themes in social responsibility (translated and adapted from Yhteiskuntavastuun sosiaalinen ulottuvuus 2006, 17)

Putting social responsibility in practice in business calls for following e.g. the OECD rules and regulations as well as the fundamental rights defined by ILO (ILO 2004 ja OECD 2000 in Yhteiskuntavastuun sosiaalinen ulottuvuus 2006, 15). In the globalised society, companies are believed to pose significant power to advance the diffusion and adoption of ethical principles as well as democratic decision-making – even more so than what could be achieved by means of warfare or traditional diplomacy, particularly when the culture at hand does not recognise the specific legislative norm or moral code (Yhteiskuntavastuun sosiaalinen ulottuvuus 2006, 15; see also Crane et al. 2008). It has been noticed that the capabilities differ country by country on how well occupational and personnel safety can be established and maintained (ILO 2004 in Yhteiskuntavastuun sosiaalinen ulottuvuus 2006, 16).

Companies are not alone enhancing social responsibility but also many other organisations and associations, unions and even sports clubs have launched their own ways of operating in a socially responsible manner. For example, "Educators for Social Responsibility" founded in 1982 collaborates with educators to advance the safety at educational institutions as well as the implementation of caring, systemic practices (<http://esrnational.org/>). Another example is the International Football Association FIFA commitment to socially responsible conduct according to which FIFA stance against racism and discrimination, acts in an environmentally friendly way and asks the players to respect each other as well as the rules. (<http://www.fifa.com/aboutfifa/socialresponsibility/index.html>).

Ministerial views on social responsibility

The Ministry of Employment and the Economy is in charge of the social and corporate (social) responsibility matters in Finland. However, depending on the nature of the topic at hand, some of the related issues may also be dealt at the Ministry of the Environment, Ministry for Foreign Affairs or Prime Minister's Office. The Ministry of Employment and the Economy is hosting an advisory board of social and corporate

responsibility, which has a central role in intensifying the enforcement of rules and regulations which apply to multinational corporations. That being said, it is no surprise that one of the three main aims set in the Government Programme 2011-2015 has to do with enhancing sustainable economic growth, employment and competitiveness in a socially responsible manner. (<http://www.tem.fi/index.phtml?s=3232>)

The Ministry of Employment and the Economy has defined an organisation to be economically responsible if it generates wellbeing in society, adds to State's tax income, preserves jobs and provides added-value to its owners. Environmentally responsible organisation, on the other hand, exploits the natural resources in a sustainable manner and reduces pollution. According to the Ministry of Employment and the Economy, acting in a socially responsible manner is to exceed the legislative minimum requirements. This means i.e. caring for the occupational and personnel safety and wellbeing at work, as well as providing work places for citizens in danger of social exclusion. (http://www.tem.fi/files/22532/sos._taloudell._ekolog._vastuu.pdf).

The European Commission has defined social responsibility from its own perspective. The Commission's Sections (e.g. European Economic and Social Committee) organise social responsibility themed events and aim to support such methods in recruitment, which respect the human rights (<http://ec.europa.eu/social/main.jsp?catId=331&langId=fi>). The Commission defines socially responsible company as one that pays attention to "social and environmental concerns in their business operations and in their interactions with their stakeholders on a voluntary basis" (Peeler 2012). Furthermore, the Commission includes the socially responsible public procurement in its corporate social responsibility definition (<http://ec.europa.eu/social/main.jsp?catId=331&langId=fi>).

Standardisation on social responsibility

It may not be common but it is possible to address the concept of social responsibility also

via standardisation. For example, in the publication called 'Yhteiskuntavastuun sosiaalinen ulottuvuus', the social dimension in social responsibility was partially described as international reporting standards, Global Reporting Initiative GRI 2002 (see e.g. Burchell 2008, 145-155) and SA8000 work and human rights standard, and the conclusion being that e.g. social exclusion prevention and ethical pricing are attributes to social responsibility.

In 2010, the American Society for Quality (ASQ), which is a member of the American National Standards Institute (ANSI), was selected to gather and manage an American group assigned to function not only as an advisory board but also as a group responsible for developing a standard defining the social responsibility. The purpose of this standard is to assist organisations to implement socially responsible business operations by honouring the cultural, social, economic, environmental and legislative obligations. The ASQ defines socially responsible activities as ethical actions both on the individual and organisational level that respect the social, cultural, economic and environmental aspects. (<http://asq.org/social-responsibility/about/what-is-it.html>).

The purpose of ISO 26000:2010 is to clarify what social responsibility is, and how the principles of social responsibility can be implemented on practical level. ISO 26000 is more of a guideline, guidance standard, than a requirement. Thus it cannot be audited similarly to many other well-known ISO-standards. ISO 26000 calls for ethicalness and transparency on

global level executed in a manner that enhances societal wellbeing and health. Five-year-long international negotiations between the representatives of the worker unions, consumer segments, fields of industry, public authorities and NGOs preceded the launch of this particular standard. (<http://www.iso.org/iso/home/standards/iso26000.htm>).

Summarising conclusions

This article aimed to address the different views on defining safety, security and social responsibility, and thus contribute to clarifying the relations between these terms. Based on the presented overview, we conclude that the safety, security and social responsibility are interrelated; social responsibility calling for actions in the field of safety and security, and on the other hand, safe and secure actions creating and maintaining social responsibility. Security is more of an enabler of other goals than absolute value.

It is our belief that in security planning an interdisciplinary approach is recommendable as it ought to be based on the comprehensive concept of security. Also the importance of highlighting the purpose of preventive measures in security planning should not be depreciated. Everyday security, sense of safety and combating crime and disturbances can best be achieved in cooperation with local communities. Taking the needs of citizens and societal aspects better into account could increase trust of new security solutions. Security should cohere with societal preferences.

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About the Authors

Dr Minna Mattila, Director, Strategic Planning and Support for Research, is an invited member of the European Academy of Sciences for an outstanding contribution to science and technology. She has served annually the European Commission as an Expert Evaluator, Rapporteur and Reviewer since 2007. In 2008-2010 Dr Mattila was a nominated expert panel member in the OECD reviews of higher education in regional development and in 2008-2014 she serves as an External Assessor for Professorships in Marketing & Information Systems for the University of Malaya. She is an Adjunct Professor at Embry Riddle Aeronautical University - Worldwide (the U.S.). Prior to her current position at Laurea, she led an innovation and research unit in a university of technology in Finland. Dr Mattila has also held professorships in Commercialisation of Innovations as acting and Marketing in the Electronic Channels as full tenure. Her docentship preceding the tenured professorship was at the department of Computer Science. She works part-time at Market Court as Council of State assigned Expert Member specialising in cases concerning restrictions of competition. Dr Mattila is acknowledged in "Who is Who in Finland" since 2005. Email: minna.mattila@laurea.fi

Gender: the Best Predictor of Criminal Behaviour?*

Tuomas Tammilehto, Laurea University of Applied Sciences, LbD and Competence Management Services, Espoo, Finland

Abstract

Gender has widely been recognised as the variable which correlates with offending. In short: men commit crimes, women do not. In the course of history, many criminologists have taken this fact for granted, and have not bothered to problematize it. However, there have also been attempts to broaden this view, and other variables possibly having an even stronger correlation with crime than gender, have been studied. In addition to gender, the most common variables studied have been age, race/ethnicity, and socioeconomic status (SES).

This article compiles different theories and views about offence indicators and examines how much emphasis criminology has put on the four variables that have been acknowledged to correlate with crime. Further, this article examines what could explain the existing so-called gender gap, and explains why gender still is the best predictor of criminal behaviour.

Key Words

Criminology, gender, gender-gap

Introduction

It is a well-known and undisputed fact that men commit the vast majority of crime, and that especially the serious criminal offenders are male (Messerschmidt, 1993; Miller & Mullins, 2009). Therefore, for example, the crime statistics show a considerable difference in the number of male and female offenders. This difference is often referred to as the gender¹ ratio (Daly, 1998), or

the gender-gap (Antonaccio, Tittle, Botchkovar, & Kranidiotis, 2010).

Simply by looking at official statistics of offenders (e.g. the Home Office Statistics: Criminal Statistics, England and Wales 2001 and Crime in England and Wales, 2002/2003), one can agree with Jody Miller and Christopher W. Mullins (2009) that gender is the variable that correlates most strongly and persistently with offending. The ratio between men and women offenders does not change significantly even if the so-called hidden crime² is taken into account.

*This article is based on the author's course work for the MA in Criminology at the City University London in 2010.

¹ The term gender must be differentiated from sex. Sex refers to biological characteristics that define men and women, whereas gender is constructed socially.

² Hidden crime is a term that describes criminal acts that are, for various reasons, missing from the official crime statistics (for example, unreported crime etc.).

For decades, the simplified view that crimes are committed by men, led to research that addressed mainly male criminals, while women were ignored. There were several reasons for this. Firstly, those who developed theories on criminal activity were men. For example, classical theories of criminology (e.g. Edwin H. Sutherland's differential association theory, Travis Hirschi's social control theory, and Robert K. Merton's anomie/strain theory) presupposed, quite rightly, that crime is dominantly a male phenomenon. They did not, however, use diverse samples when explaining crime. More so, the majority of theorists (starting from Cesare Lombroso), presumed that their theories applied to both sexes and were 'gender-free' (Miller & Mullins, 2009).

However, this simplified view of 'gender-free' theories has been challenged, from the 1960s onward, largely after the so-called second wave of the feminist movement, and its several feminist theories. The feminist theories of criminology rightfully argued that women had been forgotten in criminology: both as victims and as offenders (Messerschmidt, 1993).

Ironically, with the feminist criminology and the arising emphasis on gender issues, a claim has emerged that crime is derived from men, that there is something in men that causes crime. Therefore, in so far as someone wants to try to predict crime, he or she should focus on men (Messerschmidt, 1993).

In this article, I will try to explain the gender gap. My hypothesis is that, if one wants to predict crime, gender is (still) the best predictor of criminal behaviour. However, I am not suggesting that every man is a criminal, even if men do commit the majority of crimes. I believe that men (and women too!) have a free will, and are capable of deciding, within a framework, whatever to do in life – including whether to engage in criminal activity or not. Predicting, in this sense, is looking at what individual (or other) factors correlates with crime; and validating the best predictor is to examine how much weight criminology has put on these different factors.

In criminological literature at least three other variables besides gender have been acknowledged to correlate with crime. These are: age, race/ethnicity, and socioeconomic status

(SES) (Miller & Mullins, 2009). Of these three variables, age is relatively easy to define: one is of a certain age, even if does not act one's age. There is though a disagreement between researchers on how to categorize individuals into different age groups. For example, the age limit of juvenile crime varies from country to country. Also, drawing the line between working age and the age of retirement remains under constant debate (see, for example BBC News, 2010).

Race/ethnicity and SES are harder to define than age, and therefore no consensus on these definitions has been reached. Both of the terms are vague, and they have also been politicized as well as criticized (Covington, 1995). Between these two variables, race/ethnicity is somehow less problematic than class, even if the term of race/ethnicity changes its meaning over time and place (West & Fenstermaker, 1995). It could be because researchers, who engage in large scale quantitative analysis, and use mainly statistical material, lean on the definitions that the data collectors have adopted. The categorizations of race/ethnicity are, thus, either based on physical differences and articulated by e.g. police and judiciary, or in the cases of surveys, based on the replies. In the latter case, race/ethnicity is understood more as a subjective matter, because it stems from one's self-understanding. Race/ethnicity can therefore be more than just physical appearance, and can include e.g. connotations of culture, background etc. A relatively neutral way to define race is that it refers to a recognizable group of people that "share certain inherited physical characteristics such as skin colour and hair texture" (Covington, 1995, p. 548).

SES is, in my opinion, the hardest variable to define. It is usually defined by using factors like income (relative or absolute), level of education, occupation etc. For example, Louis A. Vitt (2007) defines SES as a "stratification system that divides a society into a hierarchy of social positions. It is also a particular social position within a class stratification system: lower class, working class, middle class, upper class, or other such class designations. It is a method of social ranking that involves money, power, culture, taste, identity, access, and exclusion".

The definitions of gender, age, race/ethnicity or socioeconomic class are however not decisive for

the purposes of this article. For my purposes, it is enough to state, that the variables are not 'black-and-white'. I am more interested in how much emphasis (if any) criminology has put on each variable in predicting crime.

This article is structured in the following way: In the first part, I will test my hypothesis by looking at how well or badly the variables presented above correlate with crime. I will start with age, and then move on to race/ethnicity, and end with the role of SES. Whilst I present mainly recent empirical research to support my arguments, I will also simultaneously pay attention to the classical theories of criminology. The classical theories are by far macro-level theories, and often cover more than one variable. In the second part, I will examine gender more closely, and hopefully convince the reader, that when it comes to predicting criminal behaviour, gender is *the* factor that a criminologist should concentrate on.

The Correlation between Age and Crime

The fact that age correlates with crime is as widely agreed upon as the correlation between crime and gender. The correlation between age and crime has remained the same for almost a hundred years: the age group between fifteen and seventeen year-olds have the highest rates of crime regardless the amount of overall crime or the offender's SES or race (Hirschi & Gottfredson, 1983). Another indisputable empirical fact is that according to statistics, crime rate declines with age (*ibid.*). However, age does not correlate with crime in the same way between the two genders. Perhaps women grow up earlier, and adopt adult responsibilities earlier than men, and hence also grow out of criminal behaviour earlier than men (Bottcher, 2001).

Age has been seen, on the one hand, as the least problematic fact to study: The age of offenders is well recorded, and age and crime related data is easy to be found. However, on the other hand, if one turns his or her attention towards the meaning or implications of correlation between crime and age, the matter becomes very complicated (Hirschi & Gottfredson, 1983).

Many so-called classical criminological theories have emphasized that crime is a youth problem.

For example, Robert Merton's student, and developer of the anomie/strain theory, Albert K. Cohen, concentrated in his *Delinquent Boys: Culture of the Gang* (1955) solely on young offenders. Likewise, other researchers that came from the so-called Chicago School of Criminology were mostly concerned about youth crime. For example, even though the 'father' of differential association/social learning theory, Edwin H. Sutherland, was not interested in any social or individual factor (i.e. age, gender, race/ethnicity, class) *per se*, and implicitly denied their effect on crime (Tittle, Burke & Jackson, 1986), he still regarded that his theory concerned primarily young men (Messerschmidt, 1993).

Sutherland argued in *Principles of Criminology* (1947) that "criminal behavior is learned exactly the same way as conforming behavior" (as cited in Messerschmidt, 1993, p. 15). For Sutherland, criminal activity was a learning process which involved both the techniques of crime committing and the motives, rationalizations, drives, and attitudes which are favourable towards violating the law (Sykes & Matza, 1957). In his work, Sutherland concentrated both on so-called white collar crime, but also on crimes committed by members of the lower socioeconomic classes. Even though he meant his theory to be applicable to all types of crime, for him, crime was predominantly a problem of young men of the lower socioeconomic classes. The members of the working class, rather than the middle or upper classes, where the ones, who socialized boys and men into criminal behaviour (Messerschmidt, 1993).

As well as Sutherland and Cohen, also Gresham Sykes and David Matza (1957), focused in minors. Their learning theory was about the way people justify their actions to themselves and others, i.e. learn to use neutralization techniques.³ Even though, they did not specify why especially young people learned these techniques, the theory implied that crime was a problem of juveniles.

³The five techniques that Sykes and Matza proposed were 1) the denial of responsibility, 2) the denial of injury, 3) the denial of victim, 4) the condemnation of the condemners, and 5) the appeal for higher loyalties (Sykes and Matza 1957).

Some researcher argue that correlation between age and crime does not seem to vary even if people are divided on the basis of their gender, marital status, SES, religion, family background, state of residence, or based on their labour force status (Hirschi & Gottfredson, 1983). Since age variation is so consistent, it has been used in testing other variables (ibid.).

Why it is then that age is not a perfect crime predictor? Firstly, age cannot predict for how long a criminal carrier lasts. The age variable cannot tell when offenders stop offending. Because “age is”, as Hirschi and Gottfredson (1983) described “everywhere correlated with crime”, it is “not useful in predicting involvement in crime over the life cycle of offenders” (ibid., p. 581). Secondly, even though the age curves of men and women are parallel, they are not similar. Thirdly, the underlying causes of crime do not alter with age, and age therefore does not tell much.

The Correlation between Race/Ethnicity and Crime

Race/ethnicity and crime have been of interest to many researchers, especially North Americans. For well over a hundred years, recorded crime rates have shown higher rates of black offenders than white ones (Covington, 1995). According to U.S. Statistics, most of the people arrested are black, even though black people are a minority with just over ten per cent of the population (Shihadeh & Flynn, 1996). As a consequence, many have tried to explain the racial-gap. Already the so-called Chicago School admitted that problems of poverty, slums, crime etc. could be seen racially/ethnically (Winant, 2000).

It can be said that there is indisputably a racial disproportion of crime committed by black and white people (especially in the United States), whether or not race per se plays a role in creating the disproportion (Wolpert, 1999).

There are several theories as to why this disproportion exists. Some theories are structural, and argue for example that communities that experience unemployment, poverty, social isolation, and lack of conventional role models are mainly populated by black people. Those kinds of communities have higher crime rates because of structural disadvantages,

and this by consequence leads to black people being over-represented in crime statistics (Krivo, Petterson, Rizzo & Reynolds, 1998).

On the other hand, the so-called cultural theorists, especially Charles E. Silberman, have stressed a specific crime prone 'Black Culture'. Some see the origins of this culture in slavery, others more generally in racism, or like James Comer even in black self-hatred. Others have argued that the fact that black people have been exposed to so much violence in the course of their history explains their violent sub-culture (Covington, 1995). I am not entirely convinced by this explanation because, if this were the case there should surely be a violent Jew, Vietnamese, and Native American subculture, since they too have been exposed to violence in the course of history.⁴

In any event, it is clear that race/ethnicity is not a good correlate to predict crime. Firstly, if race categories were removed from crime data, many theorists would simply explain crime in terms of urban inner-city poverty. There have, for example, been comparisons between groups of urban, low-income, young black men and similar groups of white men, where the so-called race-difference disappeared. Secondly, if there were a special 'black culture' behind 'racial' crimes, why would those crimes be closely attached to a specific culture, rather than to crime committed by white people? Especially since, black criminals have more in common with white criminals than with black people who are not criminals (Covington, 1995).

The Correlation between Socioeconomic Status (SES) and Crime

Before the 1950s, the criminological data collected demonstrated strong differences in the SES of criminals and non-criminals. This was accepted widely as a fact, and accordingly many theories of deviance took SES as their basis (Tittle & Meier, 1990). The theories expected crime to correlate with SES either positively (i.e.

⁴ Although, after seeing a documentary on sexual violence in a Native American reservation in South Dakota, I admit that one could argue that there might be a violent Native American subculture (Henion, 2010).

direct), negatively (i.e. inverse), conditionally, or with a combination of all three (Tittle & Meier, 1990). For example, both cultural deviance and strain theories treated SES as the primary root of crime (Rowe & Osgood, 1984). Likewise, many other of the so-called classical criminological theories asserted that crime and delinquency were either explicitly or implicitly more prevalent at the lower end of the social status (Ellis & McDonald, 2001). For example, Merton's strain theory (1938) suggested that strain is "most prevalent among those in the lower socioeconomic classes because they possess the fewest social and economic opportunities" (Wright, Caspi, Moffitt, Miech & Silva, 1999, p. 178). Even today, most textbooks argue that crime and deviance have a correlation, and that somehow "a negative relationship between individuals' SES and their propensity toward ordinary, street crime has traditionally been assumed" (Antonaccio, Tittle, Botchkovar, & Kranidiotis, 2010, p. 300).

One could assume SES to be a perfect predictor of criminal behaviour. It is therefore surprising that many empirical researches show that there is no proven correlation between crime and SES (Ellis & McDonald, 2001). Especially, the meta-analysis of Charles R. Tittle, Wayne J. Willemez and Douglas A. Smith (1978) highlighted the controversy between criminological theories and empirical facts. Tittle, Willemez and Smith showed the weakness of social scientist theories that had "assumed an intimate linkage between a variety of social pathologies and injustice or inequality in the distribution of societal resources" (Tittle, Willemez, & Smith, 1978, p. 643).

According to them the relationship was manifested and justified solely on theoretical grounds, and empirical data had not been examined properly. First of all, Tittle Willemez and Smith (1978) noted that several sociological theories lacked methodological strength in their analysis between the correlation of crime and SES. Many researchers had concentrated only on limited spatial areas, e.g. the inner-city. Lower SES could therefore have correlated with crime due to a small amount of people committing many crimes, or outsiders from other SES coming to the inner-city to break the law. Also, the crime data had been viewed as self-fulfilling prophecies, as results of policing practices: the

more police working and patrolling a certain area, the more criminals are caught, which in turn increases the number of crimes recorded in statistics (ibid.).

Secondly, Tittle Willemez and Smith (1978) perceived that in addition to methodological flaws, the empirical evidence of correlation between crime and SES was unconvincing. For example, the samples were not comprehensive as the majority of studies (85%) had concentrated only on white male juveniles.

Thirdly, Tittle Willemez and Smith argued that it was impossible to achieve a general conclusion about the relationship between SES and crime, because different studies use various methods, data, forms of reporting etc. According to them, during the past decades, there "has been a monotonic decline in association between social class and crime/delinquency, with [...] studies finding essentially no relationship between class and crime/delinquency." (Tittle, Willemez & Smith, 1978, p. 654)

Tittle did a follow up analysis with Robert F. Meier twelve years later, and still did not find evidence on the correlation between crime and SES (Tittle & Meier, 1990). However, B.R.E Wright, A. Caspi, T.E. Moffitt, R.A. Miech, and P.A. Silva (1999) found somewhat contradictory evidence. The authors suggests that the reason why the correlation between SES and crime appears to be weak or non-existent, is largely to do with the fact that both high and low SES have negative and positive effects on delinquency, and would therefore cancel each other. Therefore, in their view, there is a causal effect rather than a correlating effect.

It is clear from the controversy of research that SES is not a good predictor of crime, and in fact "most well-informed contemporary criminologists and sociologists regard the SES/crime relationship as uncertain." (Tittle, 2004, p. 166) As neither were age or race/ethnicity I will therefore turn my focus on gender.

The Correlation between Gender and Crime

In my introduction I argued that there is an undisputed correlation between gender and crime: criminal behaviour and deviance are predominantly male activities (Messerschmidt, 1993; Miller & Mullins, 2009). In this section, I will move beyond empirical research and examine closely what could explain the gender gap, and explain why gender is the best predictor of crime. As Kathleen Daly has noted, it is impossible “to distil in one essay all that has been written [...] on women, gender, and crime.” (Daly, 1998, p. 85) I will therefore concentrate on the gender gap.

The issue of gender gap can be summarized in the following way. Firstly, studies show that men/boys both have higher rates of prevalence and incidence of crime than women/girls. Secondly, studies have revealed that the gender gap is at its largest in the most aggravated crimes and at its smallest in minor, so-called petty crimes. Thirdly, criminologists have noticed that the amount of female criminals has risen during the past few decades. Fourthly, the data on crime shows that societies that have high male arrest rates also have high female arrest rates, and vice versa – over time, and that the rates rise and fall in parallel ways. Fifthly, some argue that the gender gap should be considered together with race, ethnicity, and SES. And sixthly, research shows that female crime is less violent, but when violent crime occurs, it occurs at a younger age than severe male violence. Women are also less likely to repeat the acts (Daly, 1998).

The three most popular explanations for the gender gap are versions of strain, control, opportunity, and social learning theories. The theories have examined for example such things as machismo, risk taking, and self-esteem etc. (Daly, 1998).

The ‘original’ strain theories, e.g. Merton's and Cohen's, assumed that “strain is a direct cause of crime and delinquency.” (Broidy, 2001, p. 10) However, Lisa M. Broidy (2001) has tested the strain theory from a gender perspective, and examined whether men and women responded to strain differently. She criticized the previous strain theories about focusing almost solely on

“lower class boys in urban environment.” (Ibid., p. 9) She used a diverse sample group, and examined how people relate to stressful life events. She discovered that although anger is as likely a reaction for both men and women, women react to strains more with other ways than anger. She also noted that those who react with anger are more likely to commit a criminal act (Broidy, 2001).

Hence, even if men and women do react to the same strain, their reaction is different: men get angry more often. Thus, if anger leads to crime, this could explain the gender gap. It is not the strain itself, but rather different ways of coping with the strain that leads to the gender gap. Unfortunately Broidy did not explain how men and women coped with the strain.

Many criminologists have therefore been more interested in the mechanisms of coping with the strain(s) rather than explaining the strain itself. These mechanisms can or cannot be learned, but most importantly they are situational. This means that crime and delinquency occur in specific, real-life situations instead of hypothetical and theorized social structures. Some even argue that criminal choices are often the outcome of spontaneous improvisation (Copes & Hochstetler, 2003).

One type of situation that is believed to be at the origin of delinquent behaviour is learning and socialization in general. For example, it has been suggested that the different learning methods used by men and women might lead to the gender gap, and that this bilaterally applies to different teaching methods. Studies have also revealed differences in parental and peer influence. Some argue that parents see risk differently for boys and girls. Girls are therefore taught to avoid risks more than boys; and boys' risk behaviour is less controlled, and less punished (Hagan, Gillis & Simpson, 1985; Haynie, 2003).

The teaching does not have to take place in the childhood. It is for example possible that women are taught by their male criminal companions to lesser criminal roles, and as a consequence serve lesser sentences etc. The cause for the task allocation of the ‘criminal labour market’ can also be in sexist attitudes (Mullins & Wright, 2003). Also the general

gender division of the labour market has been seen to correlate with crime. Since women have not had equal opportunities in the labour market, they have not had the opportunity to equally commit crimes (Britton, 2000). In order to commit embezzlement for example, one would have to work at a relatively high level in an environment that handles money (e.g. a bank).

Traditionally those positions have been men's positions. Another much debated situational explanation of crime is that it is a way of 'making gender' in daily routine activities. This genre of studies argues that since gender is not biological but cultural and social, it is therefore reinforced in everyday practices. One of those practices is crime and delinquency (Bottcher, 2001).

Maleness is constructed with crime especially on the streets of urban inner-city environments where violent subcultures flourish (Copes & Hochstetler, 2003), but the construction of maleness also happens in e.g. the City Banking industry. Crime is an outcome of different situations where men do their gender, i.e. prove their masculinity. It can be described as a lifestyle, ideals of which are autonomy, the capability of proving oneself, and action. The lifestyle is demonstrated by the use of money, clothing, use of drugs and alcohol, but also in the alternative language use (e.g. slang), and general 'manly' behaviour (Collison, 1996). These acts that stress maleness need an audience to evaluate them; the audience often being one's peer group. Because of the audience, criminal

behaviour is most likely in situations where one's identity is challenged. In these circumstances crime becomes a means to restore the challenged self-image. Masculine ideals are not criminogenic *per se*, but conducive to crime in certain social situations (Copes & Hochstetler, 2003).

Conclusion

It can be concluded that men commit more crimes than women for a number of reasons, as do young people compared to older people. However, the gender gap is significantly greater than then the age ratio. In addition, age does not relate positively to both sexes. Therefore, I conclude that gender is the best predictor of crime. I do not share the criticism that the 'classical' theories have concentrated too heavily on men, because they did have a valid point in doing so, since women in crime remains a marginal phenomenon.

Nevertheless, gender remains only a predicting tool which allows us to narrow the scope of the research at a general macro level. The argument of Heimer and De Coster (1999) of crime and gender being rooted in power differences seems intuitively accurate, and in my opinion those differences need to be articulated. In order to be able to better predict which males are likely to offend, research should move towards studies of masculinities, maleness and machismo, and the practices of everyday life.

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About the Authors

Tuomas Tammilehto is a social scientist (M.Soc.Sci. from University of Helsinki) and a criminologist (MA in Criminology from City University London) who has spent most of his work life in research, for example at the Helsinki Collegium for Advanced Studies and as a Senior Lecturer in Security Management at the Laurea University of Applied Sciences. Currently, Tuomas works as a Senior Manager, Support for Research, at the Laurea LbD and Competence Management Services. E-mail: tuomas.tammilehto@laurea.fi

Violence in the Finnish Workplaces: A Review of Literature

Simo Salminen, Finnish Institute of Occupational Health, Promotion of Occupational Safety, Helsinki, Finland

Abstract

The aim of this chapter is to describe the occupational violence based on the Finnish literature. So called Victim-studies showed that violence towards women had increased from 1.0% in 1980 to 5.2% in 2009. Several interview studies had shown that the increase had happened among health care workers. Interview studies and studies in hospitals showed that alcohol is a meaningful factor in workplace violence. Nowadays, there are programs to prevent violence at workplaces.

Key Words

Occupational violence, Women, Health Care, Interview

Aim

The aim of this article is to examine violence at Finnish workplaces. This is carried out by a literature review of Finnish studies on occupational violence.

4. The victim doesn't follow the will of the perpetrator or start resistance.
5. The start of fight is based on the common silent contract.
6. A post-mortem situation (Aromaa, 1994, p. 4).

Definition of violence

A violent act is usually a result of the interaction between two or more people. Before the violent act the situation is escalated according to following process:

1. The victim is a defiance of the perpetrator.
2. The perpetrator interprets this as a personal challenge.
3. The perpetrator presents a counter challenge or starts already physical attack

This analysis showed that there are many different phases to stop the interaction before the violent act. However, both partners of the process are often so emotionally involved in the process that they cannot look it from outside perspective.

Victim-study

So called victim-study started from the OECD work during the mid-1970s on the development of social indicators measuring the physical safety of citizens. A working group consisted of representatives from USA, Canada, the Netherlands, and Finland noted that the

principle behind the social indicators was to measure the prevalence of death and serious injury resulting from unexpected external factors. In Finland, the Statistics Finland and the National Research Institute of Legal Policy carried out the first survey in 1980 (Aromaa, 1993).

The sample for the survey of accidents and violence was selected to represent all permanent residents of Finland over 14 years of age. Most of the interviews (over 90%) were done by telephone. Some of the interviews were carried out by visiting the interviewee. Encountering violence was measured by asking whether the respondent had during the past 12 months been in situation where somebody known or unknown to him/her had:

1. Threatened
2. Tried to prevent from moving, grabbed
3. Pushed or shoved
4. Hit, without causing visible marks
5. Hit, resulting in bruises
6. Hit, causing a wound
7. Hit using a knife, shot or attacked with a weapon
8. Behaved violently towards her/him in some other way (Aromaa, 1993).

The first survey was replicated in essentially same form but with a larger data set (Aromaa, 1993). Based on the so called Victim study in 1988, 394 interviews of occupational violence were analyzed (Salminen, 1997). The rate of violence at work was almost identical for males (40.6 per 1,000 workers) and females (40.5) or 1.6% of men and 1.4% of women encountered violence (Aromaa, 1994). The risk of violence at work was highest among 25-29 years of age.

Based on the same data set, Aromaa (1994) reported that violent acts encountered in the real violent occupations (like police officers) is often more dangerous than violence in the other occupations. On the other hand, the violence encountered in the other occupations is more surprising and it is difficult to anticipate and give away. For example, a nurse must have a close and even physical contact with a patient and a nurse is orientated to help a patient, not protecting him/herself.

Based on the so called Victim studies from 1980, 1988, 1993, 1997 and 2003, Heiskanen (2007) concluded that violence at work has increased from 2% in 1980 to 5.5% in 2003. Especially violence against women has increased from 1.5% in 1980 to 7% in 2003. Heiskanen explained this change by the growth of health care, social work, and education occupations, where women are working with a direct contact with customers.

Among men the incidence of violence was statistically higher only in the oldest age group (over 55 years), when compared the incidence rate of 1980 and 2007. The share of women who had encountered violence at workplace had a statistically significant increase in all age groups except in the youngest age group (Heiskanen, 2007).

Based on the data set from the year 2003, it was shown that violence at workplace was the most common type of violence among women, whereas men encountered violence most often at restaurants and amusement places. Women encountered violence almost 60 000 times in the health care occupations, 17 000 in social care occupations, and 10 000 in education occupations. Among men, violent acts distributed evenly between different occupations, but the most often it occurred among drivers, house property workers, and security guards. Women's worry about the violence at work had increased from 1988 to 2003 (Heiskanen et al., 2004).

There were differences between weekdays in the violence at workplaces. During weekend nights the risk of violence at work was almost ten times higher than during regular office hours and one and half to the other times at work. The risk of occupational violence increased between 5 p.m. and 5 a.m. on Friday and Saturday nights (Salminen, 1998).

The most hazardous occupations in 1988 were prison guard, police officer and mental health nurse (Salminen, 1997) or control work, traffic work and work in social services (Aromaa, 1994). In 2003 the risk occupations among men were nurses in mental hospitals, nurses and medical doormen, whereas among women police officers, nurse and doctors encountered violence most often (Heiskanen et al., 2004).

Among men, three out of four police officers, prison wards and wards were worried of falling victims to workplace violence. Among women, six out of ten home aids and home helpers worried the risk of violence at work (Heiskanen et al., 2004).

The main reasons for violence at work were resisting the command to go away (e.g. police's order to scatter) or to the relationship between a doctor or nurse and a patient (Salminen, 1997). According to Heiskanen and his co-workers (2004), violence toward women occurred most often in caring situations (48% of women's and 12 % of men's victimization), whereas men encountered violence most often after having given an order or command (28% of men's and 9% of women's cases). In the wholesale work, violence is related to theft or damage (Aromaa, 1994).

Six out of ten workplace violence acts were threats, in other words verbal aggression. For men, the share of verbal aggression was 70%, whereas half of violence against women was threats. Thus a larger share of the victimizations of women involved physical contact. One out of ten workplace violence incidents caused injuries in 2003 (Heiskanen, 2007).

Four out of five assailants was acting alone. Five out of six assailants were males, and they were older than those who use violence at leisure time in 1988 (Salminen, 1997). However, in 2003 nine out of ten perpetrators were male (Heiskanen et al., 2004). An assailant was reported to be under the influence of alcohol in 59% of the cases of workplace violence in 1988 (Salminen, 1997). Later in 2003, six out ten male victims were threatened by an intoxicated perpetrator, and six cases out of ten female victims (Heiskanen et al., 2004). Aromaa (1994) reported that use of alcohol is increased among those who encountered violence at their work. Those employees using a lot of alcohol experienced violence more often than those using alcohol rarely.

Based on the Victim-study in 1993, Kinnunen and Haapaniemi (1995) wrote that internal conflicts and social contradictions in the workplace had a strong association with the encountering threat

of violence. It seemed that continuous exposure to violence in the work worsened the climate at workplace and contradicted the relationships between employees. If there is no clear procedures for violent situations at the workplace, employees developed internally unofficial means to control exceptional situations. On the other hand, handling of violent situations was changed to those lowest in the power hierarchy (young workers) in the workplace. Young workers were also working in the front line with a direct contact with clients, whereas older workers stay behind with administration tasks.

As a summary of victims' study from 1980 to 2009 Sirén, Aaltonen and Kääriäinen (2010) concluded that violence towards women had increased from 1.0% in 1980 to 5.2% in 2009, whereas violence towards men had been rather stable (1.9% in 1980, 2.2% in 2009). Violence at workplace was also the most common type of violence towards women. The growth had been happened especially in health care occupations. Over half of the violence against female employees were done by clients or patients, whereas their proportion in violence towards men was under half of violent acts. Women's worry about violence at work had also increased during the last 16 years.

Other interview studies

In 1999 Statistics Finland carried out a large survey with over 30 000 respondents. Based on that data set, it was shown that five per cent of the employees encountered violence at work. For the entire working population, it means that 111 000 employees experienced violence or threat of violence during the past 12 months. Women encountered violence at work two times more often than men. Employees 25-44 years of age had been the objects of violence slightly more often than the average. The enterprisers did not encounter violence as often as wage earners (Piispa & Saarela, 2000).

Based on the same data set, it was shown that almost half of the mental health nurses had encountered violence at work. Their risk of being an object of violence was nine times higher than the average. Also in health care the risk of violence was higher than in the other industries.

Three out of four perpetrators were clients, patients or pupils. One tenth of violent acts were done by co-workers and in another tenth a totally unknown person (Piispa & Saarela, 2000).

Based on three different data sets, it has been shown that fixed-term employees encountered violence more often than permanent workers. Fixed-term employees had a 9% higher risk of occupational violence among men and 11% higher among women than permanent workers (Salminen & Saloniemi, 2010). In addition, Piispa and Saarela (2000) showed that there were more often fixed-term employees in occupations with the highest risk of violence. Part-time employees had also a slightly increased risk to encounter violence at work.

Finnish Institute of Occupational Health made every third year the Work and Health survey. Based on a random sample from the Population Register, about 2 000 working people were interviewed with the same questions. In the first survey in 1997 4% of respondents had encountered violence at their work (Pirainen et al., 1997). In the last survey in 2012, the proportion of violent victims had increased to 8% (Mattila & Salminen, 2013). At the same time points the victims of occupational injury had stayed at 10%.

Based on the same data set, one out of fourteen women and one out of 20 men had encountered violence or threat of violence during the past year. This means about 52 000 violent acts and 130 000 threats of violence in the entire working population. Violence towards women had decreased one third from the previous study in 2009 (Grönqvist et al., 2010). Most often violence and its threat were encountered among bank and finance sector, where every sixth employee had experienced it. Every tenth of health and social worker had encountered violence or threat of violence, which means a decline of 44% from 2009 (Mattila & Salminen, 2013).

The National Survey of Victims of Crimes in 2012 showed that women (4.4%) encountered violence or threat of violence two times more often than men (2.5%). Violence at work occurred most often among 25-35 years of old employees. Violence at workplace is often

repeated, because over half of victims had encountered violence several times. Women were more often afraid of violence at work than men (Sirén et al., 2013).

Violence in occupational accident statistics

Violence at work can cause an injury. If an injury caused four days absence, the employer can have compensation from the insurance company. Based on these compensation claims, the Federation of Accident Insurance Institutions (FAII) gathered the Finnish national occupational accidents and diseases statistics database.

In 1994-1996, the average annual number of violent injuries was 459. Two people died every year due to violence at work. Men encountered for approximately 56% of the violent injuries and had 1.5 times higher risk of encountering violence at work than women. However, women's share on occupational violence (41%) was higher than their share on occupational accidents. Violent injuries occurred mainly in the following occupational divisions: service, health care and social service, sales, and transportation and traffic (Isotalus & Saarela, 1999; Saarela & Isotalus, 1999). Women encountered more violence in the wholesale, health care and social work, whereas men experienced violence most often as safety guards, police officers, drivers, and employees in hotels and restaurants (Saarela & Isotalus, 1998). Hotel workers had over 37 times higher risk of encountering violence at workplace than the average employee. Deck and machine workers in boats, police officers and security guards had over 15 times higher risk of violence at work compared to the average (Isotalus & Saarela, 1999).

Over half of violent acts caused minor injuries, which were absence of less than three days. The most injured part of body were head except eyes, palm and fingers, and upper extremities from shoulder to the wrist. The quality of injury was most often contusions, surface injuries, scratches, wounds and inflammations. Men received more often fractures, whereas women got internal organ injuries. In four out of five

violent fatalities the victim got internal organ injuries (Saarela & Isotalus, 1998).

In this database of FAII 1464 occupational accidents related violence were registered in 2003, which means 1.5% of all compensated accidents at work. The number of claims due to violence was 1977 in 2006, which means the growth by 35%. The growth percentage was higher for women (49%) than for men (15%) (Hintikka & Saarela, 2010).

Women encountered the majority of violence caused occupational injury (58% in 2003 and 64% in 2006). Women had 1.4 times higher incidence rate (the number of injuries per 1000 employees) than men in 2003 and 1.7 times higher in 2006. The age groups 20-24 and 35-34 years encountered violence most often (Hintikka & Saarela, 2010).

Based on the accidents at work related to violence, the most hazardous work for women were medical and nursing work (34%), social work (19%), pedagogic work (12%) and child day-care work (9%). For men, the risk of violence was highest in public safety and protection work (41%), in road transport work (9%) and in waiting work (9%). Violence-related occupational accidents were most frequently related to situations where the injured was gripped, pushed, bitten, scratched, kicked or hit by an object thrown by another person (Hintikka & Saarela, 2010).

Hospitals as source of information

Hospitals are one source of information about violence, because the victims of most serious violent acts must take to the hospitals. A study at the Turku University Hospital showed that about 7000 patients in the emergency department 7.9% were victims of violence. Approximately ten percent of them were injured at work. Over half of injuries were caused by hitting with fist. Kicking caused one out of five violent injuries. There were also cases, where the perpetrator was working while using violence. For example, the porter of the restaurant was assaulter in seven cases, police officers in four cases, and

security guard in one injury (Nieminen & Kitinoja, 1993).

In the emergency department of a small local hospital 1.5% of patients were victims of violence. Three out of four victims were men. Violence against men was usually that clients attacked towards a doorman of the restaurant, whereas women encountered violent acts from their patients. Men were kicked and thrown on the floor, whereas women were additionally thrown to the wall or pulled from hair (Nurmi-Lühtje et al., 2008).

A study of injuries and violence in three hospital districts showed that the number of violent acts was almost same as the number of occupational injuries. However, there was almost three times difference between health districts with the lowest and highest violence rate. Verbal aggression, catching, hitting and kicking were the types of violence that hospital employees encountered most often (Salminen & Parantainen, 2012).

Other studies related to occupational violence

Public safety and protection was one of the most hazardous work in relation to workplace violence. That is why there is an own research project to study work-related violence of security guards and police officers.

A survey of 1,010 security guards showed that 39% of them had encountered verbal aggression at work, mostly swearing and shouting, and abuse. Threats of assault at least once a month were experienced one out of five security guards. As many as one out of six security guards had encountered physical acts of violence. Male gender, young age, low work experience, late working hours, and time pressure were risk factors of work-related violence among Finnish security guards. Verbal aggression was highly prevalent outside the metropolitan area and directed towards both more and less experienced security guards (Leino et al., 2011a).

Another survey of 1,734 police officers showed that 45% of them had encountered violence at their work. Officers in the group 36-44 years of

age and those with 4-9 years' work experience had suffered violent injuries more often. Officers who had encountered violence at least once had almost five times higher risk of increased alcohol consumption and over four times risk of psychological distress (Leino et al., 2012). Increased alcohol use were found among officers with lack of debriefing, shortage of patrol personnel and lack of training to handle violent situations (Leino et al., 2011b). Heavy alcohol use may decrease the work ability of police officers.

Robberies are violent situations although employees do not necessarily be injured. A survey of 272 shops and 70 kiosks showed that every fifth shop had been the object of robbery. One out of three kiosks and one out of four neighborhood shops had been robbed or tried to rob during their active time. The situation of neighborhood shops had a significant meaning for to being the object of robbery. Small number of employees or working alone had not significant effect on the risk of robbery. In the shops with video control or security guard were robbed more often than shops without these security means in the suburban areas, whereas in the downtown the situation was vice versa (Isotalus & Saarela, 2001).

Prevention of violence at workplace

Kauris is a program developed for prevention of violence at workplace. It has been developed especially for shops, but the recent version is usable to all workplaces, where there is a risk of violence. The Kauris program included six steps:

1. Gathering a work pair or work group. In many workplaces a safety manager made an initiative to start Kauris program. The work group should include both employer and employee representatives.

2. A detection of violent and threat situations. The survey will be carried out with anonymous questionnaire to whole personnel.
3. An assessment of preparing for violent situations. The work group checked, how the workplace has prepared violent situations with space solutions, control and emergency systems, and special procedures.
4. The planning of actions. Based on the earlier information, actions to prevent violent situations are selected. First the work group should concentrate with situations with highest risk of violence.
5. Training for personnel. Work group arrange training for the personnel so that it suits to the conditions of the workplace. All employees exposed to violence should participate the training.
6. The violent situations and their threats should report continuously. It is a base for the development of prevention plan, because violent acts could change over time (Saarela et al., 2009).

There are also other programs to prevent violence at workplace. They show that it is possible to prevent violence at work and improve safety of the employees.

Conclusions

Based on the previous review of literature the following conclusion could be drawn:

1. Violence in the Finnish workplaces has increased during the last 16 years.
2. Especially violence towards women has increased.
3. Health care occupations had experienced the greatest growth of violence.
4. Alcohol is a meaningful factor in workplace violence

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About the Authors

Simo Salminen is a senior researcher in the Finnish Institute of Occupational Health, team of Promotion of Occupational Safety. His research area is human factors related to occupational injuries. Dr Salminen holds an Adjunct Professor position at the University of Helsinki, Department of Social Psychology. His article about the work and leisure time injuries was selected as the best study in the Finnish Institute of Occupational Health in 2006. Dr Salminen is acknowledged in "Who is Who in Occupational Health" since 2001. E-mail: simo.salminen@ttl.fi

Navigator Help Desk in a Shopping Center

TRIO Counseling Model as an Urban Education Model

Eija Mattila, Laurea University of Applied Sciences, Hyvinkää unit, Hyvinkää, Finland

Piia Suomi, Laurea University of Applied Sciences, Hyvinkää unit, Hyvinkää, Finland

Niina Koskelin, Hyvinkää, Finland

Pia Solin, WHO collaborating centre for mental health promotion, prevention and policy, National Institute for Health and Welfare, Helsinki, Finland

Abstract

Navigator Help Desk is realized as a RDI-project by Laurea University of Applied Sciences Hyvinkää Unit with its wide network of partners during 2011 and 2012. The main aim of the project was accomplished, when the innovative and citizen-oriented TRIO Counseling Model of division of labor was developed as cooperation with professional, survivor and students from public, private and third sector. This cooperation allowed social responsibility broad meaning, going beyond corporate social responsibility of Prisma shopping center. Navigator Help Desk took its permanent place in shopping center in Hyvinkää city. Help Desk advisors aimed to help the visitors of shopping center in various public health and welfare issues, thus decreasing costs of public services. This practice is now applied nationally. National Board of patents and registration of Finland accepted the Navigator Help Desk as a trademark 11/2012. We hope that in future it is also taking its place internationally.

This paper describes some backgrounds of the project, some results of the study and the spread of the TRIO Counseling Model in Southern Finland. The results showed the great need for Help Desk as a new Urban Education model that reaches people where they are doing their daily business. Navigator Help Desk promoted health and welfare and facilitated everyday functionality of visitors. The expertise of service advisors and of visitors was shared. The study results were used as a part of developing work of curricula of Laurea University of Applied Sciences.

Key Words

The Navigator Help Desk, Health promotion, TRIO Counseling Model, Citizen-oriented, Interactive listening in counseling, Survivor as an expert of experience

Introduction

Finnish local government reform aims to strengthen the structures of municipalities and to enhance the organization of services. This means more cooperation between municipalities but also with private and third sector. The purpose of the local government reform project “is to create a municipal structure that is viable, robust and coherent and which is also comprehensive and equitable”. (Ministry of Finance 2009.) Furthermore, The National Development Program for Social Welfare and Health Care (Kaste) 2012-2015 includes cross-cutting principles which stress, among others, participation of the citizen as well as customer-oriented approach in planning and developing health and welfare services and policy-making. (Ministry of Social Affairs and Health 2012.)

The emphasis of public social and health care in Finland has been on therapeutic and mending work, on expensive services both to service providers and users. Emphasis has been on public services, less on commercial or third sector, more on professional help and less on personal networks (Arnkil 2009). We need cooperation of all sectors to increase recourses for health and welfare promotion. We are living in position of dilemma. Arnkil (2009) writes: “it is necessary to cross boundaries horizontally and vertically, across sectors, agencies and professions, towards clients and their personal networks, across hierarchical levels of management and between public, private and third sector players. Bureaucracies are sectorized, everyday life is not”.

People like to tell their stories or worries to someone who really has time to them. From the point of view of internal security the skill of listening is important, because the basic requirement of good communication is being heard. Bakhtin (1981) writes that “to being heard requires the answering. For the word (and, consequently, for a human being) there is nothing more terrible than a lack of response. Being heard as such is already a dialogic relation.” The present moment, *Kairos* (Stern 2004) is the moment to the professional to find out, what is the experience that is happening in clients mind “now”. The move from now to tomorrow starts from “now”. Navigator Help Desk has answered to these challenges by giving

time, attention and respect to the clients today, when the managing the daily schedules and clock time, *Chronos* (Stern 2004), keep people busy. Navigator Help Desk has served health and welfare services easily, quickly and without barriers.

The cooperation of all sectors is useful to reduce costs and to take advantage of multiple skills and know-how of people. Hakkarainen, Lallimo and Toikka (2012) write of collective expertise and crystallized knowledge, which means working in order to combine individual, communal and networking dimensions into social and material dimensions. Authors write that expertise is realized through participation in culture and in creating new knowledge through that participation. In accordance with Arnkil (2009) the central idea of communication is for dialogues to combine strengths and resources and to transition from expert-centered work to open cooperation.

NGOs as Help Desk’s partners have had an exceptionally strong position as voluntary service providers including the active development of peer support oriented work (Vilkkumaa 2009). He writes, that the psychosocial, multidisciplinary base of counseling has reflected the contemporary theoretical and therapeutic ideas in psychology and social sciences at various points of its development. We think this applies to education as well.

Theoretical background

Health promotion aims to increase health and reduce diseases, health problems and health inequalities. Municipal politics emphasizes health promotion as common task of all sectors. (Pietilä 2010.) Hyssälä (2006) writes: “Effective and systematic action for the improvement of health of population, using genuinely all available measures in all policy fields, is an opening for a new phase of public health”.

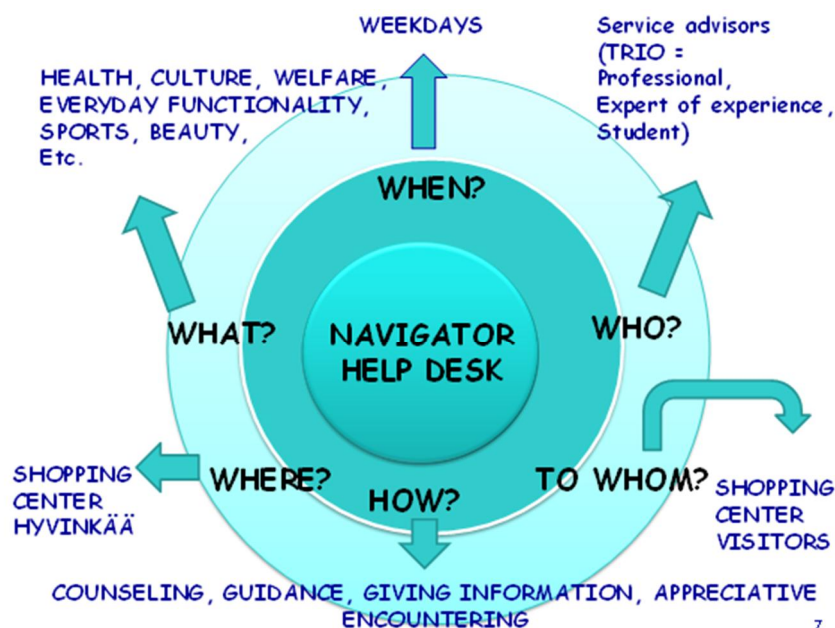
What kind of economic results health promotion has? According to Rouvinen–Wilenius and Koskinen–Ollonqvist (2010) economic evaluation and health promotion has generally been considered difficult to combine. Authors are borrowing some ideas of Hale (2000), according to whom 1) economic evaluation of health

promotion is not required in municipal decision making, 2) health promotion professionals and economics do not understand each other's work nor arguments and 3) the methods of health economics are not suitable with the evaluation of health promotion. Very often policy-makers feel that the data from qualitative research is not robust enough for them. On the other hand, in many issues of health promotion, especially mental health, quantitative methods of evaluation give only partial answers. (Solin & Lehto 2011.)

A big challenge of measuring cost effectiveness of health promotion is between quantifiable and non-quantifiable elements because of different values of economic and health promotion. Although the effects of health promotion seem self-evident, its justification with economic arguments is difficult. There are very few evidence-based studies on promotion or prevention. (Rouvinen-Wilenius & Koskinen-

Ollonqvist 2010.) That is why the Navigator Help Desk will assure the audience of its outcomes of TRIO-counseling model of division of labor. According that model the visitors can get help by consulting multi-expertise service advisors at Help Desk during their other business in shopping center. The visitors may cope without public health and welfare services thus decreasing costs of public services. Navigator Help Desk seems to be a central part of our social responsibilities.

Strengthening of cooperation and developing a division of labor of public, private and third sector increases resources for health and welfare promotion. The more there are health and welfare services available the more there must be cooperation and developmental work between counseling service providers and citizens. The following pictures (Pictures 1, 2 and 3) describe service advisor's work at Navigator Help Desk.



Picture 1 Navigator Help Desk in action



Picture 2 Service advisors ready to counsel shopping center visitors. In picture an expert of experience, public health nurse and two students from social services

TRIO counseling model (Picture 3.) is an attempt to map out, or fully explain, the richness and complexity of human behavior by studying it from more than one viewpoint (Vilkkumaa 2009). The Help Desk visitor is called in this paper by synonyms resident and citizen. The arguments for Navigator Help Desk are 1) Bringing services to the local residents in their daily environment, 2) Residents are cooperating with service advisors from all sectors, 3) Residents are gaining and sharing knowledge from social, health and culture services in their

area, 4) Survivors, professionals and students (TRIO) together are counseling residents and 5) Laurea University of Applied Sciences is getting information for developing and updating the curricula and practice training. Furthermore, societally TRIO counseling model promotes the participation of the citizen and customer-oriented approach which are important aspects in Finnish social welfare and health care ideology. (Ministry of Social Welfare and Health 2012.)



Picture 3 TRIO counseling model at Help Desk

In 2006 Mattila started to create a new dialogical counseling model for encountering people in present moment, *Kairos* (Stern 2004). The model is called **interactive listening in**

counseling. (Mattila 2006, 2008, 2009.) It is based on Experimental Learning Model (Kolb 1984), on counseling theories (Bond 2000; Feltham 1997; Sherzer & Stone 1980; Shotter

1993) and on socio-dynamic counseling theory (Peavy 1999 and 2006). Mattila developed the model in Laurea University of Applied Sciences by using Learning by Developing action model. It aims to produce new practices and demands collaboration between lecturers, students and experts from the world of work in order to progress (Raij 2007). The students from nursing and social services are studying and training the ideas of interactive listening in counseling before their practical studies in Navigator Help Desk.

At the international level there is a tendency to make the term “counseling” all encompassing, in order to accommodate a diversity of cultures and practice. But there are some languages, where is no equivalent term to counseling. Often terms of guidance or advice are in use as an equivalent to term counseling. (Bond 2000.) The term counsel is, however, linked etymologically with “consult” and “council” and has, therefore, a long historical association with the concept of decision making (Feltham 1997). For example in psychiatric rehabilitation and mental health promotion a term three-dimensional counseling is used. It refers to experience-based counseling, counseling by giving advices and counseling by emphasizing normative principles (Mattila 2002). Instead of term counseling Watts and Dent (2008) write by using term guidance-oriented interventions in the study in which the UK Learn direct advice service that operates on distance guidance basis was studied.

The objective of counseling is not to learn but to create such a good relationship in which learning becomes possible (Bond 2000). The International Association for Counseling (IAC) uses an all-encompassing definition of counseling as:

“a method of relating and responding to others with the aim of providing them with opportunities to explore, to clarify and work towards living more satisfactory and resourceful way”. (Bond 2000.)

Two major ethical principles of counseling are espoused by the British Association for Counseling (BAC 1997): respect for the client’s capacity for self-determination and the importance of confidentiality.

Interactive listening in counseling is a counselor’s skill to invite a client to dialogical counseling and discussion. A genuine contact to another person requires responsiveness of sensitivity to respond to client and the ability to listen to the client’s key message. Responsiveness makes listening more inquiring. The client can feel that she or he has been invited to relation with another expert to share his or her own expertise.

Why is interactive listening in counseling needed? The need is related to the society becoming more complicated, more fragmented, encounters becoming structured, more technical and meanings becoming blurred. More specialized working life creates new concepts and acronyms and makes it harder for people to understand each other. As a counterbalance people will build bridges and want to work together.

Interactive listening enables people to realize their intellectual and emotional potential and to find their roles in society. Good listening enhances prosperity, solidarity and social justice. On the other hand, bad listening increases costs, losses and becomes a burden to people and society. New common understanding is grown in progressive discourse. Both the counselor and the client listen to each other’s realities more in-depth than people usually do in ordinary conversations. Thus their inner responsibility and unreserved respect towards each other grows. (Mattila 2008 and 2009.)

Interactive listening in counseling consists of four elements: 1) atmosphere of the counseling situation, 2) position of counselor of “not knowing”, 3) methodological know-how and 4) structure of counseling situation. These elements were created in cooperation of a teacher student of HAMK UAS. The students of health and social services at Laurea University of Applied Sciences practice these elements before their training at Navigator Help Desk.

The expert of experience is survivor, a person, who has survived some social, health or economic problems or is coping from them. He or she has expertise from experience either as client or as relative. This person can, and should, participate in planning, developing and

evaluating of health and welfare services with professionals. (Jankko 2008; also Ministry of Social Welfare and Health 2012.)

Citizen-oriented work approaches client with dignity and equality. The service advisors are encountering residents as active participants and as experts of their own life. The need for well-being is the basis of the counseling work. The agency of the residence is realized through interaction and cooperation with service advisors by taking into account residents' own capacity. For the service advisor the agency of the residents means treating the residents as active and responsible people in the service process. It is important to remember that citizen-oriented work is based on the experience of the residents, not on the custom of service production. (Virtanen, Suoheimo, Lamminmäki, Ahonen & Suokas 2011.)

Methodological solutions

The purpose of the qualitative study, which was made at Navigator Help Desk in 2011 – 2012, was to describe interaction and client counseling between visitors and service advisors. Especially *the listening* in counseling was in the focus. The study was based on phenomenological and hermeneutic approaches (Miles & Huberman 1988; Tuomi & Sarajärvi). The study questions were: 1) Who is the visitor? 2) How long the contact lasts? 3) What kinds of elements the listening in counseling is constructing? 4) What kind of actions counseling is leading to? 5) What is happening in cooperation of partners? 6) How do the residents and partners benefit from TRIO counseling model of Navigator Help Desk?

Data was collected with forms filled by service advisors after contacts by describing the process of service advising. The visitors gave feedback with questionnaire i.e. by describing the things they were looking for help at Help Desk, their experience of counseling and the actions the counseling was led to. In data analysing both qualitative and quantitative content analysis was used (Miles & Huberman 1988; Tuomi & Sarajärvi 2009).

Miles and Huberman (1998) consider themselves as supporters of the logical positivists, but as "soft-nosed" of the substance. "Soft-nosed" comes from the fact that they refuse to set any strict limit between idiographic (individual cases as well) or nomothetic (the laws of searching) approaches. Few social phenomena are completely unique and few theoretical models can be absolute in all contexts. The findings of these phenomena are crucial for understanding of social behavior.

Research results

The results are describing both as numbers and percentage of the questionnaires filled by service advisors and as verbal descriptions of the experiences of the visitors. There was not enough written information in all questionnaires of the two study periods. The service advisors told that they were forgotten the documentation because of several visits or some items of questionnaires was unfilled by them. Two students interrupted their studies for personal reasons after collecting data. A new student was hired as project employee in November 2011. The quantitative results were described by him several different ways. The process of data analyzing proves the pleasure but also challenges of project managing. The tables in this paper, therefore, are described only as the results of spring 2012.

Who was the visitor?

The number of visitors was increased from beginning of 2011 to spring 2012. On the period from April to May 2011 (testing and preparing period of the project) the number of visitors was **539**. On the first study period from September to October 2011 the number was **639** and on the second study period from April to May 2012 it was **938** visitors. The number of men increased in spring 2012 close to the number of women from autumn 2012 (Table 1.). The estimated age of visitors stood for the average of 31 – 59 – year old adult visitors (Table 2.).

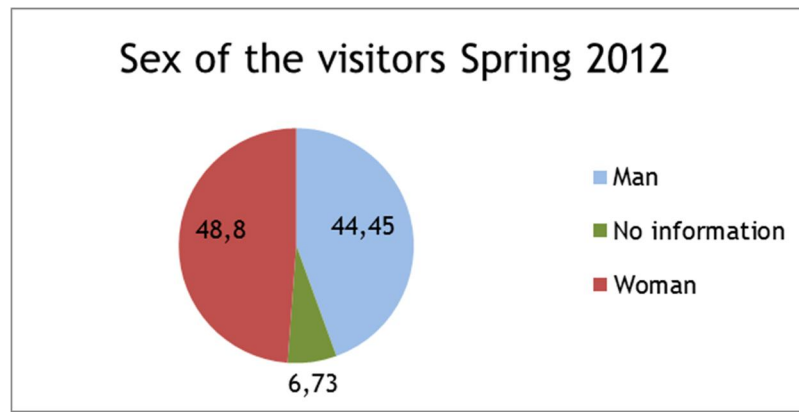


Table 1: Sex of visitors (%) spring 2012

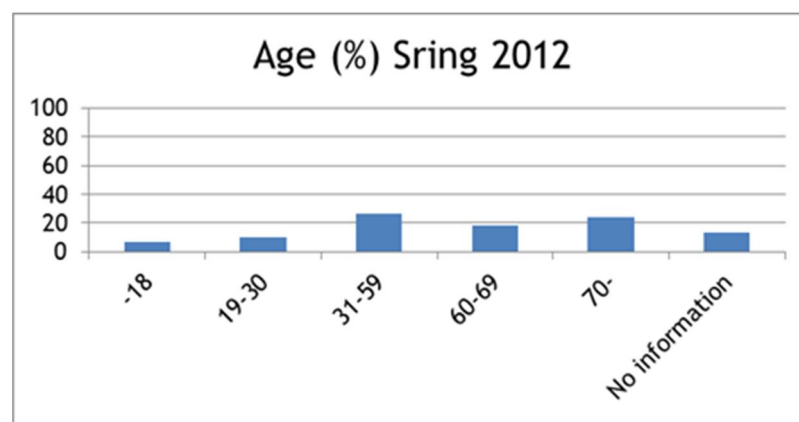


Table 2 Estimated age of visitors spring 2012

How long the contact lasted?

Many clients visited Help Desk for a short time to get an answer to their question, what Help Desk is? After getting the answer they moved on. Visits of more than two minutes included

conversations, sitting down, talking and listening. Most of the clients visited Help Desk longer than 10 minutes. The longest conversations took about two hours and they took place in a cafe near Help Desk. (Table 3.)

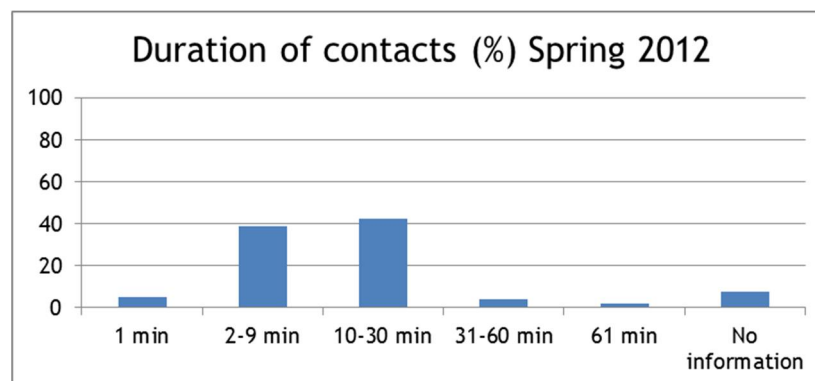


Table 3 Duration of contacts (%) spring 2012

Most clients visited Help Desk during 9.00 am – 5.00 pm (Table 4.).

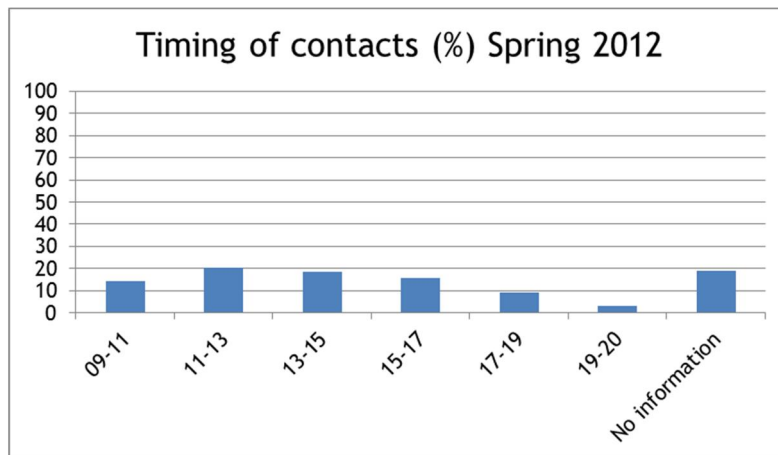


Table 4 Timing of contacts (%) spring

What kinds of elements the listening in counseling was constructed?

According to the results counseling was accomplished as mutual conversations, as 1) interactive listening in counseling and 2) counseling as getting information or advices. A confidential relationship between visitor and service advisor was soon formed and the noise of shopping center did not disturb it. One visitor described the students as “angels”, who were genuinely interested and respectful of the visitor and of his affair. The encountering was experienced by visitors as empowering and educational without the feeling of being taught.

Service advisors were acting as receivers of emotions for visitors because of spontaneous nature of Help Desk discussions. Visitors were worried about health situation, coping, homelessness, substance abuse, pensions or other concerns of daily living for themselves or for their relatives.

Visitors’ concerns were heard, rarely however, as indictment, name-calling or hate speech. In painful or frightening situations, service advisors counseled the visitors by controlling them and asked the security guards for help, if necessary. Help desk was also equipped with first aid kit. (Table 5)

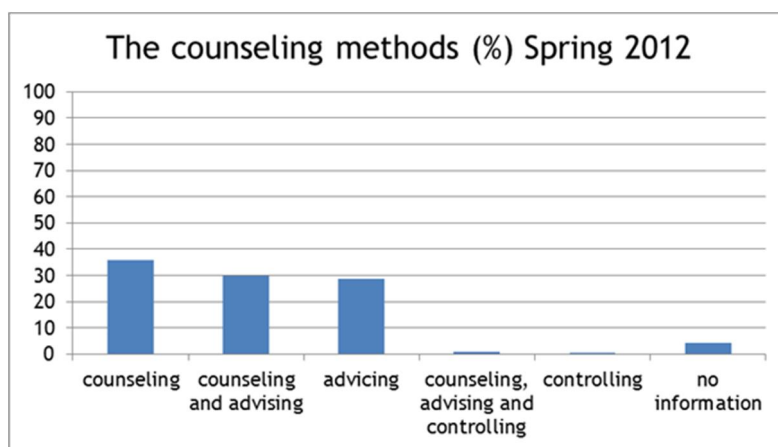


Table 5 The counseling methods (%) spring 2012

What kinds of actions counseling lead to?

Some residents visited the Help Desk several times either for a blood pressure test or to ask for special experts when they were present or for a talk and for spending time with service advisors. For many visitors Help Desk meant a place for a rest or for a discussion with someone who had time to listen to them. Some visitors were searching company to ease the solitude. For some visitors the service advisors looked for the services they needed. Visitors could also make an appointment directly to the service provider. Some visitors got help for filling different brochures or forms. Some of the visitors started to think about lifestyle changes or other changes in their lives based on the interactive listening in counseling with service advisors. Most of the visitors felt good during their visit to Help Desk.

According to the feedback of the visitors they were, most of all, looking for ways to maintain own health. Also the visitors were looking for knowledge to treat diseases and to get information of social security. According to their answers many of them had been looking for people who would listen their questions and thus, the visitors could have a feeling to had been heard. Housing, employment, leisure and solitude were equal subjects after questions of health and social security. The visitors were also interested in different cultural events and they liked to discuss the situations of their families and questions related to studying.

What happened in cooperation of partners and how did the citizens and partners benefit from TRIO counseling model of Navigator Help Desk?

The Navigator Help Desk has transformed the formal and informal education boundaries creating a new "Urban Education" field in the boundary. Help Desk has brought the TRIO counseling services to the local residents in their daily environment. Help Desk has provided counseling services for health promotion and well-being. The citizen will ultimately determine how to take advantage of counseling services.

The cooperation between public, private and third sector has allowed social responsibility broad meaning, going beyond corporate social responsibility of Prisma shopping center. It has been a big step for Prisma shopping center to make Help Desk's counseling services possible in the middle of people. Prisma shopping center differs from other shopping centers thanks to the broad meaning of social responsibility.

Companies and associations got publicity and new customers or members by approaching the people. NGOs recognized the need to become better acquainted with each other's activities and the need to bring citizens and volunteers closer to each other. Community is one of the values of Laurea University of Applied Sciences. According to the feedback of service advisors Help Desk could act as a good community and a workplace.

Visitors did not feel stigmatized. For example mental health survivors, working as service advisors and experts of experience, were breaking down prejudices of residents. The Help Desk paid particular attention to the risk of social exclusion. For example, to the church the Help Desk was a well-founded place to meet the residents.

From the viewpoint of citizens the effectiveness of Navigator Help Desk reached working-age and elderly people. They experienced the TRIO counseling as relaxed and without barriers. Even though very few young people visited Help Desk, they experienced the events of Help Desk positive.

The students as service advisors got more courage to encounter different visitors. They learned new skills of interaction and counseling. They could also carry out other studies at Help Desk, for example start to plan their thesis.

The know-how of citizens and service advisors as shared expertise became well-known between network partners. The TRIO –counseling model was applied in other projects in Riihimäki and Järvenpää cities, especially in the middle of young people. The purposes of these projects are, among other things, to prevent social exclusion by involving young people as

participants and as counselors of their own lives to getting education, vocational studies, work and friends.

Laurea University of Applied Sciences accomplished its RDI-function. The Navigator Help Desk was also visible in media. As economic benefits the Help Desk promoted health with early interventions. Many of the visitors told that they did not talk about their ideas in any other place except the Help Desk.

Conclusions

The project of Navigator Help Desk has been educational in many ways. It has created an innovative Urban Education environment in the middle of people where the shared expertise between service advisors and citizens has been accomplished. The citizen-oriented relationship made learning possible to the people. The TRIO counseling model of relating and responding to others served opportunities to explore, to clarify and work towards living more satisfactory and resourceful way. (Bond 2000.)

The Navigator Help Desk has brought counseling services to the local residents in their daily environment. Laurea University of Applied Sciences has got information to develop and to update the curricula and practice training. Furthermore, societally TRIO counseling model has promoted the participation of the citizen and customer-oriented approach. (Ministry of Social Welfare and Health 2012.)

Afterword

Laurea University of Applied Sciences wants to thank with its partners Uusimaa Regional Council for the funding of the Navigator Help Desk project. The emergence, development and dissemination as a permanent good practice of Help Desks TRIO counseling model has been a process which has required considerable cooperation of the network participants. The early planning and getting to know the participants has helped this process.

Project Manager and a student from Master's degrees did a presentation of Navigator Help Desk in the Education Conference of ECER in Berlin in 2011. The TRIO counseling model and the Navigator Help Desk were also introduced in FUAS Alliance. Help Desk has earned its place as a permanent Urban Education model in the Prisma shopping center in Hyvinkää city. Laurea University of Applied Sciences has been responsible for starting remodeling work in social and health sectors by creating an innovative TRIO counseling model at Navigator Help Desk.

"Tragedies are like great unexplained stories of the present in which social is lost. The present is rather feeding otherness, being left alone and outside. The Navigator Help Desk is timely because with its TRIO counseling model it is already answering the challenges. Different pronouncements aim to fair treatment of all citizens by 2020. This means involvement. This work is already being done at the Navigator Help Desk, which is a forerunner in the change of service structure. It is great to have The Help Desk in Hyvinkää city. As a preventive model, the Help Desk also brings comfort and mending."

(Niina Koskelin, an expert of experience)

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About the Authors

Eija Mattila, (eija.mattila@laurea.fi) is a Psychiatric Nurse, Teacher of Nursing, Doctor of Education Science and Principal Lecturer at Laurea UAS. Mattila is also Family Therapist and Supervisor. She was the project manager of the Navigator Help Desk. Her research interests lie in rehabilitative counseling and interactive listening in counseling. She is a co-author i.e. of the books *Ohjaus Learning by developing –toimintamallissa* [Counseling in Learning by Developing action model] (2008) and *Kuuntele minua* [Listen to me] (2009). Mattila is working in several projects of social responsibility.

Piia Suomi (piia.suomi@laurea.fi) is a third year student of social services at Laurea University of Applied Sciences. She is specializing in early childhood education and will graduate as kindergarten teacher. She was one of the students who had her study training at Navigator Help Desk.

Niina Koskelin (niina.koskelin@iki.fi) Bachelor of Social Services, survivor of a stroke, former municipal councilor and civil activist. She is working as temporary school social worker in Riihimäki city. She was member of executive team of Navigator Help Desk project as an expert of experience.

Pia Solin (pia.solin@thl.fi) is a Social Psychologist and a Doctor of Philosophy. Her thesis concentrated on mental health promotion and policy. She works in the Mental Health Promotion Unit in National Institute for Health and Welfare, where she is a director of WHO Collaboration Centre for Mental Health Promotion, Prevention and Policy. In her current role she is involved in several mental health promotion –projects and follows closely international mental health policy making in European level.

Restoring a Community's Sense of Security after a Fire - the Residents' Meeting as Form of Community Intervention

Tiina Korvenranta, Laurea University of Applied Sciences, Hyvinkää unit, Hyvinkää, Finland

Annika Manninen, Laurea University of Applied Sciences, Hyvinkää unit, Hyvinkää, Finland

Sointu Silvola, Laurea University of Applied Sciences, Hyvinkää unit, Hyvinkää, Finland

Abstract

The purpose of this article is to describe one form of community-based psychosocial support, the residents' meeting. There are provisions on psychosocial support in Finnish law, and the Ministries of the Interior and Social Affairs and Health have issued guidelines on the subject. Municipalities are under an obligation to provide psychosocial support within their area, in partnership with hospital districts. The relevant laws include the Health Care Act and the Rescue Act.

We take a situation involving a fire as our example, as fires are common everyday occurrences in Finland. Fires are situations where there may be a lot of need for psychosocial support. In addition to the residents of a dwelling where there has been a fire, neighbours and the rest of the community might require help. It is common practice today to consider the community as a whole in dealing with crises and disasters. The community's involvement is seen to be important if the objective is to build a sense of security. (Manash, Mujibuddaula & Rabiul 2012.)

We introduce the concept of psychosocial support and examine the contribution made at community level. We use practical examples and we have produced guidelines for organising residents' meetings for the use of those groups carrying out psychosocial work. In our article, we ponder the significance of the community as a phenomenon in the recovery of individuals and their greater resilience. If a devastating incident is handled in its initial phase by a group, the easier it is to start dealing with the crisis and make progress.

Key Words

Psychosocial support, community work, community support, resilience, sense of security

Introduction

Fires are common, everyday occurrences in Finland. Between 6,000 and 7,000 fires start in buildings every year. More than 95% of fires leading to fatalities start in residential areas. (Ministry of the Interior 2011.) If a fire breaks out in the immediate environment, it undermines people's sense of security. Fires affect the whole community, and there may be many in need of psychosocial support all at the same time.

The aim of psychosocial support in an emergency following a traumatic event is to bring the reactions of the community experiencing the incident under control. But it is not just a matter of psychosocial support for the individual victims of a fire: the rest of the residential community also need help. The emotions resulting from a devastating event may be dealt with in a variety of ways. If matters are handled appropriately and people are given information, this will reassure the community, bring the tools needed to control emotions, and help maintain a sense of order. The community will recover more quickly and the damage caused by the traumatic incident will be less. (Saari 2003, 108–109.)

Psychological resilience is the ability to cope mentally. It is the ability to function in unexpected situations. An individual's resilience depends on a person's characteristics, environment, social relationships and other psychosocial factors. People are part of their environment. Their environment affects the way people prepare for, and cope with, situations, and take decisions. (Uusitalo, Heikkilä, Rantanen, Lappalainen, Liuhamo, Palukka & Hämäläinen 2009, 37–39.) In order to develop their resilience, after a fire residents need information about what has happened and instructions. This need can be met with the timely organisation of a residents' meeting in the community that has experienced the fire.

A good time to hold the residents' meeting is within about a week after the fire, when those in attendance have got over the initial shock and

are able to deal with what happened. The meeting should consist of a statement of the facts, consideration of the psychological impact of the incident, practical matters, and information for the future prevention of fires.

The experience of survival helps restore one's sense of security. If the community is helped to cope, the resilience of individuals also improves. With resilience thinking, people must have adequate knowledge of the dangers that they can expect to face, so that they can predict events. Furthermore, people benefit from going back over events, because it helps them to see why they are in their current situation.

Arguments for psychosocial support; laws and recommendations

There are provisions on psychosocial support in Finnish law. Under the Health Care Act, local authorities and hospital districts must provide psychosocial support within their area. Under the Act, referral to psychosocial support services is also described as a task of the emergency medical services. Emergency medical services under the Act also include the referral of patients, relatives of patients, and other involved individuals to psychosocial support services. (Ministry of Social Affairs and Health Press release, 45/2011.)

Under the Health Care Act (1326/2010, section 27), local authorities must include guidance and advice on factors that help to maintain or stand to compromise mental health, provided in connection with health care, as well as psychosocial support for individuals and families, as necessary, and coordination of psychosocial support for individuals and society in unforeseen crisis situations. Under the Act, urgent medical care, including psychosocial support, must be provided for patients, regardless of their place of residence. (Section 50).

The Rescue Act and Decree on Rescue Services also oblige local authorities to ensure, in

collaboration with other experts, that the victims of an accident, their close relatives and their rescuers receive psychosocial support and services. The Constitution, Emergency Powers Act, Primary Health Care Act, Mental Health Act and Act on the Status and Rights of Patients are also key laws affecting the way in which psychosocial support is provided. Furthermore, the Personal Data Act and special laws that give entitlement to the processing of personal data also impact greatly on the organisation of psychosocial support when major disasters occur. (Ministry of Social Affairs and Health publications, 2009:16.44.)

Local authorities have frequently provided psychosocial support in such a way that third sector actors, such as the Finnish Red Cross and the Church, are involved in the process. Their work is also defined in law. The Evangelical Lutheran Church of Finland has a role to play in rescue work in disaster and crisis situations, and an important part to play too in providing psychosocial support. The role of the Church in such situations is provided for in the Church Act (Church Act [Kirkkolaki 1054/1993]). The Finnish

Red Cross is also involved in the organisation of psychosocial support when major disasters occur. The Act (238/2000) and Decree (811/2005) on the Finnish Red Cross provides guidance for this. (Ministry of Social Affairs and Health publications, 2008, 12, 22-23.)

Psychosocial support

Psychosocial support and services is an umbrella term for activities that are organised to limit the effects on people of an accident occurring in the community, a major catastrophe or other emergency situation, and to relieve the mental stress that results. The aim of psychosocial support is to reduce the harm that such an incident might cause an individual, the community and society in general, both socially and in terms of their health. Psychosocial support can be roughly divided into psychological support, social work and services, and the kind of spiritual support offered by the Evangelical Lutheran Church of Finland and other religious communities (Figure 1). (Ministry of Social Affairs and Health publications, 2009:16, 12.)

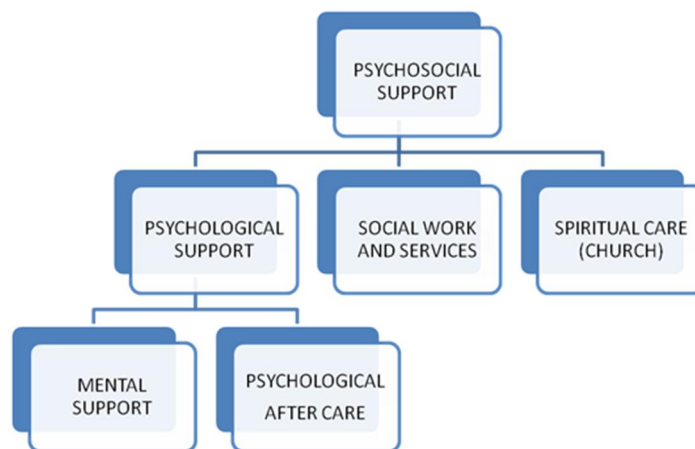


Figure 1 What psychosocial support consists of?

Psychological support

Psychological support helps an individual or community that has suffered trauma. Timely support at the outset is a way to try and prevent psychological trauma. Early identification of psychological trauma, treatment and rehabilitation are essential if other mental disorders are to be prevented. Social work is also

a measure that can be taken to help a person to recover. (Ministry of Social Affairs and Health publications, 2009: 16, 12-15.)

The timing of psychological support, the choice of approach and the amount provided depend on the psychological adjustment process and its stages. The stages in the adjustment process are psychological shock, the reaction, working on and dealing with the situation, and what is

known as reorientation. The choice of the approaches and methods used in psychological support at different stages of the adjustment process may have the following structure: psychological first aid (basic needs, practical help, contacts with relatives, active listening, receiving reactions), early stage support (community work in families, residential communities and schools, among friends, community or group-based support), working on and dealing with the situation (professionally mediated peer support, trauma therapy). At the reorientation stage, various forms of peer support and rehabilitation courses make suitable forms of support, based on an individual needs assessment. (Ministry of Social Affairs and Health publications, 2009: 16, 12-15.)

Social work and services

A key component of psychosocial support is various forms of social work and services in conjunction with psychological first aid. The physical and material requirements for existence must be urgently safeguarded. Social services to help provide basic security supports, and such provision also constitutes psychological first aid. To aid recovery, a person's livelihood must, where possible, be protected, as mental stress is also often associated with material losses and other changes, as well as uncertainty in addressing the practical challenges that life poses. (Ministry of Social Affairs and Health publications, 2009: 16-18.)

In various unexpected crisis situations, such as fires, it is the task of the social services to examine the need for care of the children and others dependent on those who have died, who have been injured or whose ability to function has been impaired. Care and protection are the urgent social services provided, according to need. (Ministry of Social Affairs and Health publications, 2009: 16-18.)

Psychosocial support in practice

The psychosocial support given after a fire is divided into responding to the emergency, the organisation of support, emergency work and subsequent work (Figure 2).

The emergency response centre raises the alarm, and those assisting at the initial stage, the police, firefighters from the rescue department and paramedics, assess the need for psychosocial support and contact the relevant unit in that area. The request may also come from a representative of a condominium (housing cooperative), the victims or their relatives. These requests frequently come in a few days later.

Emergency work at the scene of the accident refers to establishing contact with the victims and relatives, calming the situation, attending to material needs, such as accommodation and clothing, examining local networks, shaping a collective view of what has happened, and agreeing on what steps to take next.

This subsequent work divides into individual and community work. Subsequent individual work may take the form, for example, of appointments with a crisis worker or occupational health psychologist, or long-term trauma therapy. Subsequent community work refers to a situation where a larger group of people exposed to trauma is present at the same time. The residents' meeting is one form of community support, and it has in practice proven to be an important method of providing psychosocial support. Individual and community support are not mutually exclusive, however, and community psychosocial support may begin after individual support has been given. For example, the residents' meeting may be an occasion where people are selected who are in need of longer-term support.



Figure 2 Psychosocial support

Community support

A fire always affects the whole community. In addition to the residents or family in a condominium where there has been a fire, neighbours, friends and acquaintances might require psychosocial support. It is a terrifying experience to realise that a fire has broken out in the next apartment or in a neighbouring house or building. It is then that you have to face the fact that your own home may burn down. A person will start to think 'What if....?', and could become extremely anxious.

Emergency work following a traumatic incident is always a form of community work. The aim of emergency work is thus always to bring the reactions of a community that has experienced a traumatic incident under control and to get the crisis management process under way. If matters are handled appropriately and people are given information, this will reassure the community, bring the tools needed to control emotions, and help maintain a sense of order. The community will recover more quickly and the damage caused by the traumatic incident will be less. (Saari 2003, 108–109.)

It is natural and important for people to have a sense of community and to be, speak and act together. Having other people close to you and supporting you is important in a crisis. One effective model of community-based psychosocial support following a tragic situation is the residents' meeting.

Community-based support and increasing the individual's resilience

Resilience is the ability to function in unexpected situations. This requires skill and knowledge. An individual's resilience depends on a person's characteristics, but also the external environment, social relationships and other psychosocial factors. People cannot be detached from their environment: it affects the way they prepare for, and cope with, situations, and take decisions. (Uusitalo, Heikkilä, Rantanen, Lappalainen, Liuhamo, Palukka & Hämäläinen 2009, 37-39.)

People have both positive and negative feelings about their community, based on their life experiences. One of these is security and the feeling of security. (Saarnio 2001, 50.) Feelings of disintegration and bewilderment following traumatic events can spread in the community and lead to its decline. (Ayalon 1995, 16.) It is therefore important that the community as a whole should be helped after a tragic event, such as a fire.

Psychological resilience is the ability to cope mentally. Resilience is a quality that can be developed. For this to happen, people need to have a certain number of difficulties in their lives and they must receive sufficient guidance and support to deal with them. In this way they experience the fact that difficulties can be overcome. They develop a sense of confidence that they have the ability to cope. Every sudden, shocking experience people have enables them

to develop their resilience. (Saari & Hynninen, 2010.)

The purpose of psychosocial support for the whole community is to strengthen social cohesion, interactive relations and social support within the community. In this way, the effects of a fire can be alleviated, the sense of security increased, and the resilience of the community enhanced. For example, it is possible to think of ways to identify those in a community who may develop mental or physical symptoms owing to an incident and provide them with support. In addition, people can be made to feel less anxious if they are properly informed about the incident and its consequences. (te Brake, van der Post, de Ruijter 2008, 11.)

Community-based psychosocial support may be provided in the following ways:

- support on the one-stop shop principle - known in the Netherlands as Informatie-en Adviescentrum (IAC), where people can receive answers to all kinds of questions relating to an incident.
- Active support for communities provided by psychosocial support professionals.
- Identification of, and support for, individuals active within the community.
- Discussion with members of the community is an important form of psychosocial intervention.
- Clear and effective information is vitally important.
- Social support is a key positive factor in resilience, and it should be strengthened.
- Healthcare support, as necessary. (te Brake et al 2008, 11.)

Organisation of the residents' meeting

A good time to hold the residents' meeting is within about a week after the fire, when those in attendance have got over the initial shock and are able to deal with what happened and receive information. The meeting should consist of a statement of the facts, consideration of the psychological impact of the incident, practical matters, and further information for the

prevention of fires. Research shows that people prefer to receive information on the risk of accidents from an official quarter (Glatron 2012). Knowledge about fire safety provided by the local rescue department at a residents' meeting is thus an effective solution. The organisation of the residents' meeting should be the responsibility of the unit in the local authority responsible for psychosocial support.

The following should be taken into account when the meeting is being organised: contact with the parties with whom the event is to be held, booking the premises, invitations sent out to residents, and the staff who will be running the event. An employee of the local rescue department and a representative of the relevant condominium (housing cooperative) should be asked to attend, at the very least. The police, the Church, an insurance company and voluntary workers also make good partners at residents' meetings. If the condominium (housing cooperative) does not have a suitable area in which to hold the meeting, the most suitable premises in the town should be considered, generally a school located close by, for example. The Church may also be able to provide somewhere to hold the meeting. It is a good idea to have a ready-made template for invitations, which can be edited as the situation requires. The property manager for the property in question should be consulted on the matter of sending out invitations to residents. To facilitate organisation of the residents' meeting, it is a good idea for the psychosocial support unit to have prepared guidelines.

The residents of the community at such meetings have an opportunity to meet one another, discuss what happened and its significance, and receive peer support, by means of which social cohesion is enhanced. The importance of support for residents to increase resilience is especially reflected in how people receive information about what happened and what is to happen as a result of the fire, with regard to the condominium (housing cooperative), for example. Residents also receive information on fire prevention and fire safety, and learn what to do if there is a fire in the future. People's sense of security is restored and they have a greater ability to cope in unexpected and challenging crisis situations.

The residents' meeting

The residents' meeting should consist of a statement of the facts, consideration of the psychological impact of the incident, practical matters, and further information on the prevention of fires. What happened? Why did the

fire start? At the meeting the issue of how fires can be prevented is discussed. There is also discussion about the psychological impact of accidents and what repairs are to be made to the condominium (housing cooperative), and when. (Figure 3).

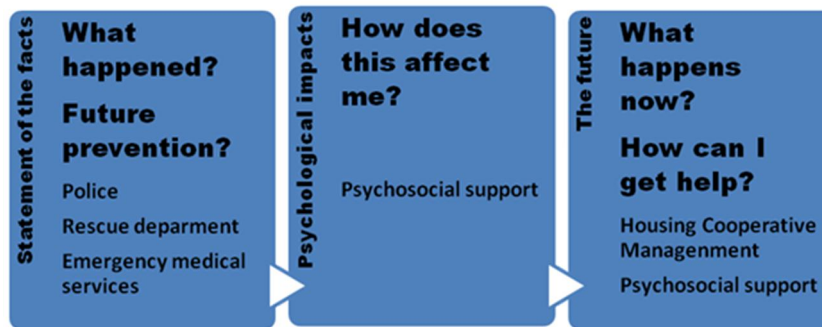


Figure 3 Content of the residents' meeting

Statement of the facts

To start with, the rescue authorities state the facts regarding the fire, how it started and the rescue action taken. Residents are also told how fires can be prevented and what everyone should do in the event of a fire. Residents may ask questions about the rescue action taken and fire prevention.

Psychological impact

A representative of the psychosocial support unit speaks about how people generally react in crisis situations. Residents are informed about where help can be sought and when. They are encouraged to share their experiences and feelings.

Looking ahead

The property manager explains what the condominium (housing cooperative) will do to repair the damage and the repair schedule.

Discussion

Finally, residents have an opportunity to discuss matters with the crisis workers and receive peer support from the other residents. The crisis workers note the physical and mental health of the residents. The contact details of those in

need of support are collected and they are contacted later as agreed.

Conclusions and suggestions

Our experience shows that the resident's meeting is a viable way to provide psychosocial support. Community-based assistance is effective, because it reaches a large group of people at one and the same time. At the meeting, it is possible to select those people who need community-based, special and longer-term support. Individuals active in the community may be identified at the residents' meeting, and these may be able to assist in the community's recovery, for example.

People are greatly in need of information after a traumatic event, and various rumours may have begun to spread in the community. At the residents' meeting, information is given regarding what has happened, and any misunderstandings are put right. Feedback from residents suggests that they think that this is important. At the meeting they have a chance to ask about fire prevention and what should have been done. Common questions include: "Must the windows be closed, or can we leave the flat?"

If residents receive the correct information from the authorities, it will add to their sense of security in the future. People prefer to receive information on the risk of accidents from an official quarter, such as fire fighters and the police.

If a residents' meeting is organised and held, it bolsters cooperation between the main agencies that act in crisis situations, as people discover what their various functions are. This also improves cooperation in other emergencies. Furthermore, different residential communities become known to the authorities and interaction between citizens and authorities becomes smoother. Community-based psychosocial support can prevent the segregation of communities, thereby increasing cohesion and a sense of security.

Studying the impact of the residents' meeting is of particular interest to psychosocial service providers, although the subject might also be

examined from the perspective of security and the provision of information. No studies have as yet been conducted in Finland on the impact of the residents' meeting on restoring a sense of security among residents. It would be rewarding to produce a thesis or carry out other forms of research into the subject.

The authors of this article presented the model they had developed of a residents' meeting as a psychosocial intervention in August of last year in Davos, Switzerland, where the International Risk and Disaster Conference 2012 was being held. A panel of experts asked the writers of the article to present their model for psychosocial community support to the international scientific community. One of the themes at the conference was resilience. The residents' meeting as a psychosocial intervention was an unfamiliar one for the majority of the audience, and the presentation was received with interest.

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About the Author

Tiina Korvenranta is a 45 years old socialtherapist in the city of Kerava. She holds a Bachelor of Social Sciences and has also completed specialisation studies in crisis work. She is currently studying at Master's Programme in Health Promotion, Crisis and Emergency Management. She has also studied the upper level of the specific solution-focused psychotherapy. She has been working in acute crisis work twelve years. She has been developing the metropolian area of psychosocial support co-operative model. She has participated in the international Barents Rescue exercise in 2011. She has also participated in many local rescue exercises. In addition she has made a study of Finnish municipalities acute psychosocial support and also a study of management of acute psychosocial support.

Annika Manninen is 46-year old crisis worker in Helsinki City Social and Crisis Emergency Services. She holds a Bachelor of Social Sciences and has also completed specialisation studies in crisis work. She is currently studying at Master's Programme in Health Promotion, Crisis and Emergency Management. She has been working in an acute crisis work seven years now. She has also worked at Finnish Mental Health Association for four years, working in an acute crisis work. In addition, she has done a research in an influence of peer groups for victims of tsunami in Thailand 2004. She has participated many local rescue exercises during the last seven years.

Sointu Silvola is a 41-year old crisis worker. She works at the Social and Crisis Emergency Services of Vantaa city. She holds a Bachelor degree in Social Sciences and has also completed specialisation studies in crisis work. Currently she is studying at the Master's Programme in Health Promotion, Crisis and Emergency Management. She has been working in acute crisis work since 2007. In her work she organizes psychosocial support for citizens of Vantaa and other areas of Finland. In 2011 she participated in the international Barents Rescue exercise. She has also participated in many local rescue exercises. In her free time she has also worked seventeen years as a volunteer for the Finnish Red Cross at the youth emergency shelter.

Lost in Navigation; Developing a Survival Kit for Lappish Wilderness without Communication Signals and Power Outlets

Jyri Rajamäki, Laurea University of Applied Sciences, Leppävaara unit, Espoo, Finland¹

Juha Knuuttila, Laurea University of Applied Sciences, Leppävaara unit, Espoo, Finland

Abstract

Satellite-based tracking systems combine navigation and mobile telecommunications technologies. Excessive trust in Global Navigation Satellite Systems (GNSS) technology could end in disaster in subarctic Lapland, where communication signals nor electricity network do not cover all zones. However, GNSS-based tracking systems enable many possibilities for improved safety and security response especially in remote and sparsely populated areas. The main challenges from a GNSS-based tracking device in remote and sparsely populated areas are the coverage of radio communications and power consumption of the devices. Parallel use of multiple communication systems increase coverage, but also the size of the device will be larger and it increases power consumption. With new battery and energy harvesting technologies, more power could be achieved. Increasing the intelligence of tracking devices, power consumption could be optimized.

Key Words

Global Navigation Satellite Systems (GNSS), tourism security, subarctic area, communication systems, power consumption

¹ Correspondence concerning this article should be addressed to Jyri Rajamäki, Laurea SID Leppävaara, Laurea University of Applied Sciences, FI-02650 Espoo, Finland. E-mail: jyri.rajamaki@laurea.fi

Satellite-based tracking system combines navigation and telecommunications technologies. Tracked devices are positioned by Global Navigation Satellite Systems (GNSS), and positioning data is delivered for post-processing via mobile networks. Smart phones are most common GNSS-receivers and their technology burgeons. Also, many companies are developing dedicated tracking sensors. The majority of sensors consume dreadful energy for long-lasting mobile use. Most sensors are “stupid” requiring command for almost all tasks. However, some “smart” sensors exist, e.g. in the field of crime investigation. Applying machine learning type of artificial intelligence (AI), a tracking sensor can adjust according to the behavior of the target. A multi-talented, intelligent and smart sensor can monitor the environment, e.g. light conditions, temperature, vibration, GNSS location and cell location. This information helps to visualize happening at location. The sensor’s own AI-brain makes necessary decisions, generates alerts and facilitates help in tough situation. This also makes sensors’ more power efficient.

The SATERISK project has studied risks associated with GNSS-tracking, specifically whether the use of tracking generates additional risks. For example, GNSS device battery may die in long-lasting hiking that leaves hikers with no way to navigate in the wilderness. Excessive trust in GNSS technology could end in disaster. However, GNSS-tracking systems enable many possibilities for improved safety and security response in remote and sparsely populated subarctic areas, especially if their energy

consumption is optimized. The end-user should be the development target for the whole efficiency chain, from the sensor to the information. It is essential as big part of the power consumption rely on how equipment behaves? Next step will be to look for energy harvesting; through other means which enables smart sensors for lasting performance.

Related Work

Overview of GNSS-based Tracking

Satellite-based navigation and tracking have become routine features of modern society and everyday life. Their use is still growing—a recent market research report predicts that the Global Navigation Satellite System (GNSS) market will likely double by 2016 (ABI research, 2011). A modern GNSS-based tracking system combines navigation and telecommunications technologies. The system is complicated and it consists of many technical segments, including the control segment, space segment, tracking segment, communication segment, data processing segment, application interface for external applications and end-user segment. The basic principle is that a tracked device is positioned by GNSS and positioning data is delivered for post-processing via mobile networks, the internet or a secure network as shown in Figure 1 (Kämpfi & Guinness, 2010). The system is complex and vulnerable of several kinds of cyber-attacks (Kämpfi, Rajamäki & Guinness, 2009).

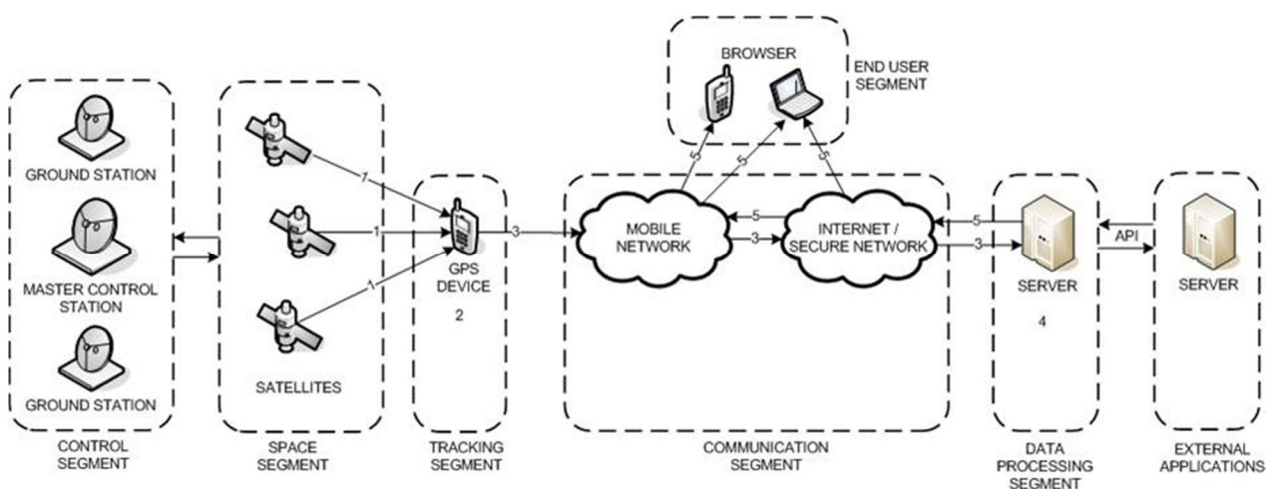


Figure 1: Principle of a satellite-based tracking system

Mobile GNSS-based tracking devices are able to calculate and deliver position information for post processing. Today many mobile phones include GPS receivers, and phones are easy to turn into tracking devices by client software. New positioning devices will support several GNSS systems so that multiple techniques can be used simultaneously to guarantee better positioning accuracy and availability. The widely used US-based GPS (Global Positioning System) and Russian-based GLOSNASS (Globalnaja navigatsionnaja sputnikovaja sistema) satellite positioning systems will soon get an EU counterpart and rival from Galileo. GNSS-based tracking is used in many applications, e.g. in logistics, fleet management, road tolls, traffic signal management, crime investigation. Many of these applications are developed for improving the safety and security of people and property. (Rajamäki, Pirinen & Knuuttila, 2011.)

Communications in Sparsely Populated Areas

As Figure 1 shows, telecommunications technologies have an important role within tracking systems; the communication segment delivers positioning data for post-processing and further to end-users. In most cases, the tracking device sends positioning data via mobile networks. The Internet is used to route positioning data from mobile networks for post processing, and this makes the system globally available. End-users can access their data via the Internet as well.

The Global System for Mobile Communications (GSM) is the second-generation mobile communications (2G) standard made by European Telecommunications Standards Institute (ETSI). The General Packet Radio System (GPRS) is an extension of GSM, which offers mobile packet-switched access. The data rate offered is 40-300 kbit/s, and the round trip time (RTT) is up to a few seconds. GSM offers connectivity in more than 200 countries covering over 80% of the world's population. Universal Mobile Telecommunications System (UMTS) is the successor to GSM, also called third-generation mobile communications system (3G). It offers voice, messaging and data services. UMTS' data rate is up to 14 Mbit/s and RTT shorter than in GSM. Radio coverage is continually expanding and UMTS currently covers the most populated areas. Short Message Service (SMS) is the messaging service of GSM

and UMTS. It allows users to send and receive text messages on a mobile phone. The length of messages is 160 characters, and messages can be sent globally via different operators. Long Term Evolution (LTE) is a fourth-generation (4G) telecommunication standard. LTE offers a packet-optimized service without native support for voice communication. The data rate offered is up to 300 Mbit/s with low RTT. The first commercial LTE networks were launched in Scandinavia in late 2009. However, all commercial communications networks have huge coverage gaps in sparsely populated areas.

Terrestrial Trunked Radio (TETRA) has been developed for professional services, especially for public safety like police and fire departments. It offers voice, short data (SDS) and packet data services. Strong security features and dedicated capacity are essential for professional use. The latest release of TETRA offers data rates up to 500 kbit/s. Finnish nation-wide VIRVE network is based on TETRA standard. The Inter-System Interface (ISI) forms part of the TETRA standard suite and it defines the connectivity between two independent TETRA networks. The main purpose of ISI is to allow cross-border communications between European nations for effective cooperation of security organizations in case of major incidents, such as international crimes or natural disasters. Another initial objective was to create large homogeneous networks based on different infrastructures from various manufacturers. However, this proposition was too complex to achieve because of the substantial differences between TETRA implementations. The ISI between Norway and Sweden is under implementing.

Modern satellite data services are typically provided to users world-wide through Geostationary satellites that can offer high data speeds. Most communications satellites use C-band (Comprise) which is a portion of the microwave band ranging from 4-8 GHz, and a wavelength of around 5 cm. Downlink frequencies (space to earth) are around 4 GHz and uplink frequencies (earth to space) around 6 GHz. The band is also used for radar, including weather radar, and Radio LAN in the 5 GHz range. Broadband Global Area Network (BGAN) is a newer satellite network from The International Mobile Satellite Organization. BGAN will offer transmission speeds of

theoretically up to 492 kbps. Actual data rates will be lower, depending on the satellite terminal used. BGAN will offer both voice and data services. BGAN supports both packet switched services based on IP as well as traditional circuit switched services. BGAN uses the new series of Inmarsat-4 satellites. BGAN offers coverage around the whole globe with the exception of the Polar Regions and parts of the Pacific Ocean. Services will be offered to land-based, airborne and maritime users. Geostationary satellites' communications coverage is at about 70 degrees North / South. Iridium is the only Company that offers coverage over the entire globe (Frost & Sullivan White Paper, 2010). The Iridium constellation of 66 low-Earth orbiting cross-linked satellites provides critical voice and data services for areas not served by terrestrial communication networks. Although the Iridium data link is slow (2.4 kbps), it suffices for secure tracking services.

Recoverable Technologies for Tracking Devices, Systems and Services

Artificial Intelligence (AI). More than half a century, allowing computers to model the world view well enough to express what we call intelligence has been the focus of research (Bengio, 2009). Machine learning (ML) is an old branch of artificial intelligence. Samuel (1959) defined that ML is a field of study that gives computers the ability to learn without being explicitly programmed. ML develops algorithms that take as input empirical data, such as that from sensors or databases. The algorithm is designed to (1) identify relationships thought to be features of the underlying mechanism that generated the data, and (2) employ these identified patterns to make predictions based on new data. The algorithm acts as a machine learner which studies a portion of the observed data to capture characteristics of interest of the data's unknown underlying probability distribution, and employs the knowledge it has learned to make intelligent decisions based on new input data (Wernick et al, 2010).

New Battery Technologies. New high energy rechargeable battery technologies are under development, being based on the elements of lithium and sulfur. The combine of these two elements yield a battery system with the highest theoretical gravimetric and volumetric energy densities of any known useful battery couple. The

difference with lithium-ion batteries is that the cell voltage is not anymore 3.6 V but varies nonlinearly in the range 2.5-1.7 V during discharge. Lithium-ion batteries are found everywhere from laptop computers and hybrid cars to electric power grids. A limitation of lithium-ion batteries, though, is the amount of energy they are able to store. Researchers have identified silicon as a material that can store ten times more energy than conventional technology, but it swells more than three times its volume when fully charged then shrinks again during discharge (Roan, 2011).

Energy Harvesting. Energy is everywhere in the environment in the form of thermal energy, light (solar) energy, wind energy, and mechanical energy. Unfortunately, the energy from these sources is often found in such minute quantities that it cannot supply adequate power for any viable purpose. Earlier, it has not been possible to capture such energy sufficiently to perform any useful work, but this scenario is about to change. "Energy Harvesting is the process of capturing minute amounts of energy from one or more of these naturally-occurring energy sources, accumulating them and storing them for later use. Energy-harvesting devices efficiently and effectively capture, accumulate, store, condition and manage this energy and supply it in a form that can be used to perform a helpful task. Similarly, an Energy Harvesting Module is an electronic device that can perform all these functions to power a variety of sensor and control circuitry for intermittent duty applications." (Energy Harvesting Forum, <http://www.energyharvesting.net/>.)

Combining Navigation and Emergency Services

The eCall system combines GNSS-based positioning and an automatic emergency call. It can automatically call emergency services in case of a serious accident as soon as the on-board sensors (e.g. airbag sensors) detect it, even when the victims are incapable to call emergency services (e.g. if they are unconscious). The eCall system is foreseen to be installed on all new vehicles in the near future all over Europe. The service is planned for initial implementation in 2015 and mandates that all new models of cars and light vehicles sold in the EU should be eCall compliant. A memorandum of understanding supporting eCall has been signed by most

European countries, the European Automobile Manufacturers Association and many automotive companies. (European Commission. eCall.)

Analytical Framework and Methods

This case study was a part of a SATERISK (SATEllite positioning RISKS) research project carried out 2008—2011. SATERISK project aimed to answer the following questions: Does satellite-based navigation and tracking involve risks? Do we know what the risks are now and what they will be in the future? Often new technologies will present opportunities for increased safety and security—and this is certainly true with satellite-based navigation and tracking—but they can also create new risks. It is important for the technology developers and end-users to clearly understand these risks and take steps to mitigate them. (Rajamäki et al., 2012.) SATERISK project followed the base of

development research (DR) in the management information systems (MIS) wheel diagram, first published by Nunamaker, Chan and Purdin (1991). According to the Nunamaker’s (2010) “going the last mile” approach, the starting point of research should be a real problem for real people.

As Figure 2 shows, the creation of innovative artefacts includes three phases: proof of concept (POC), proof of value (POV) and proof of use (POU); as well as theoretical science supporting these phases (Nunamaker, 2010). The aim of this paper is to provide an improved theoretical understanding how GNSS-based tracking services should be modified that they could improve the safety and security response in remote and sparsely populated areas.

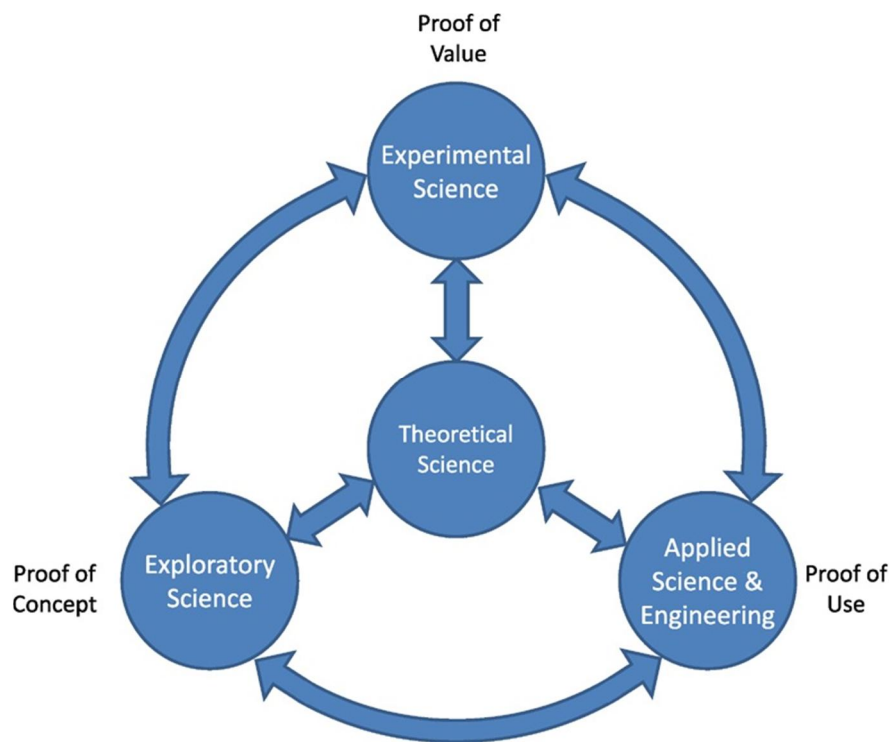


Figure 2: Integrated, multidisciplinary, multi methodological development research

Research Question and Process

The original research question is: How GNSS-based tracking devices, systems and services should be modified that they could improve the safety and security response in remote and sparsely populated sub-arctic areas?

The unit of analysis of the case study is the tracking device in use. The data collection has been done through literature, documentation get together in the SATERISK project and interviews of experts and tracking device manufacturers and end-users. The subarctic region covers much of Alaska, Canada, Iceland, Lapland (=the north

part of Scandinavia and Russia), Siberia, and northern Mongolia.

Results and Discussion

According to our study, the two main challenging areas with regard to tracking in remote and sparsely populated areas are sustainability of the radio coverage and sufficiency of power of tracking devices.

Threats to Radio Coverage

Radio coverage of commercial mobile cellular communication networks has huge gaps in remote and sparsely populated areas. Especially deep valleys and fjords are very problematic areas. Also, these networks are vulnerable for break downs during extreme weather conditions, when safety and security systems are most needed. TETRA networks are quite robust for extreme weather conditions. Although, TETRA coverage in Finland is quite extensive, the situation is not same everywhere. Also, the roaming between TETRA networks is not in operational use creating threats within remote border district where people could stray across the borderline. In past, the first roaming agreements were set up in Scandinavia for GSM. Now, the same should be made with TETRA ISI roaming.

The coverage of geostationary communication satellites is at about 70 degrees North and South; e.g. Utsjoki in north Finland is situated at 69°54'25"N. Iridium cross-linked satellites offer coverage over the entire globe.

In remote and sparsely populated areas, parallel use of multiple communication systems increase coverage, but also the size of the device will be larger and it increases power consumption. Small (20x20x3 mm) and low power (consumption in idle mode: <2.6 mA, speech mode: 270 mA average) 2G/3G modems are available (<http://www.gsm-modem.de/module-gsm.html>). Several TETRA modems supporting for simultaneous SDS and packet data services can be used to develop a variety of TETRA data solutions including customized telemetry devices, PDAs and tracking devices. Their smallest sizes are about 50x50x5mm and current consumption 1.8A (4V) , small satellite modem modules are available. E.g. Thuraya has also launched a 70x50x10mm unit designed for

integration into other devices. A commercially available tracking system applying Thuraya Module consumes 3W during transmission (SVTS Thuraya GmPRS).

Power Generation, Storage and Consumption of Tracking Devices

Today, smart phones are the most common GNSS-receivers and also tracking devices. However, they consume too much energy to be utilized in tourism safety and security systems. For that reason, dedicated tracking devices are needed. Many companies are developing tracking devices for different applications; some even considering the power consumption.

Power consumption. In reality, the majority of tracking devices consume dreadful energy for long-lasting mobile use. The power consumption of a tracking device is not a problem when tracking vehicles having large batteries and chargers. But power consumption is a critical factory if only batteries are available, especially during emergencies. Most devices are “stupid” requiring command for almost all tasks. Usually a tracking device includes only motion detectors; if the motion of the device stops, also sending of position information stops until the motion continues. However, some “smart” GNSS-based tracking devices have lately been developed, e.g. in the field of crime investigation (Rajamäki, 2012). Applying machine learning type of artificial intelligence, a device can adjust according to the behavior of the target. A multi-talented, intelligent and smart device can monitor the environment, e.g. light conditions, temperature, vibration, GNSS location and cell location. This information helps to visualize happening at location. The device’s own AI-brain makes necessary decisions, generates alerts and facilitates help in tough situation. By optimizing the use of radio transmitters, devices’ could improve their power efficiency significantly.

Power storage / Batteries. In practice, all requisite power of every mobile tracking device is stored inside the device’s own battery from which it is consumed when needed. Many GNSS-based tracking devices are very small and require little power, but their applications are limited by the reliance on battery power. However, battery technologies are advancing rapidly and this will enable many new tracking applications.

Power generation / Battery recharging. The most common way for recharging of batteries is to exploit mains power and carry it out when the mobile device is not in use. Energy harvesting modules convert ambient energy (e.g., solar power, thermal energy, wind energy, salinity gradients, kinetic energy) into electrical energy. Scavenging energy from ambient vibrations, wind, heat or light could enable smart mobile devices to be functional indefinitely. Also, portable dynamo generating power could be utilized.

One general solution improving the safety and security response in remote and sparsely populated areas would be to install fixed emergency points having SOS phones and recharging places for mobile devices. All relevant places where electrical power is available, such as e.g. base stations, should have a SOS phone and a power point with universal battery chargers. Also, emergency points are needed along hike routes away from power grids. For instance in Lapland, the easiest standardized routes are designed for unassisted wheel-chair traffic compounding the need of SOS phones. Statscewich et al. (2011) have developed a modular, autonomous remote power module (RPM) for Arctic environments. The RPM designed to generate 10 KWh per day contains subsystems for power generation, satellite communications and power performance monitoring. RPM's batteries are primarily powered by wind and solar and secondarily by a diesel generator. The RPM is robust for extremely weather conditions as well as for wildlife (rodents, foxes, bears). A fossil-fuel based generator is employed as a backup power source so that costly maintenance visits and ongoing logistics and fuel costs can be minimized. The RPM is modular and highly portable, designed to be deployed and serviced using small planes, boats, four-wheelers or snow machines. Component redundancy ensures reliable operations under harsh environmental conditions. (Statscewich et al., 2011.) Shelter cabins along hike routes without electrical power should be equipped with grinding dynamo generators for enabling to recharge mobile equipment.

Conclusions

This chapter evaluates the research process and the findings of this study from the viewpoint of the research questions of the study. Finally, suggestions for future research avenues are made.

Improved Use of Tracking Devices for Safety Critical Services in Subarctic Region

A satellite-based tracking system combines navigation and telecommunications technologies. Excessive trust in GNSS-technology could end in disaster. In emergency situations, the power consumption of the tracking device could be a critical factor. For example, GNSS-device battery may die in long-lasting hiking that leaves hikers with no way to navigate in the wilderness. So, orienteering skill (utilizing maps and compasses) is still needed. However, GNSS-based tracking systems enable many possibilities for improved safety and security response in remote and sparsely populated areas, especially if their communication paths and energy consumption are optimized. By utilizing machinery learning type artificial intelligence e.g. the use of radio transmitters could be optimized, improving devices' power efficiency significantly. Combining devices' power consumption optimization and new high energy rechargeable battery technologies with utilizing energy harvesting from ambient vibrations, wind, heat or light, a multiplied running time could be achieved. However, the end-user should be the development target for the whole efficiency chain, from the sensor to the information.

Along hike routes, fixed emergency points having SOS phones and recharging places improve the safety of tourists. For emergency points away from power grids, remote power modules are available and/or they could be equipped with grinding dynamo generators for enabling to recharge mobile equipment and using SOS phones.

Suggestions for Further Research

By no means, GNSSs are not everlasting stable systems; old satellites die and new systems are launched while international competition in the space is going on. So far Russian satellite systems are covering Lapland best according to peer reviews. Nevertheless, GLONASS has been underestimated by EU countries. More research is needed about emergency coverage areas in Lapland.

Law enforcement authorities are developing robust and secure tracking sensors for their technical surveillance (Rajamäki, 2012). These research and development activities could be utilized in other safety critical tracking systems. Improving of these tracking devices, the next step would be to integrate available avalanche rescue service techniques, such as Recco, and to look for energy harvesting; through other means which enables smart sensors for lasting performance. However, this needs future research.

New eCall devices should be deployed in all new vehicles, such as snowmobiles, and not only in cars. In order for the eCall system to work correctly, all involved parties including vehicle manufacturers, telecommunication operators or emergency services agencies should take actions

in order to offer a valuable eCall service. By December 2014, telecommunication operators must ensure that mobile networks are able to identify whether an emergency call is actually an eCall, as well as the eCall activation method (automatic or manual), because the accident data must be transmitted as quickly as possible. At the same time, Emergency centers must be capable of processing the data that comes from an eCall and they should retransmit it to other rescue services, such as ambulances, police, fire brigade, hospitals, etc. However, a correct installation of an eCall system into a snowmobile needs further research.

In Lapland the easiest standardized hike routes are designed for wheel-chair traffic, too. It should be research, how emergency facilities with SOS phones should be brought into these standards, or not?

Big cruisers sail along subarctic coasts, especially via fjords of Norway and Alaska coastline. The coastal infrastructure in cases of maritime hazards is totally absent on routes of cruises made. All life rafts should have waterproof satellite phones and tracking devices and grinding dynamo generators.

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About the Author

Jyri Rajamäki received his M.Sc., Lic.Sc. and D.Sc. degrees in electrical and communications engineering from Helsinki University of Technology, Finland in 1991, 2000 and 2002 respectively. From 1986 he works for Telecom Finland. From 1996 he was with the Safety Technology Authority of Finland where his main assignment was to make the Finnish market ready for the European EMC Directive. Since 2006 he has been with Laurea University of Applied Sciences, Espoo, Finland, where he serves as a head of Laurea's Data Networks Lab. He had 17 years experienced in electro technical standardization, e.g. being 7 years the Secretary of Finnish national committee on EMC, and 10 years the Chairman of Finnish Advisory Committee on EMC. He has been a member of several EC working groups, e.g. EMC-ADCO, EMC Working Party. His research interests are electromagnetic compatibility (EMC) as well as ICT systems for private and public safety and security services. He has published about 80 papers published in international journals and conference proceedings. He has been scientist in charge for several research projects funded by EUREKA and the Finnish Funding Agency for Technology and Innovation. E.g., he has been the Scientific Supervisor and Director of the following research projects: SATERISK (focusing on risks and challenges of satellite tracking in cross-border operations), Rescuing Intelligence and Electronic Core Applications RIESCA (risks analysis of essential CIIP systems and a method to minimize risks in new system), Multi-Agency Cooperation In Cross-border Operations MACICO (develops a concept for interworking of security organisations dealing with cooperation of security organisations that do not use the same radio network in their day-to-day job, but in some missions could benefit from infrastructure sharing) and Mobile Object Bus Interaction MOBI (enhances ICT integration of emergency vehicles and creates a base for an emergency vehicle concept suitable for export.) E-mail: jyri.rajamaki@laurea.fi

Juha Knuutila, Licentiate degree in information systems, M.Sc. in political science. 17 year background in diplomacy (incl. European security and trade policy issues), 11 years in IS academia in group technologies and post-master education. He has studied the application of group support systems into the fuzzy daily work of multinational diplomatic conference organizations e.g. OSCE.

International Tax Planning, Tax Avoidance and Corporate Social Responsibility

Reijo Knuutinen, Laurea University of Applied Sciences, Hyvinkää unit, Hyvinkää, Finland

Abstract

The society expects companies to act socially responsible. In this article, I am going to review international tax planning and tax avoidance in the light of corporate social responsibility (CSR).

Increasing globalization and the amount of cross-border business makes local taxation of companies more difficult, especially regarding large multinational enterprises (MNEs). The phrase “aggressive tax planning”, has been recently used on several occasions. Companies often defend their tax strategies and actions as being in obedience of the laws and regulations. But for society, this is not always enough. The ultimate aim of tax law is to divide the tax burden in a just and fair manner. Laws and regulations do not always ensure that.

In cross-border situations, it may be justified to expect that MNEs would pay their fair share taxes to each country. It can be argued that tax planning activities using different kinds of loopholes and incompatibilities are not socially responsible actions when the outcome is that a company obviously does not pay its fair share of taxes to the country in which it carries out its business.

Key Words

International tax planning, tax avoidance, profit shifting, tax arbitrage, corporate social responsibility, tax gap, tax havens

Introduction

Corporate social responsibility (CSR) is to some extent a controversial concept. It has been so especially in the United States. However, within the European Union, there seems to be an increasing awareness of CSR, and the EU and its

member states are supporting the idea. The society expects companies to act socially responsible. In other words, society sets CSR expectations to reflect its ethical norms.

However, people often define corporate social responsibility differently. Society’s values are

also sometimes conflicting or confusing, but always changing. Traditionally, there have been three dimensions indicated in the concept of CSR: (1) economic, (2) environmental, and (3) social. In other words, companies must take into account the economical, environmental and social effects of their activities. There has been recently been much public discussion about companies' responsibility to pay taxes and especially about tax planning of companies in the international context. However, it is not necessary to view taxation as a new dimension. We can view it as part of economic responsibility.

The concept of CSR refers to companies' actions that are above the limits set by legislation. Of course, to be a responsible, a company must always obey the law. Thus, CSR refers to activities that exceed the minimum requirements set by law.

In addition, CSR requires transparency. A responsible company reports its businesses and activities in public, and thus provides the general public with an opportunity to assess its activities. At the earlier stages, companies reported on their environmental impact. Later on, reporting has covered all three dimensions of CSR. Many different kinds of standards have also been created for these purposes.

In this article, I am going to review international tax planning and tax avoidance, primarily in the context of income taxation, in the light of CSR.¹ Does CSR have any significance in the context of tax law and taxation? And more closely, is there the kind of CSR that sets limits on companies' tax planning? Is there an obligation to pay any more taxes than has to be paid according to the law and the tax treaties? However, at the beginning, it is necessary to review whether a company has any social responsibility at all besides making money for its shareholders.

Does a corporation have any social responsibility?

Corporate social responsibility has been a controversial concept. The term does not have any fully established definition, although

¹ See also Knuutinen (2013), pp. 177-191, where the issue of tax minimization and CSR is reviewed more generally.

generally, the economic, environmental and social dimensions have been identified. The concept also changes and develops over time, along with the development of the whole society.² For example, some of the issues that were previously "only" within CSR are now codified legal obligations. Points of view, opinions and definitions vary and change.

The basic question, however, remains: does a corporation have any social responsibility at all, apart from its legal obligations?

The starting point is clear. According to financial theory, the ultimate purpose of a company is to make profits for its shareholders and to maximize the value of the shares. According to the Companies Act³ in Finland, the purpose of a company is to generate profits for shareholders, unless the articles of association state otherwise. However, with some assets and actions the aim is to make profits directly, and with others indirectly. The *shareholder value* theory accepts the kinds of responsibilities that are based on legal obligations or that increase the value of shares (at least in the long run).

Economist (and also a CSR critic) Milton Friedman put it this way in his famous article:

"What does it mean to say that "business" has responsibilities? Only people have responsibilities. A corporation is an artificial person and in this sense may have artificial responsibilities, but "business" as a whole cannot be said to have responsibilities, even in this vague sense."^{4,5}

In the context of taxation and according to this point of view, if a company pays a higher tax than it would have paid had it undertaken some tax planning, the company makes inappropriate use of its shareholders' funds. On the other hand, if corporate executives assign corporate resources to some "social objectives" (beyond legal obligations), that means that they are imposing extra "taxes" on the shareholders.⁶ So the

² See Oxford Handbook (2008), p. 33.

³ Ch. 1, Sec. 5 of the Limited Liability Companies Act 21.7.2006/624 (osakeyhtiölaki).

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⁵ "The Social Responsibility of Business is to Increase its Profits", The New York Times Magazine, September 13, 1970.

⁶ Oxford Handbook (2008), p. 59.

question is whether company executives have the right or power to do that?

Some counter-arguments can be presented to this critical view of CSR. First, the question of CSR does not disappear as such, even if we see that corporate executives do not have the right or power to impose “hidden” taxes. Instead, the shareholders themselves have the right or power to do CSR activities.

Secondly, several CSR activities can also be seen as useful for shareholders. It is the task of corporate executives to identify and eliminate all kinds of risks in business. As of today, missing CSR strategy or activities can already be considered a risk for business and for a company. In some cases, CSR activities can even be seen as a kind of investment.

Income tax system is an imperfect system

There are different demands and expectations for a good tax system. Most of the demands and expectations can be scrutinised for three basic requirements: equity, certainty and efficiency. However, in practice, these basic requirements are very difficult to fulfil at the same time.

The common problem of the income tax system, in Finland and in other countries as well, is that the tax system is not fully built on the economic reality, and therefore it does not fully reflect the economic reality. Instead, as a part of the legal system, the tax system is based on legal norms and legal forms. Therefore, there is a tension between legal forms and economic reality throughout the entire system of income taxation. The core of the problem in a single system is that taxable income is understood, defined and measured in a way that deviates from the economic concept of income. The economic concept of income is always the natural starting point for tax statutes. However, exceptions to that concept are made in many ways and for many different reasons. Therefore, the problems and issues of *form and substance* have their background at the law-making level.⁷

⁷ About the issues of form and substance in tax law see Knuutinen (2009).

Having said that, it is necessary to notice that in business income taxation – in Finland and in many other countries – the concept of income is closer to the economic concept of income than it is in personal taxation. The main reason is that taxation of business income is strongly linked to accounting. However, business taxation also has some features that create tensions in the tax systems. One example is the realization requirement in defining and measuring income. The outcome of the realization requirement is often underestimation of income.⁸

Secondly, there are also tensions at the level of interpretation. Tax statutes are in written form, and language is not as exact as numbers. Interpretation is needed to give those words meaning. At the level of interpretation, it may be a question about the legal substance of legal norms. Instead, regarding the transactions, the question often arises on whether the legal form or the economic substance of the transaction is relevant in determining the tax treatment. The income tax systems are mainly based on legal transactions, not directly on economic factors. A taxpayer can choose a certain form of transaction and sometimes makes a choice partly or mainly based on gaining a tax benefit. Furthermore, a taxpayer can even make a transaction without having any real business reason at all.

Furthermore, business, financial and other transactions are very often cross-border activities, especially regarding the bigger multinational enterprises. At the same time, the tax systems are basically local. Income taxation is usually based on the income generated by separate legal entities, not on the economic facts and circumstances of the whole group. Thus, there are incompatibilities between different systems, despite the fact that to some extent compatibility is somewhat improved by tax treaties and, in our case, also by EU tax legislation.

In a globalised world where economies are increasingly integrated, domestic tax systems designed in isolation are often not aligned with each other, thus creating room for mismatches.⁹ These mismatches may result in double taxation

⁸ In some cases, however, the mark-to-market approach is used instead of realization requirement.

⁹ See OECD (2013), p. 39.

or double non-taxation. Therefore, many tax planning and tax avoidance strategies take advantage of the interface between the tax rules of different countries.

The result is much tension, both *in* different tax systems and *between* different tax systems. Many taxpayers are aware of these incomplete characteristics of the tax system and their incompatibilities with other systems. This creates opportunities for tax planning and tax avoidance.

Tax evasion, tax avoidance, tax planning

It is natural that taxpayers want to minimize their taxes. The ways to minimize taxes can be divided into three levels:

Tax evasion is the general term for any kind of efforts by individuals, corporations, and other taxpayers to evade taxes by *illegal* means. This can mean, for example, incomplete or false tax reporting (that is information about the state of affairs to the tax authorities) or otherwise acting in a fraudulent manner. In income taxation, this means declaring less income (or profits or gains) than actually earned or overstating deductions. The tax evader tries to achieve his goal by concealing facts and misrepresenting them. Tax evasion (or tax fraud) is criminalized in the Penal Code.¹⁰ It is obvious that tax evasion efforts are not socially responsible activities. However, with large multinational enterprises, illegal abuses are the exception rather than the rule; their tax strategies usually comply with the *legal* requirements of the countries involved.

A distinction must be made between *illegal* (criminal) tax evasion and *legal* (non-criminal) avoidance of tax. The OECD has described *tax avoidance* as follows: "A term that is difficult to define but which is generally used to describe the arrangement of a taxpayer's affairs that is intended to reduce his tax liability and that, although the arrangement could be strictly legal,

it is usually in contradiction with the intent of the law it purports to follow."¹¹

Tax avoidance means legal utilization of the tax regime to one's own advantage in order to reduce the amount of tax that is payable by means that are within the law – or at least within the *letter* of the law. The tax avoider is a person or company who avoids tax payment, but does so using legal means only, and makes – at least formally – full and truthful disclosure of all the facts.

Thus, the question is not about the disclosure of the facts. Instead, the question is often the purpose and real substance of the actions and transactions. In tax avoidance, legal formalities are often used to get tax advantages. Tax avoidance actions and transactions are – mainly or only – made for tax purposes. Tax avoidance actions and transactions are often artificial, lacking valid business reasons. Despite the fact that actions and transactions are formally legal and they are also fully and truthfully disclosed, they are against the *purpose* of tax law. Furthermore, although the actions taken are formally presented to the tax authorities, the ultimate purpose or the real economic significance of the actions are often hidden.

After all, it is very difficult to give an exact definition for tax avoidance. It is also important to notice that tax avoidance is not criminalized. This, in fact, is the core of the problem. If tax avoidance could be easily and exhaustively defined, it also could be criminalized – and the problem would be solved.

Therefore we can only generally describe and characterize tax avoidance. Nonetheless, in the tax legislation of many countries (for example, Finland), there is a general anti-avoidance provision, for which purposes there has to be some kind of legal definition for tax avoidance.¹²

¹⁰ Ch. 29, Secs. 1–4 of the Penal Code 19.12.1889/39 (rikoslaki).

¹¹ OECD (Centre for Tax Policy and Administration): Glossary of Tax Terms. See www.oecd.org.

¹² In Finland, Sec. 28 of the Act on Assessment Procedure 18.12.1995/1558 (laki verotusmenettelystä). This general anti-avoidance provision may be applied in the case of any arrangement with a clear tax avoidance purpose. Based on the general anti-avoidance provision, it is possible to deny any tax benefits that would not have been available had the taxpayer used the form of an arrangement or a transaction that corresponds to the actual nature of the arrangement or transaction. The general anti-avoidance

These definitions are often a bit ambiguous and vary between different countries.

It is quite obvious that tax avoidance efforts are not socially responsible activities. However, it is not always easy to know in advance what is tax avoidance and what is not tax avoidance. On the other hand, taxpayers are entitled to know their legal position, which is to know what will be regarded as tax evasion, what will be regarded as tax avoidance, and what is acceptable tax planning or mitigation. The principle of legality is unconditional in criminal law, and it has importance in tax law as well.¹³

As previously discussed, the borderline between tax evasion and tax avoidance is easy to define conceptually. But the borderline between tax avoidance and tax planning is a difficult one.

Tax planning (or tax mitigation) traditionally refers to the actions and transactions of taxpayers that are not against the purpose of the tax law. At least in the framework of the national tax system, the legislator has explicitly or implicitly accepted this kind of action for tax purposes. One example of acceptable tax planning is the choice between forms of legal incorporation (e.g., to conduct one's business as a company or as a partnership), even though that choice may dramatically alter tax liability.

Therefore, tax planning is acceptable in principle. Nevertheless, this involves a number of concerns. Tax planning opportunities are not same for all taxpayers. While taxation, at least in the long run, has some features of a zero sum game, tax planning can also lead to an unjust distribution of the tax burden. Therefore, one argument against tax planning is that it can increase the tax burden on other taxpayers. Tax planning can also lead to inefficiencies in the economy; taxpayers often make decisions they would not make in a tax-free economic situation.

The phrase “aggressive tax planning”, as opposed to normal or acceptable tax planning, has been recently used on several occasions. In

provision applies both to domestic and cross-border situations.

¹³ The Constitution of Finland 11.6.1999/731 (perustuslaki), Sec. 8 (the principle of legality in criminal law) and Sec. 81(1) (the principle of legality in tax law).

the international context, aggressive tax planning can be characterized, for instance, by intensive use of legal and financial tools, establishments in foreign tax havens, unbalanced capital structures and transfer prices, and disingenuous use of tax treaties.

An income tax system is usually created as a compromise of different kinds of policy objectives. Therefore the systems are not usually consistent and coherent; instead, they include different kinds of distinctions and discontinuities, without relevant equivalences in the economic reality. These distinctions and discontinuities are used both in tax avoidance and tax planning. Different kinds of distinctions and discontinuities are especially strong and difficult in the international framework, that is, between different tax systems.

In light of public discussion, it seems to be so that tax planning activities can be divided into two subgroups: those which are regarded by society as normal or acceptable tax planning, and those which are regarded as unacceptable or “aggressive” tax planning.

It can be argued that the latter activities therefore are not regarded as socially responsible activities by the stakeholders. I take this as a starting point in my review in this article.

To sum up the relation between the levels of tax minimization and CSR, it can be argued that:

- tax evasion efforts obviously are not socially responsible activities;
- tax avoidance efforts quite obviously are not socially responsible activities;
- tax planning activities can, in principle, be divided into the following: (a) acceptable tax planning activities, and (b) unacceptable or aggressive tax planning activities, which activities therefore are not regarded as socially responsible activities by the stakeholders.

Therefore, the line of moral acceptability goes *inside* the tax planning area.

It is worth noticing that in the first place, taxpayers make the division for acceptable and unacceptable tax planning activities themselves.

However, regarding corporate social responsibility, the crucial thing is where this borderline is drawn by different stakeholders and the whole surrounding society: media, customers, investors, etc. Furthermore, these moral views can vary between people and also over time.

Tax gap

Because of tax evasion and tax avoidance (and maybe we can include a part of tax planning here as well), there is a gap between the tax that is collected and the tax that *should* be collected. It is called the *tax gap*.

However, there are different kinds of approaches and definitions for tax gap. For instance, in the UK, *Her Majesty's Revenue and Customs* (HMRC) has defined tax gap as follows:

"The tax gap is defined as the difference between tax collected and the tax that should be collected (the theoretical liability). The theoretical tax liability represents the tax that would be paid if all individuals and companies complied with both the letter of the law and HMRC's interpretation of the intention of Parliament in setting law (referred to as the spirit of the law). The tax gap estimate is net of the Department's compliance activities.

*An equivalent way of defining the tax gap is the tax that is lost through non-payment, use of avoidance schemes, interpretation of tax effect of complex transactions, error, failure to take reasonable care, evasion, the hidden economy and organised criminal attacks."*¹⁴

On the other hand, in Finland, the Tax Administration has also included aggressive tax planning as one cause of the tax gap – although without giving any definition or further guidelines as to what is aggressive tax planning and what is not.¹⁵

We can argue that from the legal perspective, the tax gap components are formed due to tax evasion and tax avoidance. Instead, from a tax policy perspective, the tax gap can also include a third component due to aggressive tax planning. From the viewpoint of CSR, this component is the most interesting. The first two components can

basically be tackled with legal measures. Instead, the third one – the component of aggressive or otherwise unacceptable tax planning – is beyond the borders of the law. Here, CSR can take the role.

If tax planning is too aggressive, the legislator can always, in the framework of the national system, make changes to the tax legislation. However, in the international framework this is not possible – or at least it is not easy to do. There are incompatibilities between different systems, which create opportunities for tax planning and also for certain types of tax avoidance as well. However, this kind of tax avoidance is not exactly the same kind of avoidance as that defined for a national system. Hence, the general anti-avoidance provision may not be applied.

Multinationals enterprises and international tax planning

Increasing globalization and the amount of cross-border business makes local taxation of companies more difficult, especially regarding large multinational enterprises (MNEs). The erosion of national tax bases has recently been one of the major concerns of OECD and G20 countries as well. According to the OECD, tax base erosion constitutes a serious risk to tax revenues, tax sovereignty and tax fairness for OECD member countries and non-members alike. OECD has recognized that there is a growing perception that governments lose substantial corporate tax revenue because of planning aimed at shifting profits in ways that erode the taxable base to locations where they are subject to a more favourable tax treatment.¹⁶ G20 countries, in turn, discussed the issue in their February 2013 meeting.

The basic dilemma is described by the OECD as the following: "Domestic rules for international taxation and internationally agreed standards are still grounded in an economic environment characterized by a lower degree of economic integration across borders, rather than today's environment of global taxpayers, characterized by the increasing importance of intellectual property as a value-driver and by constant

¹⁴ HM Revenue & Customs: Measuring tax gaps 2012 (An official statistics release 18 October 2012), p. 3. <http://www.hmrc.gov.uk/stats/mtg-2012.pdf> (13.3.2013).

¹⁵ Finnish Tax Administration (Annual report of the 2011), p. 9.

¹⁶ OECD (2013), p. 13.

developments of information and communications technologies.”¹⁷

According to the OECD, there are several studies and data indicating that there is increased segregation between the location where actual business activities and investment take place and the location where profits are reported for tax purposes.¹⁸

The OECD has identified problems in the following areas:

- international mismatches in entity and instrument characterization, including hybrid mismatch arrangements and arbitrage;
- application of treaty concepts to profits derived from the delivery of digital goods and services;
- the tax treatment of related party debt-financing, captive insurance and other intra-group financial transactions;
- transfer pricing, in particular in relation to the shifting of risks and intangibles, the artificial splitting of ownership of assets between legal entities within a group, and transactions between such entities that would rarely take place between independents;
- the effectiveness of anti-avoidance measures, in particular GAARs, CFC regimes, thin capitalization rules and rules to prevent tax treaty abuse;
- the availability of harmful preferential regimes.¹⁹

The term *cross-border tax arbitrage* generally refers to a situation in which a taxpayer or taxpayers rely on conflicts or differences between two countries' tax rules to structure a transaction or entity with the goal of obtaining overall tax benefits.²⁰ The outcome can be either a reduced or a no-taxation situation. Technically speaking, the tax planning actions are acceptable from the viewpoint of the national tax laws of each country. However, taking both tax systems into consideration, tax systems do not work together in such a way that the basic objectives of these

systems would be realized in an appropriate manner. That is, with cross-border tax arbitrage, the taxpayer is utilizing incompatibilities and inconsistencies between different systems.

Multinationals have also established companies and made large-scale direct investments in some countries with certain tax benefits. There is published data regarding foreign direct investments (FDI) on a country-by-country basis. For instance, in 2010, Barbados, Bermuda and the British Virgin Islands altogether received more than 5% of global FDIs. That is more than Germany or Japan received. At the same time, these three jurisdictions made large-scale investments in the other world. For example, in 2010 the British Virgin Islands were the second largest investor in China (14%), after Hong Kong (45%) and ahead of the United States (4%).²¹

The OECD is also using a concept of special purpose entities (SPEs) in its reports and other materials. SPEs are defined to be (1) generally organised or established in economies other than those in which the parent companies are resident; and (2) engaged primarily in international transactions but in few or no local operations. Furthermore, SPEs are defined either by their structure (e.g., financing subsidiary, holding company, base company, regional headquarters) or by their purpose (e.g., sale and regional administration, management of foreign exchange risk, facilitation of financing of investment).²² Generally, SPEs are entities with no or few employees, little or no physical presence in the host economy, whose assets and liabilities represent investment in or from other countries, and whose core business consists of group financing or holding activities.²³

The Netherlands is one of the countries where SPEs (like holding companies) are of great importance. In 2011, total incoming stock investments into the Netherlands were equal to USD 3 207 billion. Of this amount, investments through SPEs amount to as much as USD 2 625 billion. At the same time, outgoing stock investments from the Netherlands were equal to USD 4 002 billion, with about 3 023 billion being

¹⁷ OECD (2013), p. 5.

¹⁸ OECD (2013), p. 15.

¹⁹ OECD (2013), p. 6.

²⁰ Ring (2002), p. 80.

²¹ OECD (2013), p. 17.

²² See <http://stats.oecd.org/glossary>.

²³ OECD (2013), p. 18.

made through SPEs.²⁴ Similarly, in Luxembourg SPEs are of great importance in incoming and outgoing stock investments.

Tax havens are definitely a huge global problem, but it is not easy to draw the line between countries that are tax havens and those that are not. The Netherlands and Luxembourg, for instance, also offer some tax benefits for multinational enterprises.

The Internet has changed the world of taxation as well. Nowadays it is possible to be heavily involved in the economic life of another country by doing business with customers located in that country via the Internet, without having a taxable presence there or in another country that levies tax on profits.²⁵ There are many examples discussed in publicity lately. In some cases, public discussion and pressure has changed a company's tax strategy to fall more in line with the expectations and demands of society.

Anyway, the changes in business practices brought about by globalization and the digitalization of the economy have raised questions among governments about whether the domestic and international rules on the taxation of cross-border profits have kept pace with those changes.²⁶

The framework of tax treaties

Both overtaxation (double taxation) and undertaxation are problems. In the international context, double taxation is usually eliminated by double taxation conventions (tax treaties). According to the OECD Model Tax Convention, the principal purpose of tax conventions that eliminate double taxation is to promote the exchange of goods and services and the movement of capital and persons. However, it is also a purpose of tax conventions to prevent tax avoidance and evasion.²⁷ Therefore, the improper use of the convention has been raised in a number of articles in the OECD Model. It is agreed that states do not have to grant the benefits of a double taxation convention where

arrangements that constitute an abuse of the provisions of the convention have been entered into.²⁸

However, the existence of more than 3 000 bilateral tax treaties²⁹ complicates matters. The aim in creating national tax systems has been to make them coherent and consistent as much as possible. Instead, the global tax treaty network is not created that way and it is not a logical whole. Taxpayers often try to take advantage of tax treaty benefits in ways that can be considered inappropriate. However, in some cases it may be difficult (both conceptually and practically) to determine what kind of international tax planning is appropriate and what kind is inappropriate.

Taxpayers may, for instance, establish a conduit company or other kind of artificial legal construction in a tax treaty state in order to take advantage of tax treaty benefits that would not otherwise be available for the taxpayers.³⁰ The aim may be to avoid source taxation of dividends, interests or royalties, or to avoid capital gain taxation. This kind of *treaty shopping* leads to a loss of tax revenues in the taxpayer's state of residence or in the original source state of the income. Therefore, tax treaties include more and more provisions against tax avoidance and especially treaty shopping.³¹ A taxpayer may also take advantage of a tax treaty by arranging activities in a way that the most advantageous provisions of the tax treaty will apply. The taxpayer may, for instance, transfer income from one state to another in a form that qualifies under the most advantageous article of a tax treaty. This type of *article shopping* may also be used together with treaty shopping.³²

Tax treaties include provisions against improper use of convention, such as tax avoidance or treaty shopping. However, in the OECD Model Tax Convention it is noted that it should not be lightly assumed that a taxpayer is entering into the type of abusive transactions. Therefore, "[a] guiding principle is that the benefits of a double

²⁴ OECD (2013), p. 18.

²⁵ OECD (2013), p. 7.

²⁶ OECD (2013), pp. 27–28.

²⁷ OECD Model Tax Convention, Para. 7 of the Commentary on Art. 1.

²⁸ OECD Model Tax Convention, Para. 9.4 of the Commentary on Art. 1.

²⁹ See e.g. OECD (2013), p. 8.

³⁰ See OECD Model Tax Convention, Paras. 8–9 of the Commentary on Art. 1.

³¹ See Helminen (2013), p. 42.

³² Helminen (2013), p. 296.

taxation convention should not be available where a main purpose for entering into certain transactions or arrangements was to secure a more favourable tax position and obtaining that more favourable treatment in these circumstances would be contrary to the object and purpose of the relevant provisions.”³³ This guiding principle (“treaty anti-avoidance rule”) reads like a test that must be met before the benefits of a treaty can be denied.³⁴

Anyway, it is important to notice that it is also a purpose of tax conventions to prevent tax avoidance and evasion. Namely, according to the Vienna Convention, a treaty should be interpreted in light of its purpose.³⁵

The framework of EU tax law

European Union tax law is part of the international tax law of Finland. EU tax law includes the legal norms based directly or indirectly on the founding treaties of the EU that may have relevance for taxes. The organs of the EU do not have their own taxing powers regarding direct taxes. Instead, taxation in the EU Member States is based on each country's domestic tax law and tax treaties.

The TFEU Treaty includes certain norms dealing expressly with taxes, certain norms that indirectly concern taxes and norms that concern the EU decision-making process in tax matters. However, there are no express norms concerning direct taxes. Relevant to direct taxes are primarily the general non-discrimination article and the articles regarding the fundamental freedoms: freedom of movement for workers, freedom of establishment, freedom to provide services, free movement of goods, and free movement of capital.

The Union shall adopt measures with the aim of establishing or ensuring the functioning of the internal market. The internal market shall comprise an area without internal frontiers, in which the free movement of goods, persons, services and capital is ensured in accordance with

the provisions of the Treaties.³⁶ Any kind of barriers to these freedoms, such as taxation, must be removed. Although direct taxation falls within the non-harmonized area, the Member States can, however, exercise that power in such a way that it does not constitute a barrier to the fundamental freedoms. However, problems arise particularly with income taxation because the internal market idea requires cutting off all national boundaries; but at the same time the income systems are national.

As such, it is clear that tax avoidance is not acceptable from the EU perspective.³⁷ As the EU Court has stated, nationals of a Member State cannot attempt, under cover of the rights created by the Treaty, to circumvent their national legislation improperly. They must not improperly or fraudulently take advantage of the provisions of EU law.³⁸ But the crucial thing is that usage of the EU fundamental freedoms is not tax avoidance or improper use as such. On the contrary, creating internal market and various cross-border activities between Member States are objectives of the EU. Multinational enterprises have the freedom to establish new companies also in those Member States where the tax rate is low, such as Ireland. However, from the perspective of other Member States, this causes some problems.

The advantageous tax treatment under some EU directives may also be taken advantage of in the same way as it applies to the tax treaties. Taxpayers may enter into artificial arrangements in order to take advantage of the directive benefits. A taxpayer may, for example, establish a company in an EU Member State in order to be able to channel income from a third state through the company as tax-exempt direct investment dividends covered by the EU Parent-Subsidiary Directive.³⁹ However, according to the tax avoidance articles of the Parent-Subsidiary Directive⁴⁰, as well as to many other tax

³³ OECD Model Tax Convention, Para. 9.5 of the Commentary on Art. 1.

³⁴ Arnold (2004), p. 250.

³⁵ Vienna Convention on the Law of Treaties, Art. 31(1).

³⁶ TFEU 26 Art.

³⁷ This is supported also by the fact that the aim of preventing tax avoidance is included in many EU directives. See Weber (2005), p. 174.

³⁸ See C-196/04 Cadbury Schweppes, Para. 35, with many references there to earlier case law.

³⁹ Helminen (2013), p. 296.

⁴⁰ Council Directive 90/435/EEC of 23 July 1990 on the common system of taxation applicable in the case of parent

directives, these directive benefits do not have to be applied to arrangements that have the principal objective of tax avoidance or evasion.

Reconciliation of the requirements of tax law and CSR

Tax avoidance is not acceptable from both tax treaty law and EU law perspectives. However, what may *seem* to be tax avoidance from the national perspective may be fully acceptable from the tax treaty law and EU law perspectives. On the other hand, the relevant provisions and articles, both in the tax treaties and EU law, are targeted for tax evasion and tax avoidance. Instead, the term “tax planning” is not mentioned in these contexts. Nonetheless, the tax planning activities of MNEs and other companies can be aggressive and harmful, at least from the national perspective. Could CSR be for help?

According to the legality principle, tax liability must be based on law. On the other hand, nobody has to pay more than the tax laws require. There are no liabilities beyond that. Is it justified or realistic to expect that someone would voluntarily pay more taxes than the tax law prescribes?

In cross-border situations, it may be justified to expect that multinational enterprises would pay their fair share taxes to each country. Society has grounds and justification to expect that multinational enterprises make their decisions concerning their group structures according to well-grounded business reasons and not based on tax reasons alone. Society also has grounds and justification to expect that group capital structures of MNEs are neutral, and transfer pricing between the group companies is fair. Increased transparency is needed to ensure these requirements.

The OECD has published guidelines for multinational enterprises; these guidelines include many CRS issues. The OECD Guidelines for Multinational Enterprises are recommendations addressed by governments to multinational enterprises. However, they provide

non-binding principles and standards for responsible business conduct in a global context consistent with applicable laws and internationally recognized standards. Instead, the Guidelines provide voluntary principles and standards for responsible business conduct consistent with applicable laws and internationally recognized standards. The Guidelines provide principles and standards of good practice consistent with applicable laws and internationally recognized standards. A precise definition of multinational enterprises is not provided. However, they usually comprise companies or other entities established in more than one country and are so linked that they may coordinate their operations in various ways.⁴¹

According to the Guidelines, enterprises should comply with both the letter and the spirit of the tax laws and regulations of the countries in which they operate. Complying with the spirit of the law means observing and following the intention of the legislature. However, it does not require an enterprise to make payment in excess of the amount legally required pursuant to such an interpretation.⁴²

There is a need for increased transparency of tax strategies and effective tax rates of MNEs. Some companies have indeed voluntarily reported their tax strategies and the taxes paid to different countries. However, it may even be necessary to set legal requirements to report tax issues. As a result, it is very likely that companies whose tax planning activities are too aggressive have to explain that to their stakeholders and the general public. Increased transparency of taxation, combined with pressure from the media and from social media, would likely change tax strategies of many MNEs. Also, many investors are becoming more and more CSR-sensitive.

Private customers can freely decide from whom to buy products and services. However, it is kind of a paradox that the public sector does not have such freedom. Public procurement is highly regulated. Environmental issues can to some extent be included in the criteria. However, regarding taxation, the line goes along the requirements of tax legislation. According to the Public Procurement Directive, any economic

companies and subsidiaries of different Member States, Art. 1.2.

⁴¹ See OECD (2011), pp. 3, 13 and 17.

⁴² OECD (2011), p. 60.

operator may be excluded from participation in a contract where that economic operator has not fulfilled obligations relating to the payment of taxes in accordance with the *legal provisions* of the country in which he is established or with those of the country of the contracting authority.⁴³ Overly aggressive tax planning is not a criterion to exclude somebody from tendering if tax planning has taken place within the law.

However, it is also difficult to think that the Public Procurement Directive would say something about tax planning in the future. Instead, it could include further requirements for reporting tax issues.

Conclusion

The ethical issues in the area of taxation are complicated. It is not easy to say what kind of tax system is just and fair, and what would be the fair share of tax burden for each. Even the legitimacy of corporate taxation can be questioned, while the shareholders pay taxes on their dividends and capital gains. However, corporate income tax has a relatively high proportion and significance in public financing. Across the OECD countries, corporate income tax raises, on average, revenues equivalent to around 3% of GDP, or about 10% of total tax revenues.⁴⁴

Lately, there has been public debate on aggressive international tax planning of some companies, both in Finland and in some other countries. Companies often defend their actions as being in obedience of the laws and regulations. But for society, this is not always enough. The ultimate aim of tax law is to divide the tax burden in a just and fair manner. However, laws and regulations do not always ensure that, for the reasons discussed earlier in this article. Multinational enterprises and their tax consultants are aware of many loopholes in the domestic system and incompatibilities between systems on the international level.

It is also necessary to notice that international tax planning and tax avoidance of big multinational enterprises can distort competition. When some businesses (such as those that operate across borders and have access to sophisticated tax expertise) profit from profit shifting or some other kind of international tax planning and tax avoidance opportunities, they can have an unintended competitive advantage over small and medium-sized enterprises that operate mostly on the domestic level.⁴⁵

It can be argued that tax planning activities using these loopholes and incompatibilities are not socially responsible actions when the outcome is that a company obviously does not pay its fair share of taxes to the country in which it carries out its business.

⁴³ Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts, Art. 45.

⁴⁴ OECD (2013), p. 15.

⁴⁵ OECD (2013), pp. 8 and 39.

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About the Author

Reijo Knuutinen, LL.D, MSc (Econ.), is a Principal lecturer at Laurea University of Applied Sciences. He is also an Adjunct Professor of tax law (University of Helsinki). Doctoral dissertation (2009): “Form and substance in tax law – With special emphasis on financial instruments”. In addition, he has published a monograph about the issues of tax planning and tax avoidance (2012) and several tax law articles. E-mail: reijo.knuutinen@laurea.fi

Region's Socio-Demographic Characteristics as Interpreters of Crimes Directed to the Business Establishments

Anssi Keinänen, University of Eastern Finland, Joensuu, Finland

Jyri Paasonen, Laurea University of Applied Sciences, Leppävaara Unit, Espoo, Finland

Pasi Karppinen, Research Group on Empirical Security and Safety Studies, Finland

Abstract

Crime directed to companies has become a significant problem with extensive impact causing additional costs. This research aims at understanding and validating the role regional factors play in connection to the crimes experienced by business establishments. Criminological theories, which were used to explain the phenomenon supported by statistical data analysis of 3000 and a phone interview of 2427 Finnish establishments, include social control, social disorder and routine activity theory. The routine activity theory was identified as the best explanation of the results that indicate the prevention of crime directed to establishments is more effective if targeted to distraction elements in immediate surroundings than to socio-demographic factors of the area.

Keywords

Interpreters of crime, regional factors, distraction elements, routine activity

Introduction

Crime is often explained with sociological and regional factors. For example, according to the social control theory, individuals who have close ties to some social group like family, school or

group of friends are less likely to commit crimes than those who don't have these ties (e.g. Hirschi, 1969). Social disorder theory (e.g. Kivivuori 2008, 186–218) can be considered as a sort of a parallel theory to the social control. The overall idea is that crime rate is higher in areas where social control is

lower. Sources of social control include, among other things, solid family ties, good employment relationship and a small community where residents know each other well. On the other hand, some sources of social disorder are low income level, ethnic heterogeneity, regional migration propensity and uncommon family ties. The increase in these factors is connected to the increase in regional disorder, which leads to the growth of crime and vandalism (Sampson & Groves 1989).

Crime is also explained with the routine activity theory. In order to materialize crime needs a potential offender, suitable target and lack of control (surveillance or protection) at the same time in the same place (Cohen & Felson 1979). The victim of crime can be a person, an object or a site. In the criminological studies it has been noted that the victimization is not randomly spread but accumulates to the same persons, the same places or to certain kind of products (for examples see Farrell & Pease 1993 and Clarke 1999). Becoming the target of crime can be explained by the fact that certain persons create, with their own behavior, an opportunity for an offender to carry out the crime more easily against that person than others. For example, a person who takes the subway to work is an easier target for pickpockets than a person who drives own car to work. Also, the homes of working people are less protected during the day than the homes of the unemployed, therefore the former being a more favorable target for burglars. Similar situation when holiday seasons end and people leave their summer houses empty. This creates a more favorable time for burglars to target criminal activity to summer houses. Moreover, shopping centers can often be the targets of crime because people, as well as criminals, spend more time in these places. On the other hand, shopping centers also offer lots of targets for crime, like the products sold in stores and customers. During the crush it is easier to steal from the stores.

In the empirical studies, which have sought to assess the control theory's ability to explain variation in crime, many different variables to measure social control or social disorder have been used. For example, young men's share of the population size and the number of residents in municipality are used to describe the demographic characteristics of the municipality. These variables can be considered as indicators for the social disorder of municipalities. The assumption behind

the social control theory is that the growth in both of the variables will increase crime. According to many research studies, young men commit most of the crimes, thus when the proportion of young men in the municipality's population size increases the crimes are also expected to increase (for examples see Entorf & Spengler, 2000; Freeman, 1996; and Steffenmeier et al., 1989). One explanation for the large number of crimes committed by the youth is that these youngsters are breaking away from family control without having already developed a stable relationship with others. In their research Glaeser and Sacerdote (1999) have found that the higher economic advantage and smaller probability of getting caught will increase crimes in large cities. Furthermore, when getting caught in a big city, the harm done to reputation is smaller as people do not know each other as well as in smaller cities. Sampson and Groves (1989) noticed that in areas where people's relationship networks are smaller than others and the groups of adolescents living without supervision is higher there exists higher criminal and vandalism levels.

One indicator for disorder can also be rental apartments' share of the dwelling stock in the area. This indicator measures migration propensity in the area. The larger the share of rental apartments the larger the probability that people will migrate. This reflects the social reputation costs of crimes and the possibility of local control. The longer the people live in the same place the better they get to know their neighbors and the larger the reputation cost of crime. In addition, neighbors can look after others' homes better when they know who resides them.

Research data and design

The data of the research focuses on retail and industrial sectors, which are the largest lines of business when measured with turnover or number of employees (see more on data Salmi et al. 2011). This research concentrated solely on crimes experienced by and aimed at retail sector. The research subject is a company establishment, not the whole company itself. The fundamental set of the research consists of retail and industrial establishments, which had been operating during the past 12 months and had at least one employee. This employee working in the establishment could also be the owner of the company. The research data does not include establishments, which did

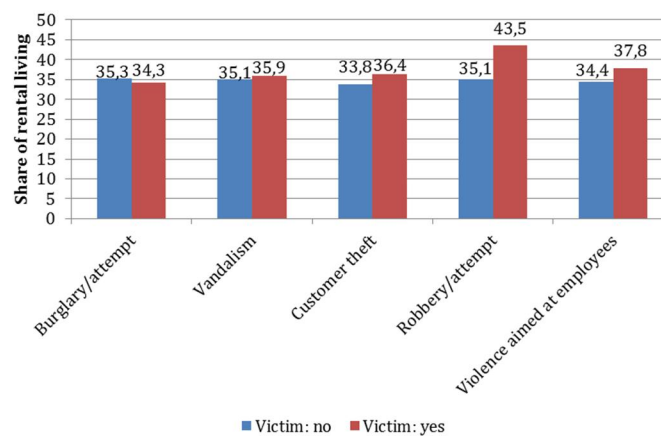
not have at least a single employee earning wages within a year. Research data sampling was divided by the area and the size (number of employees) of the establishment. This allowed a large enough representation of different establishment groups and parts around Finland to be included in the sample.

The Statistics Finland carried out sampling based on the information collected from the Trade Register entries. The sample comprised of 1 500 retail and 1 500 industry establishments, a total of 3 000 subjects. The questionnaire was carried out as phone interviews by the Statistics Finland between March and June 2010. Before the actual questionnaire, each establishment was called to find out who would be the most relevant person to answer the research questions. After this initial contact, each identified person received pre-material for the research, which included research cover letter, noteworthy recommendation regarding the subject of research and help form. The help form covered some of the research questions so that the person to be interviewed could prepare beforehand thus speeding up the interview process.

The research received answers from 2 427 establishments, out of which 1 197 were retail and 1 230 were industry establishments, respectively. The research response rate was 81 per cent (80 % for retail, 82 % for industry), which is remarkably high when comparing internationally.

Characteristics of the area as interpreters of crime towards companies

Next we will examine what regional characteristics can explain the establishment's victimization within the past 12 months. The research data covers information from the Statistics Finland's "Finland by post codes" service database. This kind of general level information include, among other things, between 18 and 24 years old adolescents' share of the population within the postal code area, share of low income households out of all dwelling units and the share of rental housing out of all living arrangements (see Figure 1). In addition, information has been collected on how many department stores, kiosks, alcohol and other beverage retails stores are located within the postal code area. The data illustrates structure of the area and amount of routine functions. The more shops and kiosks, the more people, including criminals, are on the move in the area. The rise in the amount of Alko's (Finnish monopoly liquor stores) shops can be considered to increase the disruptive behavior in the area. The victimization of establishments is modeled with the help of multivariate regressions (logistic) analysis. This allows the control of other variables to the researched phenomenon, which in turn makes it possible to take a look at and estimate the pure effect of a single factor to the victimization. Also, the interpretation of causalities between the dependencies of variables can be conducted more easily.



Graph 1 Share of rental living compared to the victimization

Retail and industrial comparisons

The review of factors explaining crimes experienced in retail and industrial establishments will examine whether the establishment has experienced one of the following crimes during the previous 12 months: burglary or an attempted burglary, vandalism, robbery or an attempted robbery. In the response variable attention will not be paid to the violence directed at employees or the robberies made by the customer because they are seldom found in industrial settings. This allows a better comparison between the differences of the factors affecting crimes in commercial and industrial establishments. We will focus on regional factors' possible connection to the crime risk experienced in commercial and industrial sectors.

Commercial establishments are more likely to have experienced crimes than industrial establishments. During the previous 12 months, 26.6% of commercial establishments had been a subject of crime, while this number was only 10.5% in industrial establishments. Both sectors were included in the regression analysis, in which the victimization of the establishments was explained. This allowed the comparison between industry-specific differences in victimization to the crimes. When compared to the preceding analysis, the data regarding customers and opening hours were excluded due to them not being available in most of the industrial establishments.

Commercial. The number of kiosks in the area of establishment had a relationship to the establishment's victimization. Every additional kiosk was found to amount to an increase of 2% in the victimization of establishments. The presence of Alko store was connected to the reduction of the crime risk experienced by establishments. One explanation for the result is the increased natural protection in the area where Alko store is opened. Another explanation affecting the result is that often Alko stores are placed within the massive supermarkets, which are located far away from the central places making it harder for adolescents to access. Other factors did not have a statistical effect on the victimization of the establishments. On the other hand, the number of employees had a connection to the victimization of establishments. When medium sized establishment had 22% probability of becoming a victim of the crimes under review during the previous 12 months,

establishments with small amount of employees experienced only half the risk. Respectively, in establishments with lots of employees the risk of becoming a victim of crime was 8 percentage points higher than in medium sized establishments.

Industrial. In the areas with a small number of inhabitants, the industrial establishments become victims of crime less often than elsewhere. This connection was statistically significant. Furthermore, the proportion of rental housing had a connection to the victimization of the establishment. When the proportion of people living in rental housing increased by 10 percentage points, the probability of victimization increased by 2 percentage points. Other observed factors did not have a statistically significant effect on the criminal victimization of industrial establishments.

The number of employees in an industrial establishment had a connection to the victimization. In small establishments the risk of becoming a victim of crime was 6 percentage points lower than in medium sized establishments. This connection was proportionately stronger than in commercial sector.

When comparing the commercial and industrial sectors, only the number of employees explained the victimization in both sectors. For example, unemployment rate and the proportion of low income families in the area did not explain victimization of crimes at all in both sectors.

All in all it can be stated that the victimization of establishments cannot be accurately explained just based on regional or area factors. One reason can be the too exact regional split of the researched data. Offenders can come from other areas than where the criminal target establishment is located. For example, it is generally known that there are many commercial establishments located in downtown area and people who live there can be considered wealthy as the price of housing is often very high. It is also known that criminal activity is concentrated in these downtown areas. Still, one cannot claim that specifically the people living in downtown were the ones committing crimes to nearby establishments but at least some of the offenders live outside the criminal activity area. In the future, it is important to consider very carefully on what level the regional factors are measured (e.g. municipality, district or postal code) when one

wants to research the regional factors' effect on crime.

Another reason why regional factors cannot fully explain the victimization of establishments can be the strong mutual correlation of explanatory factors (so called multicollinearity problem). For example, the size of the area is determined by many variables like inhabitants, shops, Alko stores and the number of kiosks. In this case, the effect of a single variable to the victimization of crime is extremely hard to measure accurately because the same subject is reflected by many other variables at the same time.

An attempt to estimate the reliability of the research results was made by analyzing how much the regression results differ when one dependent variable is omitted from the models. Leaving out any single variable did not have a significant effect on other variables' regression coefficient and their statistical significance. This was specifically the case with demographic variables, like unemployment and low-income rates. Removing the Alko stores from the models changed the effect of the number of inhabitants to the victimization of establishments but once again the results were not statistically significant.

Regional factors as interpreters of distraction elements in immediate surroundings

The analysis of the results of company victimization study has shown that the regional factors do not really explain the reasons why establishments' become the targets of crime (see Table 1). Instead, establishments' immediate surroundings distraction elements have a very clear connection to the victimization. Regional factors, like the unemployment rate and the amount of people living in rental housing, can affect crime indirectly in a way that these factors affect the appearance of adolescents and intoxicated persons within the area. Respectively, these factors directly have an effect on establishments' victimization. Next, there is a discussion how well the regional factors can be used to explain the distraction elements of the immediate surroundings of establishments. The subject of the examination is the appearance of adolescents, intoxicated persons and damaging of the property in the area.

When looking at the appearance of damage to property, we notice that the establishment's industry, the population in the area, the amount of single parents, the number of shopping centers, retails stores and kiosks all have an effect on the appearance of distraction elements. Damaging of the property was found in around 53% of the commercial establishments' surroundings. The equivalent number among industrial establishments was 32%. Damaging of the property was less than the average in areas where the number of inhabitants was small. 10 percentage point increase in the number of single parents was connected to the appearance of damaging of the property by 2 percentage points. An increase in the number of kiosks by one was connected to the increase in the property damaging by one.

Usually there are adolescents in close proximity to the area where commercial establishment are located. 57% of all respondents agreed with this statement. The similar number was 20% in the areas of industrial establishments. In addition to the field of business, the number of inhabitants in the area, the number of Alko stores and kiosks was connected to the adolescents spending time in the area. When the number of inhabitants was small, the number of adolescents in the area was 7 percentage points smaller than on average. Adding one kiosk in the researched area was connected to the appearance of adolescents by around 2 percentage points. In the regional level, having an Alko store in the area was connected to the decrease in adolescents. This result can be interpreted as a so called natural supervision by adults. Adolescents do not prefer to hang out in areas where there are lots of adults on the move. Another possible explanation is the location of Alko stores. These stores are nowadays located in the shopping centers in the fringe areas, which are harder for adolescents to access.

According the respondents, 46% of commercial establishments had intoxicated persons spending time in near proximity while in industrial establishments the number was 10% respectively. In addition to the field of business, the factors connected to the appearance of intoxicated persons in the area included unemployment rate, proportion of people living in rental housing, number of single parents out of total number of families in the area as well as number of department stores and kiosks.

One percentage point increase in the unemployment rate was connected to the appearance of intoxicated persons by one percentage point while ten percentage point increase in the number of people living in rental houses was connected with four percentage point increase. When the number of single parents in the area rose, the appearance of intoxicated persons declined. 10% growth in the proportion of single parents caused a 2% decline in the appearance of intoxicated persons. Adding one kiosk increase this appearance by almost 2 percentage points.

Based on the analysis it can be observed that the regional factors are connected to the appearance of distractive elements in the immediate surroundings of establishments. However, these factors do not

appear systematically in different crimes. For example, unemployment rate was only connected to the appearance of intoxicated persons in the close proximity of the establishments. The proportion of low-income families was not statistically significant to any crime under review. The connection in the number of kiosks to distractive elements most likely refers to some sort of routine activity effect in a case that kiosks draw attention of people who like to spend time in the area. This finding is according to the routine activity theory. The analysis made here shows that the area factors have an effect on the distractions appearing in the companies' operational environment, even when the regional socio-demographic characteristics are separately standardized.

Variable	Damaging of property			Loafing adolescents			Intoxicated persons		
	Odds-ratio	p-value	Margin effect	Odds-ratio	p-value	Margin effect	Odds-ratio	p-value	Margin effect
Regions' demographic characteristics									
Share of rental living	1,001	0,756	0,0	1,008	0,153	0,2	1,027	0,000	0,4
Share of low-income families	0,993	0,570	-0,1	0,990	0,364	-0,2	0,999	0,938	0,1
Share of single parents	1,077	0,051	1,7	1,002	0,953	0,1	0,878	0,003	-1,9
Unemployment rate	1,020	0,311	0,5	1,013	0,508	0,3	1,081	0,001	1,0
Share of adolescents	1,017	0,397	0,4	0,993	0,710	-0,2	0,965	0,148	-0,7
Number of shops									
Alko stores	0,959	0,679	-1,0	0,736	0,002	-7,3	0,855	0,170	-1,6
Department stores	0,724	0,011	-7,5	1,061	0,608	1,4	0,793	0,096	-1,5
Retail stores	1,039	0,099	0,9	1,004	0,857	0,1	1,017	0,505	0,0
Kiosks	1,057	0,053	1,3	1,080	0,006	1,8	1,114	0,001	1,5
Field of business									
Industry	0,273	0,000	-28,6	0,221	0,000	-33,6	0,150	0,000	-32,9
Region's size									
Region's size: small	0,683	0,006	-8,6	0,732	0,024	-7,3	0,817	0,200	-4,5
Region's size: large	0,875	0,446	-3,0	1,105	0,562	2,4	1,198	0,346	5,1
Diagnostics									
N	2369			2378			2380		
Pseudo R2	0,099			0,109			0,203		
P	36,5 %			38,7 %			23,8 %		

Table 1 Regional characteristics' connection to the distraction elements

Conclusions

The objective of the research was to study the effect of regional factors on establishments' possibility of becoming a victim of a crime and the appearance of distraction elements in immediate surroundings. The criminological theories explaining the phenomenon assume that the social control of society, the lack of control and the flow of routine activities have an effect on the appearance of crimes. The data of this company victimization study made it possible to examine these interpretations further.

All studies have both strengths and weaknesses. The strength of this research is that the information about crimes is not based on registers but the companies' own notifications. As a difference

between sole register studies one can talk about overall crime studies. On the other hand, when analyzing the research data, we noted some weaknesses. For example, in the future it would be beneficial to consider the level of regional measurements. The postal code information, i.e. the level used in this study, can be criticized to be too exact because offenders do not necessarily live in the same area as the establishment, which is the victim of a crime. For example, using neighbourhood as a measurement level could possibly be more suitable for this kind of research. Neighbourhood level would allow better utilization of differences, such as unemployment rate and the number of people living in rental housing, in order to find out the regional variations in factors affecting crime.

When looking at the retail establishments, we noticed that becoming a victim of a crime is best explained by the size of the establishment as well as late opening hours. Regional factors did not have connections, despite individual cases, to establishments falling victims of a crime. Moreover, when comparing retail and industrial establishments the regional factors hardly explained victimization. The only partial exception to this can be the violence directed at employees as certain regional factors might have some effect on the violence experienced by the staff. On the other hand, the fact that socio-demographic features of the location of establishments do not have any significant effect on the companies' criminal risk is the main result, and a socially interesting phenomenon, of this study. The Finnish society is probably socially and culturally homogeneous when comparing to most of the other societies, the regions have not differentiated or segregated to the same extent as in many other countries. Against this background the research results, pointing to the small role that regional factors play, are understandable.

Regional factors could partially explain the appearance of distraction elements in immediate surroundings. The effects were not systematic; they differed based on the distraction elements. The

effect of regional factors to the appearance of distraction elements in immediate surroundings could be the focus of future research studies. The regression analysis used in this research may not be the best available method to study the connections. For example, a structural equation modeling could lead to a more detailed view on the interdependencies between various factors.

The research results indicate that the prevention of crimes, which are directed to the companies, is more effective if targeted to the distraction elements in immediate surroundings rather than to general regional factors such as reducing the unemployment rate. When explaining crime, the criminological findings of this study support the routine activity theory more than the social control or the social disorder theories. According to the routine activity theory, in order for crime to materialize there needs to be a potential offender, suitable target and lack of control (surveillance or protection) at the same time in the same place (Cohen & Felson 1979). By reducing distraction elements, like the amount of adolescents or intoxicated persons in immediate surroundings of establishments, the rate of crimes directed at the establishments could be decreased.

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About the Author

Anssi Keinänen D.Sc. (Admin.), D.Sc. (Econ.) is a Professor of legal studies at the University of Eastern Finland and the Director of Research Group on Empirical Security and Safety Studies.

Jyri Paasonen Lic.Sc. (Admin.) is a Principal Lecturer of Security Management Program at the Laurea University of Applied Sciences and a member of the Research Group on Empirical Security and Safety Studies.

Pasi Karppinen M. Sc. (Economics and Business Administration) is the Security Specialist and Researcher at the Research Group on Empirical Security and Safety Studies.

Security, Safety and Social Responsibility as Laurea's Area of Focus

Dr Minna Mattila, Laurea University of Applied Sciences, LbD and Competence Management Services, Espoo, Finland

Abstract

Laurea University of Applied Sciences distinguishes itself as a high profile international HEI in four areas of focus. The contextual choices in the focus area of 'Security, Safety and Social Responsibility' are guided by Laurea's strategy as well as external variables such as current societal challenges. In the before mentioned focus area, the preventive, reactive and rehabilitative measures form an iterative cycle. Risk management is perceived as an integral method in this cycle. 'Security, Safety and Social Responsibility' focus area concentrates on enhancing both internal and societal security. The aspects of social inclusion are particularly included as reducing social exclusion contributes to the maintenance of safety and security in society. This focus area is dynamic and its diversified pool of projects represents the current stream of research in the given subject field. This focus area also meets and masters the targets set in the Horizon2020, the new framework programme for financing research and innovation in the European Union.

Keywords

Safety, Security, Social Responsibility

Introduction

The four focus areas in which Laurea will enhance the development of the region, students and partner organisations, are defined in Laurea's strategy. In these four focus areas Laurea produces state-of-the-art competence for the benefit of its operating region. (adapted from the Internationalisation strategy of Laurea 2012-2015, 5). The focus areas will actively gather and import knowledge of the good practices and results already obtained abroad. In addition to external network partners, Laurea focus areas

will also integrate Laurea's own experts into the international RDI projects. (adapted from the Internationalisation strategy of Laurea 2012-2015, 10).

Laurea has fixed its four focus areas with the Ministry of Education and Culture for the budgetary years of 2013-2016. Furthermore, Laurea has agreed with the ministry that its mission, profile and focus areas are defined jointly with the strategic alliance, Federation of Universities of Applied Sciences (FUAS), of which Laurea is a founding member. The concept of

R&D related focus areas is not new at Laurea as such but a special attention has been given to their practical implementation over the past year. A systemic approach to channeling the research activities through focus areas is still evolving. Focus area development does not only call for creating new knowledge – collectively and across disciplines - but also adopting new knowledge. Fostering collaboration across different educational units of Laurea becomes an essential factor affecting the success in implementing the concept of focus areas.

Security is contested concept lacking a widely approved definition. Social responsibility is an ordinary and contemporary concept and as such its definition appears to vary depending on the discourse and context. The different views on defining safety, security and social responsibility as independent terms have been discussed earlier in this journal. In this focus area, the concepts of safety/security and social responsibility are interpreted from a wider perspective, pragmatically. The R&D activities in the given focus area are problem-based, and aim at developing solutions for the benefit of practitioners and supporting authorities in their decision-making.

It is not evident from the existing literature that a definition would exist which describes and classifies security, safety and social responsibility as one holistic entity. When describing this particular area of focus as a whole, 'Security, Safety and Social Responsibility', it is important to aim at simplicity. The unique feature of this focus area is that it does not represent just one, single field of study. It is more of a compilation of dimensions stemming from Security Management, Correctional Services (Criminology and Criminal Justice), Business Management incl. legal studies, Health Care and Social Services, and Business Information Technology. In order to keep this focus area united, it is necessary to perceive safety/security and social responsibility as sections of a continuum. It means that in this focus area security must be perceived as an enabler, outcome and integral part of other subject fields. Similarly, perception on social responsibility in this focus area goes well beyond the corporate social responsibility. In fact, one might refer to our understanding of social responsibility, which is to be taken here more of a

way of doing something and approaching issues, as responsibility for the social development or societal responsibility.

Academically, on an international level, one of the most significant part of security as a field of study, is the problem-solving and critical thinking skillset for analysing the security threats and managing risks. Laurea's competence-based curriculum and development-based learning model Learning by Developing (LbD) offer an optimal platform to generate new knowledge on understanding and affecting the human behaviour and decision-making in the light of advancing safety and security in society. Perhaps the 'Security, Safety and Social Responsibility' focus area could be described through the human security paradigm which refers to a multidisciplinary approach towards understanding the concept of security (Korhonen, n/a), which according to Korhonen (n/a) consists of several fields of study such as international relations, strategic and development studies, and human rights.

Laurea has seven campuses in Helsinki metropolitan area: Leppävaara, Tikkurila, Hyvinkää, Otaniemi, Lohja, Kerava, Porvoo. The campuses are independent budgetary units offering education in the chosen subject fields and running research projects. The seven campuses instantiate the Laurea level strategic focus areas through their campus specific profiles. For example, while one campus may be more security oriented, another might focus more on the safety or social responsibility aspects of the focus area. Let the figure below present a hypothetical example of how for example three campus profiles and their different orientations could complement each other within the focus area framework.

The purpose of this exercise is to propose clarification on how the different focus area dimensions and campus profiles are interlinked. It also presents well the complexity yet complementarity existing within the focus area framework of operation. Figure 1 is a result of individual's inducting reasoning, and it should not be taken as an effort to align the operations of the independent units. No orientation is better than the other but all can be equally justified.

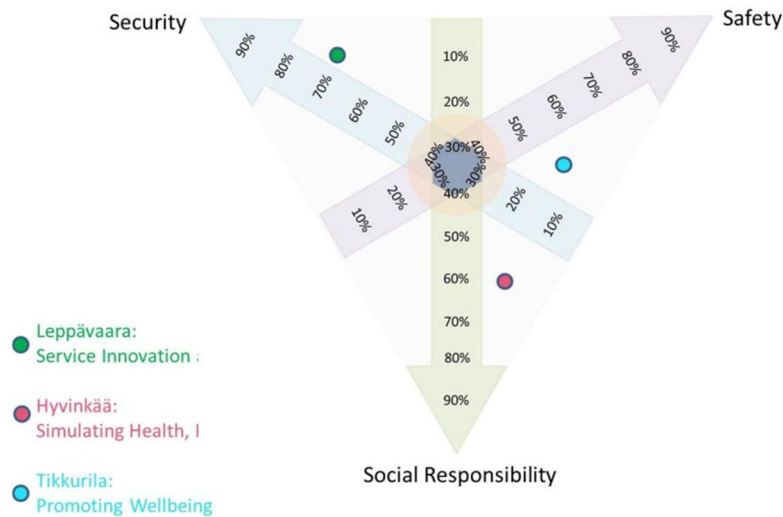


Figure 1 The complementary profiles of campuses within the focus area framework: a hypothetical example (figure layout modified from the Motivational Value System Triangle)

For a project or an educational programme to be part of this focus area, it must have traits from all the different dimensions of the focus area. That being said, for the sake of competitive advantage and purposeful actions, the dimensions of safety, security and social responsibility may be weighed differently case by case. Aiming at the centre of the triangle is not worth pursuing for as it would represent a full balance between different dimensions and no specialisation at all. Locating in any given corner is not the desirable option either as it would mean 100 per cent specialisation on one dimension alone and excluding all the others.

Context of the Focus Area

The contextual choices in the focus area of ‘Security, Safety and Social Responsibility’ are guided by Laurea’s strategy as well as external variables. Internal factors include for example

Laurea’s skills and competences, and strategic intent. External factors are for example the Government Resolutions, funding agencies’ programme requirements, societal trends and other current phenomena. Laurea focus areas are to be aligned with the FUAS-level focus areas. Laurea is one of the founding members of FUAS, the Federation of Universities of Applied Sciences. FUAS addresses and generates partial solutions to major global challenges through its focus areas (Yhteistyöllä kilpailukykyä...2011, 5). The FUAS focus area of ‘Societal Security and Integrity’ is led by Laurea. It builds around four main pillars: water and food, built environment, security of energy supply, and crisis management (Yhteistyöllä kilpailukykyä...2011, 6). This FUAS focus area has common interface with Laurea’s ‘Security, Safety and Social Responsibility’ area of focus in the field of societal security as visualised in figure 2.

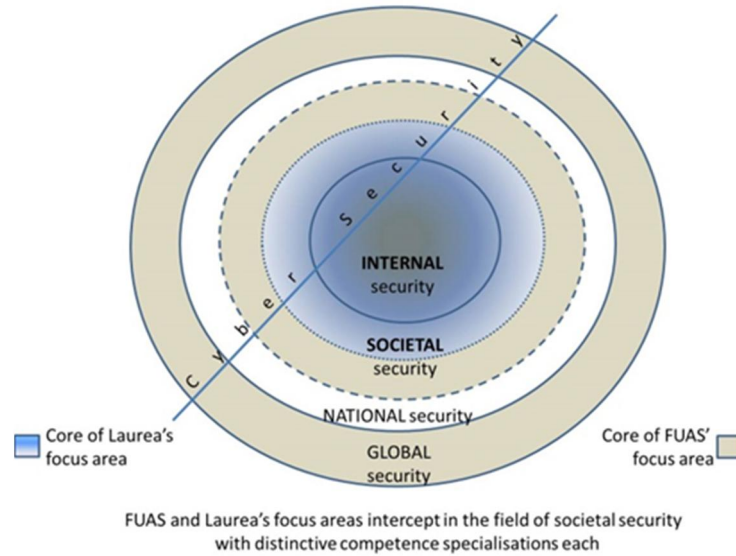


Figure 2 The FUAS and Laurea focus area umbrella in the field of safety, security and social responsibility

While Laurea focus area of ‘Security, Safety and Social Responsibility’ enhances the promotion of internal security and safety first and foremost, the FUAS’ focus area of ‘Societal Security and Integrity’ aims at covering the major global security aspects. FUAS and Laurea focus areas intercept in the field of societal security. However, both have specific features stemming from the organisational level strategies and well-defined yet complementary roles in contributing to the societal security field.

Kupi et al. (2010, 67) has mapped seven (7) potential fields in Finnish security business, of which ‘specialist services, education and consulting’ and ‘information system security and operability’ are perhaps the closest ones to Laurea’s area of focus. Other potential security business areas, ‘private households, living and everyday safety and security’ and ‘safety of the ageing’, converge with several Laurea’s areas of focus, ‘Security, Safety and Social Responsibility’ including. The context of the FUAS focus area is more aligned with ‘transportation safety and

secure logistics’ and ‘environmental security’, which too were found by Kupi et al. (2010) as potential security business areas in Finland. It is worth noticing though that Kupi et al. (2010, 108) did not find any one specific desired target state which would be common to the security business as a whole in Finland. Later on, in 2012 Kupi et al. has also created a roadmap for supporting the internationalisation of the Finnish security business. This internationalisation plan concentrates on four fields of security business in particular: safety and care, undisturbed logistics, communication and situational awareness, and security in urban areas.

In this focus area, the social responsibility is to be understood in the context of “way of doing things” or as a matter of perspective. In fact, one might refer to our understanding of social responsibility as responsibility for the social development or societal responsibility as Dr Reijo Knuutinen put it in April 2012.

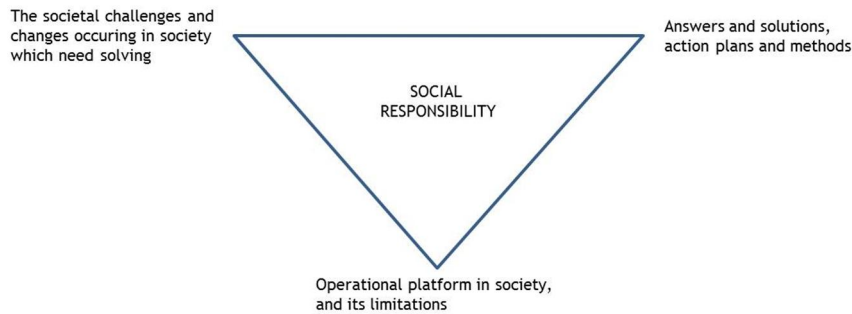


Figure 3 Social responsibility in the context of Laurea focus area on safety, security and social responsibility (originally presented by Dr Reijo Knuutinen on 3 April 2012)

When examining the dimensions of internal security, we notice that they are closely related to the seven themes of the cross-sectoral action plan for reducing social exclusion, poverty and health problems (see for example http://www.stm.fi/vireilla/kehittamisojelmaj_hankkeet/syrjaytymisen_ehkaisy/paateemat). The second Internal Security Programme called Safety First contained 74 measures intended to maintain and improve security. The social exclusion was recognised as the major threat to internal security (Sisäisen turvallisuuden ohjelma 2008, 6). Preventing social exclusion is also within the strategic emphasis of Laurea focus area. This choice is supported by the latest

European level developments which indicate the future R&D funding tools to be more focused on improving social inclusiveness.

In a long run, all the measures preventing social exclusion improve safety and security in society, and thus follow the social responsibility principles and also create and maintain social responsibility. As Lic Armi Jyrkkiö has put it in September 2012, the more work is done to prevent social exclusion, the more we promote the internal security and act in a socially responsible manner in society. Preventive measures aiming at reducing the social exclusion improve the internal security as well.

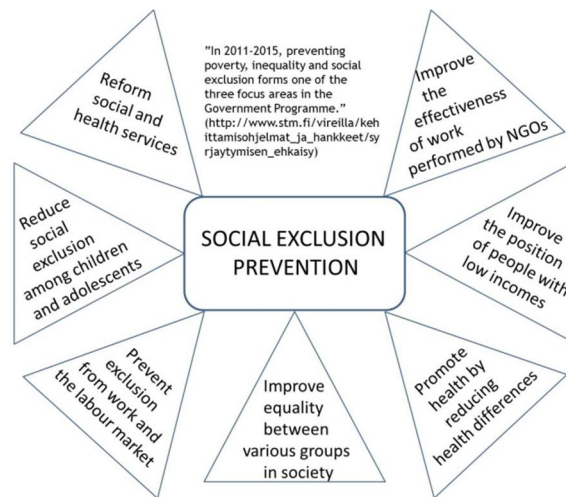


Figure 4 Ministerial cross-sectoral action plan for reducing social exclusion, poverty and health problems

The existing framework programme ‘Security’ for funding research does not continue as such within the new framework programme. The new programme for years 2014-2020 comprises of

the basis of the Seventh Framework Programme (FP7), the Competitiveness and Innovation Framework Programme (CIP) and the European Institute of Innovation and Technology (EIT), of

which the latter one funds the European Knowledge and Innovation Communities (KICs). The new EU-level expectations are an integral part of the context of the Laurea focus area. The CSF report indicates outlines some observations which are meaningful also to the development of Laurea focus area (Inclusive, Innovative and Secure Societies Challenge 2011, 4).

“Security is an enabler of other goals. There is common ground on the recognition that social issues are creating increasing constraints to new security technologies that should comply with specific (and sometimes still unclear) requirements for safeguarding human rights. There is acceptance that the societal dimension of security research should be enhanced by integrating the societal aspects into these activities. Citizens’ needs should be taken better into account, in order to build trust of new security solutions. These societal aspects should be integrated the inception of new security solutions. Security should cohere with societal preferences. The major Security non technological issues are trust and resilience. Trust between entities may be from citizen-citizen, citizen-state, state-state, and internal or external to Europe. Resilience implies the recognition that we cannot prevent all incidents and that we must also builds societies and infrastructures that can cope. Societal scrutiny of security policy rests on four pillars: a firm legal and regulatory framework, an ethical overview, social interoperability and understanding of impacts and outcomes of interventions. Horizon 2020 needs research to operationalise these ideas to ensure that technology and practice within the security sector remain coherent with societal preferences. Any effective social science participation should ensure proper and realistic recognition of the threats and challenges by all stakeholders, including their context. The search for solutions must focus on resilience as much as on prevention. An interdisciplinary approach must be assured; a genuine partnership must be guaranteed – the social sciences should not be seen as a sub-contract.”

The societal dimensions are strongly present also in the European Commission’s Security Industrial Policy, the Action Plan for innovative and competitive security industry (Toimintasuunnitelma innovatiivisen ja kilpailukykyisen... 2012, 12-13):

“A better integration of the societal dimension into security industry activities would help in reducing the uncertainty of societal acceptance. This should allow for an efficient use of R&D investment, as well as allowing the demand side to purchase products which fulfill entirely their security requirements and at the same time are accepted by society. The Commission, therefore, considers that the societal and fundamental rights impact should already be taken into account through societal engagement before and during the R&D phase. This would allow addressing societal issues early on in the process. The Commission already undertook a number of activities with a view to mainstream the societal dimension in the FP7 Security Theme. In view of Horizon 2020, it is, however, now time to consolidate these efforts, to engage society in research and innovation and make societal impact checking more systematic. The Commission will involve society and make societal impact testing an obligatory part, where appropriate, of all its future security research projects (with the exception of “unsuited” areas, such as for instance basic technology research and projects on foresight and scenarios). The Commission will specifically “check” the societal impact of new technologies in all its security PCP schemes outlined above.”

Content of the Focus Area

Risk management is a typical method in this focus area (see for example Jordan et al. 2006; Landoll 2011). Traditionally thinking, risk management has focused on risk avoidance, removal, reduction, transfer, and keeping risk to oneself (Ohje riskien arvioinnista... 2003, 2). In the beginning of assessing and starting to manage risks, the extent and expected impact of a risk is usually analysed first (Fone et al. 2000; Ohje riskien arvioinnista... 2003, 16). Risk management as a method can also be perceived as sustainable development. This sort of approach fits well Laurea’s area of focus in safety, security and social responsibility. When observed in the context of sustainable development, the risk management covers not only economic dimensions but also responsibility for the surrounding society and quality management as well as the various sectors of safety and security (<http://www.dpsdirectmail.co.uk/About-us/Sustainable-development-at-Stralfors/>).

Based on an interview data collected amongst 13 experts and consults by Reiman (2008), it can be concluded that

- 7.7% of the respondents perceive safety and security as keeping up the control
- 53.8% of the respondents describe safety and security through preventive measures
- 30.8% of the respondents describe safety and security through reactive measures
- 7.7% of the respondents define safety and security as an opposite to a risk

In our national cyber security strategy creation process, 20 per cent of the measures (detection, information sharing, situational awareness, analysis) were preventive by nature, 20 per cent were more controlling and/or restricting (limiting, obstruction, counter measures, communication) and 10 per cent of the measures were allocated towards repressive measures such as restoring the situation. (Kansallinen kyberturvallisuusstrategia...2011).

Ensuring safety, security and social responsibility by means of both preventive and

repressive/rehabilitative measures is natural to Laurea focus area of 'Security, Safety and Social Responsibility'. In our thinking, the preventive, reactive and rehabilitative measures form rather an iterative and accumulative cycle than opposite ends of one linear line. What could be perceived as repressive measures by one might appear as preventive measures to another (e.g. the strategic aim laid out in the strategy of the Criminal Sanctions Agency to add the skills of the sentenced offenders to reintegrate into society as its full members after release <http://www.rikosseuraamus.fi/54002.htm>).

Within the context of this focus area, a so-called comprehensive concept of security is in use and the risk management comprises significantly of preventive and rehabilitative measures. Besides risks and threats, other factors affecting the promotion of safety and security are included although they may not be quantifiable threats to individuals or to society. However, such factors do affect either directly or indirectly to the perceived or experienced safety in society and thus must be addressed for the sake of social responsibility.

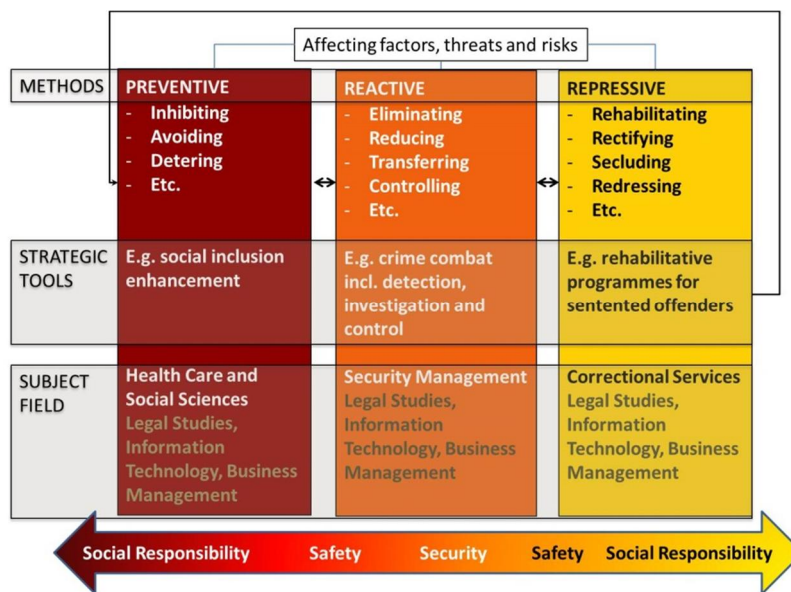


Figure 5 The focus area framework: pursuing internal and societal security in a socially responsible manner

The distinctive strength of Laurea University of Applied Sciences is its comprehensive research and educational activities covering well the complete value chain of safety, security and social responsibility. Laurea has been doing

pioneering work particularly in the fields of Security Management and Correctional Services. The interdisciplinary approach enhances learning and new knowledge co-creation, enabling more profound information exchange between experts

from different subject fields. New skills and knowledge see the daylight in this focus area as the fields of Security Management, Correctional Services, Business Management incl. legal studies, Health Care and Social Services, Business Information Technology immerse their best practices under an interdisciplinary vision. Focus area can also act as an innovation platform where various experts and practitioners come together and adopt from each other new ways of thinking and doing which may have not been commonly used in their own area of expertise. The collaboration is not limited to knowledge transfer on an individual level but reaches across the units and communities of actors.

Characteristics of the Focus Area

‘Security, Safety and Social Responsibility’ focus area is dynamic which means for example that the networks and clusters in the field evolve and develop as needs change (compare Kupi et al. 2010, 120). The RDI activities in this focus area are strategically central to Laurea (Laurean

strategia 2010-2015, s. 12). Since the definition of the focus area is dependent on multiple internal and external factors, as described in detail earlier in this paper, it is not relevant to explicitly define just one, single and timeless spearhead project. Particularly since based on literature, security as a field of science is relatively young and immature.

Instead, following the Relationship Awareness Theory (see e.g. Porter 1996) analogy, the activities within this focus area could be described as a buoy floating on the waves of education and research depending on the existing variables and affecting factors. This does not indicate that the focus area activities would be floating freely, even though separate research and development projects might appear to be relatively far apart from each other content wise. All the activities carried out within the framework of this focus area are always anchored to their common premises of safety, security and social responsibility.

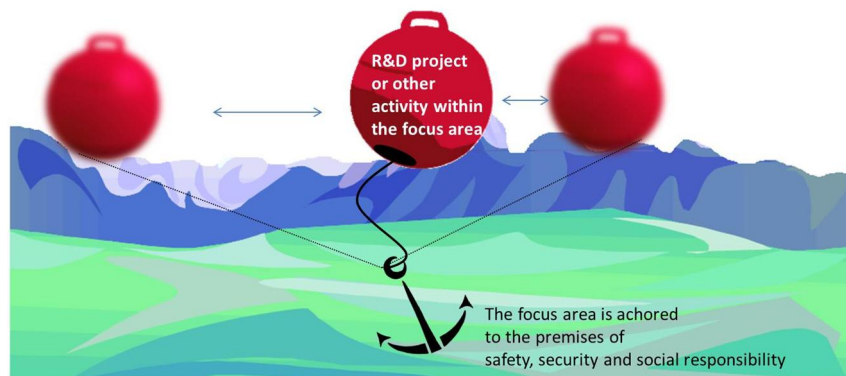


Figure 6 Buoy metaphor visualising the dynamic nature of the focus area activities

In order to map possible spearheads for externally funded R&D projects, the factors, threats, risks and measures related to internal, societal, national and global security were gathered together. The variables presented in the following figures are adapted from the Government Resolutions and also emphasise the focus areas present in the Government Programme for years 2011-2015. Laurea has taken steps on many of the areas of interest listed in the following figures to boost its international R&D activities. As mentioned before in this paper, Laurea focuses on enhancing

internal and “the inner circle” of societal security (see figure 7) first and foremost whereas the FUAS focus area activities concentrate more on the outer circle of the societal security, which is closer to national and global security.

The thematic areas of interest presented in figure 7 comprise of numerous subsectors and their dimensions. To elaborate this multilayer composition of internal (and societal) security further, business security which is part of internal security is presented as an example on a more detailed level in figure 8.

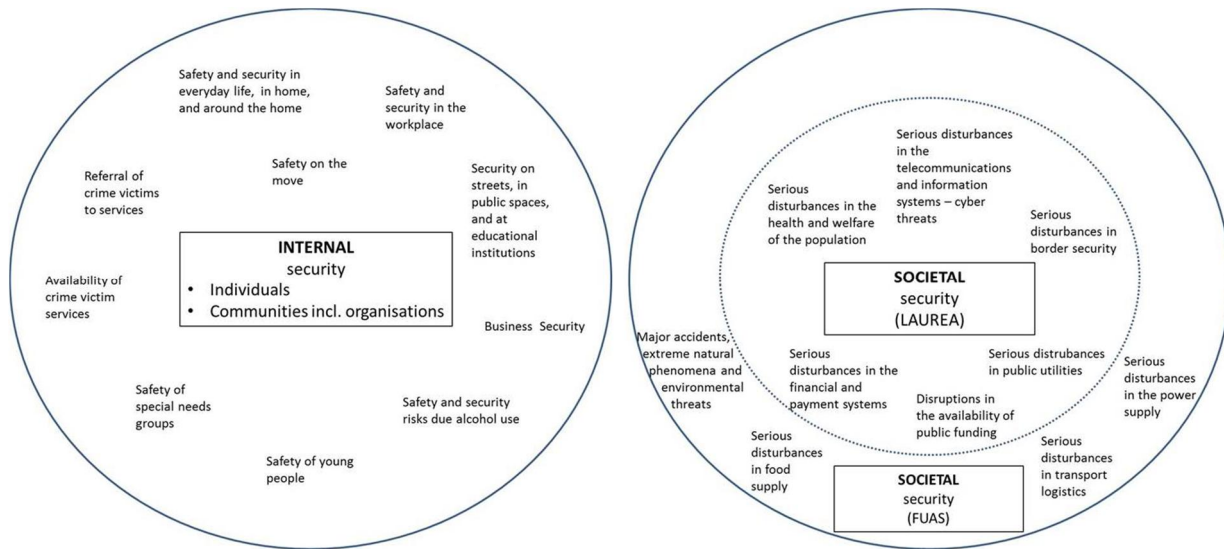


Figure 7 Internal and societal security dimensions

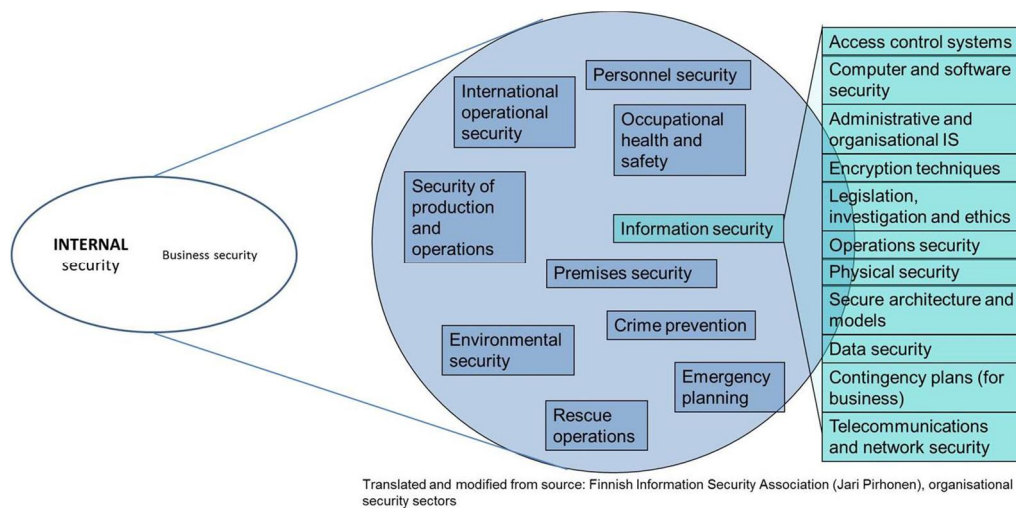


Figure 8 Business security as an internal security sector and the dimensions of related information security

When launching the concept of focus areas, Laurea chose to place a special emphasis on establishing international trailblazer research and development projects on the following, strategically justified, areas of interest:

- border security; air, land and maritime surveillance including
- organisational security incl. e.g. information security, security on campus and in the educational institutions, and occupational safety
- social exclusion prevention such as advancing public health and welfare,

reducing security risks stemming from substance abuse and safety of young adults

The chosen thematic cores are not to exclude optional paths towards internationally meaningful projects. The emerging research interests include for example reoffending prevention, patient security and privacy, product(line) and raw material security, and cyber security.

Reducing safety and security risks due to alcohol use, safety of young people and promoting

health and wellbeing exemplify Laurea's commitment in preventing social exclusion in this focus area. As a result of re-organising the European Commission services, some of the so-called Directorates-Generals (DG) allocating the Commission research and innovation funding, were terminated and some new were established (see e.g. http://ec.europa.eu/about/ds_en.htm). One of the new DGs, 'Employment, Social Affairs and Inclusion' (EMPL), concentrates on preventing social exclusion. Commission has previously granted funding to improve social inclusiveness in electronic services. Social exclusion prevention perspectives are strongly in the agenda of many of the DGs. For example, 'Communications Networks, Content and Technology' (CNECT, formerly known as INFSO) and 'Health and Consumers' (SANCO) are to adopt social exclusion prevention aspects when granting research project funding.

Border security is an EU-level challenge which Commission considers the most promising area for undertaking pre-commercial procurement (PCP), together with aviation security (Toimintasuunnitelma innovatiivisen ja kilpailukykyisen... 3-4; 13, 2012). The report of the workshops on the Common Strategic Framework (CSF) for Research and Innovation: Inclusive, Innovative and Secure Societies Challenge, presents the border security as one theme for future security research (Inclusive, Innovative and Secure Societies Challenge 2011, 13). The border security threats are also present in the Finnish Government Resolution 'Security Strategy for Society' (2010, 80-81). Thus, placing special emphasis on border security also in Laurea focus area is well-justified from the national and global strategy viewpoints.

As part of the organisational security, Laurea focus area assesses in particular security at education institutions and business security of which the latter one covers aspects from information security and safety and security in the workplace. Particularly the educational institution security is closely related to the social exclusion prevention and safety of young people. Security at education institutions is receiving an

increasing amount of attention worldwide due to recent school shootings. It is also one of the core challenges listed in the third (Finnish) Internal Security Programme (Turvallisempi huomien... 2012).

The recognised need to pay more attention to cyber security issues stems from the recently published Finland's Cyber security Strategy. Similarly to border security, cyber security, particularly cyber-crime and cyber-terrorism, has been listed as special area of interest in the report of the workshops on the Common Strategic Framework (CSF) for Research and Innovation: Inclusive, Innovative and Secure Societies Challenge (Inclusive, Innovative and Secure Societies Challenge 2011, 13). Cyber security, to which information and data security are closely related to, is a commonly known global threat crossing several security sectors. The CSF report indicates an acute concern on the privacy of information and data e.g. from the patient security perspective. Furthermore, several measures are proposed in the report to be taken to improve information security in general (Inclusive, Innovative and Secure Societies Challenge 2011, 11-12). It is our assumption that many of the suggested measures will be funded through R&D projects in the forthcoming framework programme for financing research and innovation in the European Union, Horizon2020.

The security sectors presented in figure 9 are linked to Laurea focus area more on a general level (than internal and societal security). The externally funded R&D projects are expected to rise mostly within the internal and societal security sectors. The concept of comprehensive defense approach is regulated by law and includes the use of military force (<http://www.defmin.fi/index.phtml?s=434>). The Ministry of Defence is in charge of national security as well as international cooperation in defence policy matters. Advisory Board for Defence Information assisting the Ministry of Defence operates in the Research Unit of the Administration Policy Department (<http://www.defmin.fi/index.phtml?s=372>).

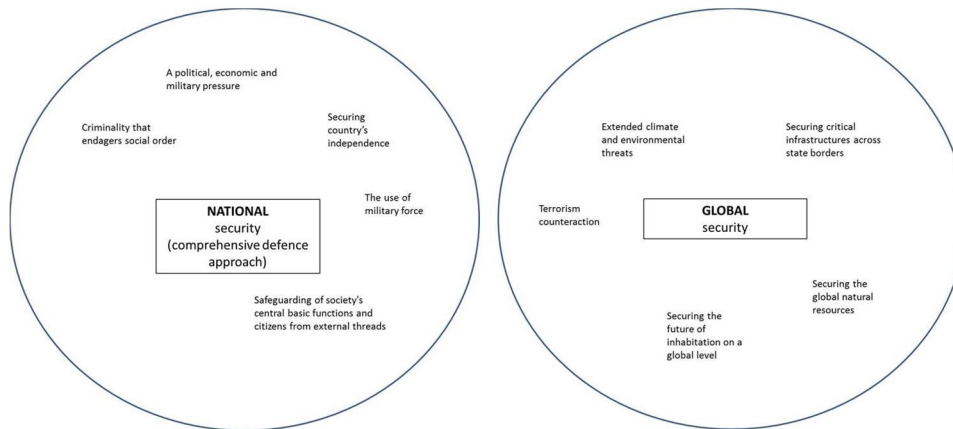


Figure 9 National and global security dimensions

Global security aspects are covered by the FUAS-level focus area. The Critical Infrastructure Protection (CIP) concept was formulated in 1996, and developed by the North Atlantic Treaty Organisation (NATO). The three CIP dimensions are political, economical, and technical. The infrastructures are not restricted to one country, but may span many countries, thus calling for cooperation in order to jointly protect them. (Hagelstam 2005, 12; 15-17).

Concluding remarks

The European Commission has recommended reducing the gap between research and markets as one of the three potential solutions to raise the competitiveness of the European security industry and to create more jobs (Toimintasuunnitelma innovatiivisen ja kilpailukykyisen... 6, 2012). Furthermore, the Commission has suggested several actions to overcome the security market fragmentation (Toimintasuunnitelma innovatiivisen ja kilpailukykyisen... 9-11, 2012). The proposed measures are first of their kind, and address also the R&D project activities (Toimintasuunnitelma innovatiivisen ja kilpailukykyisen... 13, 2012). The following three appear to have most significant impact, Laurea focus area development considering:

1. "The Commission intends to make full use of the PCP instrument set out in Horizon 2020 and devote a significant part of the security research budget on this instrument. This novel funding approach should bring research closer to

the market by bringing together industry, public authorities and end users from the very beginning of a research project. The Commission considers that border security and aviation security are the most promising areas for undertaking PCP. Implementation period: from beginning 2014"

2. "The Commission has launched a tender for a major study analysing the legal and economic implications of third party liability limitation. Implementation period: 2012 – mid 2013"
3. "The Commission will make full use of the new IPR rules provided for security research in Horizon 2020, in particular through the possibility provided in the two specific programmes of the Internal Security Fund to test and validate results stemming from EU security research projects. Implementation period: from beginning 2014"

Laurea has multiple strengths which together respond to the existing education and research demand in the field of safety, security and social responsibility. Perhaps the biggest strength of Laurea University of Applied Sciences is its comprehensive research and educational activities covering well the broad field of security, safety and social responsibility from the preventive measures all the way through the perhaps more technologically-oriented reactive tools to the repressive methods such as rehabilitation.

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About the Author

Dr Minna Mattila, Director, Strategic Planning and Support for Research, is an invited member of the European Academy of Sciences for an outstanding contribution to science and technology. She has served annually the European Commission as an Expert Evaluator, Rapporteur and Reviewer since 2007. In 2008-2010 Dr Mattila was a nominated expert panel member in the OECD reviews of higher education in regional development and in 2008-2014 she serves as an External Assessor for Professorships in Marketing & Information Systems for the University of Malaya. She is an Adjunct Professor at Embry Riddle Aeronautical University - Worldwide (the U.S.). Prior to her current position at Laurea, she led an innovation and research unit in a university of technology in Finland. Dr Mattila has also held professorships in Commercialisation of Innovations as acting and Marketing in the Electronic Channels as full tenure. Her docentship preceding the tenured professorship was at the department of Computer Science. She works part-time at Market Court as Council of State assigned Expert Member specialising in cases concerning restrictions of competition. Dr Mattila is acknowledged in "Who is Who in Finland" since 2005. Email: minna.mattila@laurea.fi

Book review:

Steinberg, Richard M.

Governance, Risk Management, and Compliance.

It Can't Happen to Us – Avoiding Corporate Disaster While Driving Success

Hoboken, New Jersey: John Wiley & Sons, Inc. 2011.

pp. xxiv + 312

Marita Salo, Laurea University of Applied Sciences, LbD and Competence Management Services, Espoo, Finland

Corporate Responsibility (CR) is a well-established term covering environmental responsibility, economic responsibility and social responsibility. This book introduces Governance, Risk Management and Compliance (GRC). The themes under GRC fall mainly under economic responsibility part of CR and the overall common nominator is business ethics. The distinctive factor in the book is its in-house view or more precisely its boardroom view and an insightful analysis of corporate infrastructures and driving forces in the corporate world.

The first chapter explains the meaning of GRC. The G is for governance and the author says to prefer a definition of governance as the allocation of power among the board, management, and shareholders but explains also the wider meaning of governance in the text. The R is for risk or risk management. The C stands for compliance, initially meaning adherence to applicable laws and regulations but the author notes, however, that many users also include

adherence to internal company policies in compliance.

Every organization is different and has a unique culture. Corporate culture has a strong effect on an organization and the effect can be either positive or negative. Corporate culture is handled in the second chapter of the book and it is described as the critical driver within the organization. The tone at the top of the organization is crucial because official policies specify what the board and the management want to happen whereas corporate culture determines what actually happens, and which rules are obeyed, bent, or ignored. As the dominant personality in an entity, the CEO often sets the ethical tone of the company. The author points out that culture is built by each decision, large and small, and the organization is framed by those decisions. That also explains why turning the corporate culture around is so difficult. The book gives instructions for proper and effective compliance processes but reminds

the reader that in a healthy compliance culture people don't need to look at the rule book but they know intuitively what the right thing to do is.

Regarding legal and regulatory compliance, companies have two possible approaches: to align business objectives and build compliance programs into existing management and business processes, or to create a separate function and make general counsel or chief compliance officer responsible that the company is fully compliant. Cost-effective compliance programs are handled in the third chapter of the book and the author states that forward-looking companies align their compliance process with the company's business goals and objectives, and build it into existing business processes. Further on, responsibility for compliance rests not with a compliance officer, but rather with each and every line and staff manager. The responsibility of the chief compliance officer is then to create a cohesive compliance program. The key message here is that when built into the management process, compliance is both more effective and efficient. Moreover, successful companies recognize that legal and regulatory requirements indicate a demand for better performance and they strive to meet the challenge by exceeding minimum requirements. The author handles the strong effect of corporate culture and continues by pointing out the meaning of an ethics policy as a basis for an effective compliance program. He further advises to set zero tolerance in compliance matters as any other approach can send an unintended message that compliance is not important and can be negotiable.

Ethics program is another foundational block in GRC and even if there is no "E" in GRC, ethics is critical for corporate culture and every aspect of GRC. Many companies have ethics programs in place, either as part of their compliance program or a separate program. Those include typically a code of conduct, whistleblower channel, an ethics/compliance officer, audits and training programs for personnel. This looks comprehensive but in reality it is more about form than substance. As noted earlier, corporate culture is tuned at the top and the same applies for ethics. For an ethics program to be effective, ethics must be built into the business, supported

by a solid corporate culture based on integrity and strong ethical values and advocated by the management. The issues related to ethics program are handled in fourth chapter and the author provides examples of companies that have failed in that area. The text focuses on how to create an effective ethics program but only briefly mentions the importance of recruiting the right people.

In following five chapters of the book the focus is on risk management. First of all, a sound strategy is critical and many boards of directors have put their effort in formulating the strategy. Identifying and managing risks related to company's business objectives is fundamental for company's success and survival and therefore risk management should be on the agenda of every board of directors. Enterprise risk management (ERM) is business management focusing expressly on risks. Moreover, the author points out that risk management is not only about identifying risks but it also includes identifying opportunities.

In a chapter about enterprise risk management system, the author states that if top management is not fully committed, the likelihood of successful implementation is not very high. Another pitfall is that management and personnel only see the implementation as an administrative exercise, serving no higher purpose for the company. Similarly as for compliance and ethics programs, responsibility for risk management must be built into the organization and executed by the line and staff managers responsible for running the business and chief risk officer acting as a support.

The book has also a separate chapter for internal control and there the book provides a list of factors that helps preventing fraudulent reporting and the list includes integrity and ethical values, avoiding wrong kind of incentives, management's philosophy and operating style, internal and external audits. The author goes further and states that in reality chief financial officer and other officers have often played a key role in avoiding fraudulent reporting, including situations where a dominant CEO has insisted on making the numbers at any cost. The author then mentions Sheron Watkins of Enron and Cynthia Cooper of WorldCom as prime examples of

individuals with high integrity and courage. With that said, the importance of recruiting right people with right ethical values could be underlined more in the book.

In chapter number ten, we get to the core of the book and it is about where boards of directors should focus. The list summarizes areas where boards can add value:

1. Strategy.
2. Risk management.
3. Tone at the top.
4. Measuring and monitoring performance.
5. Transformational transactions. Mergers, acquisitions, partnerships, joint ventures.
6. Management evaluations, compensation, and succession planning.
7. External communications.
8. Board dynamics.

Looking at the list, many boards of directors are excellent in measuring and monitoring and spend a lot of time around that subject. Every board of directors also wants to excel in the area of strategy. How well the boards are able to add value in the other areas, remains open for debate. My own list would have one more topic: strategic HR. The best companies focus more and more on human resources/human capital and the boards of directors must be equipped to add value also on that area.

In the same chapter the author also lists the top ten pitfalls boards have fallen into. The list has been created in the U.S. and therefore reflects certain characteristics typical in the U.S. but overall it presents many of the pitfalls that are relevant anywhere. According to the list the number one pitfall for the board of directors is making a bad decision about the CEO and it is easy to agree with that.

Next chapters address board's role in overseeing strategy and risk management, CEO compensation, succession planning and crisis management as well as performance measurement and reporting. The decision regarding CEO compensation is one of the important responsibilities of the board and it is discussed commonly everywhere why CEO compensations got out of control. The book

makes an interesting remark stating that all boards want to believe that the CEO they chose is better than average and therefore should earn above average. So we are facing here the same dilemma than with car drivers where a vast majority believes to be better than average drivers. Another major problem has been the missing link with compensation and actual performance, not to mention various change-in-control and other severance provisions. Interestingly, the author refers to a study that concludes that internally-promoted CEOs significantly outperform those hired from the outside and with significantly lower average compensation. It is therefore well-grounded to argue that one key responsibility of any professional board of directors is to see as part of the succession planning that there are potential CEO candidates growing within the company.

In chapter 15 of the book the author has focus on three topics: keeping up with the Joneses syndrome, best practices and groupthink. These topics explain the phenomena that have caused many of the pitfalls seen during the recent years. Keeping up with the Joneses syndrome is simply a situation where a competitive desire turns into an obsessive need to match peer performance, not matter the risk or cost. But why does the author criticize best practices? Haven't we all been active in finding out the best practices and implementing them? The point the author is correctly making is that best practices are often nothing more than common practices, not best practices. In other words, when a company is referring to best practices, there is a risk that the company is just following what others in the market are doing. Thirdly, the author mentions groupthink. When groupthink is on, it is very difficult for individual persons to express their different views deviating possibly very far from the apparent consensus. This can be seen for example in C-suites chaired with a strong CEO and groupthink then effectively kills all meaningful dialogue with fresh views and ideas.

Remaining chapters deal with shareholder rights, structural issues at the board and finally an outlook to the future. The last chapter describes topics like right-sizing of CEO compensation, new subprime-like disasters and shareholder power.

There are a number of books focusing solely in corporate governance, risk management or compliance, mentioning the additional two but keeping the three topics clearly separated. In the same way, companies usually organize the three functions separately but this book handles all these related but somewhat disparate concepts and creates an overview of them all. The book is not a handbook or manual how to organize governance, risk management or compliance but it brings forward and addresses the potential pitfalls why companies, their management and boards of directors have failed to effectively carry out their responsibilities. In doing so, the book refers to many examples from recent years and provides analysis on why many leading companies like British Petroleum, Merrill Lynch and Société Générale, just to name a few, failed in their risk management.

According to the preface Governance, Risk Management, and Compliance is directed not only to members of boards of directors or senior managers, but both, and with an aim of providing insight into the interface between the two. The

main focus of the book is in the boardroom but the book gives valuable insight also to the management. The book differs from many others by not focusing solely on processes, protocols and procedures but making corporate culture and ethics as the foundational blocks of any successful company. It also points out that in ethics, compliance and corporate culture, it is the CEO who sets the tone.

Richard M. Steinberg is founder and CEO of Steinberg Governance Advisors, Inc. He is a former senior partner of PricewaterhouseCoopers (PwC) and the leader of its corporate governance advisory practice. Steinberg served as the lead project partner in developing COSO's Internal Control – Integrated framework and led development of COSO's Enterprise Risk Management – Integrated Framework.

Steinberg is a graduate of the University of Pennsylvania's Wharton School and holds an MBA from New York University's Graduate School of Business.

About the Author

Ms. Salo is a Senior Manager, Support for Research at Laurea LbD and Competence Management Services and she holds a Master's degree in Law. Prior to her current position, she worked as Senior Lecturer at Laurea University of Applied Sciences. She is the Chair of Board Professionals BPF Finland, a non-profit organization promoting diversity, corporate governance and ethics.

LbD in Practice

LEARNING BY DEVELOPING – A PEDAGOGICAL INNOVATION BY LAUREA

Learning by Developing (LbD) means a development-based learning. It is a new way to obtain the competences required in working life. A student's learning is based on development work, research, people skills and producing new knowledge. In LbD, the student is considered as the junior colleague of the expert from the collaborating organization and of the educator. Students will complete the majority of their studies in working life relating projects. Many of these projects are multidisciplinary. The projects can combine, for example, aspects of the welfare and business sector. Laurea R&D Labs as learning environments constitute a special feature of the LbD-model.

The Finnish Higher Education Evaluation Council appointed Laurea in its entirety as a Centre of Excellence for 2010-2012 for student-centred R&D work integrated in learning. Laurea has been appointed as a centre of excellence five times, and is thus Finland's most awarded higher education institutions.

Laurea Simulated Hospital – Technical Solutions to Simulate Real Life Medical and Nursing Situations

Jorma Jokela, Laurea University of Applied Sciences, Hyvinkää unit, Hyvinkää, Finland

Annukka Puotiniemi, Laurea University of Applied Sciences, Hyvinkää unit, Hyvinkää, Finland

Seija Paasovaara, Laurea University of Applied Sciences, Hyvinkää unit, Hyvinkää, Finland

Laurea University of Applied Sciences in Finland produces new competences in the field of service innovations and carries out professionally orientated education, regional development and R&D activities by following the Learning by Developing (LbD) pedagogical model. Laurea employs approximately 500 personnel and has about 8000 students of which roughly 1200 study in the adult education programmes. Laurea operates in the Greater Helsinki region, in seven units, close to good transport connections.

Learning by Developing (LbD)

Learning through research and development (LbD) is a pedagogical model that is based on learning through practice-focused R&D. Both students and teachers can develop their competencies by participating in different types of development projects that address the phenomena and problems of real-life workplaces.

One of the main objectives is to identify the core phenomena of each problem and the key concepts with which these phenomena can be analysed and solved. Phenomena and problems are examined with a research-orientated

approach. In the LbD model, learning is not restricted by the limitations of the curriculum, textbook or exercise book.

Results by co-operation

Learning in the LbD model is usually based on teamwork. Expertise and experiences are shared between teachers and students, as well as workplace representatives. The teachers' role is not to organise the project activities from start to the end or to dictate the objectives; instead, the entire team takes part in the planning. The team members have joint responsibility for the outcomes of the project.

While working in the project teams students take part as equal partners, bringing their expertise with them. The student's role in the project can vary from a project worker with basic competences, to acting as a project manager. The teacher members of the development team take part by providing their expertise to steer the progress of the work and, at the same time, the progress of learning. The workplace representatives bring and share their "know how" experiences and development needs of

their organization with the team as one equal member of the team.

Diversified development of learning

The LbD model helps to develop students' abilities to respond to future challenges. The chance to act as developers in genuine R&D projects supports students' development as actors who can change, develop and influence workplace practices.

Up-to-date information is utilized in the project and projects also produce new knowledge and processes. By working in a project environment, students can improve their interaction and reasoning skills. Projects provide a natural setting for learning to use the necessary tools.

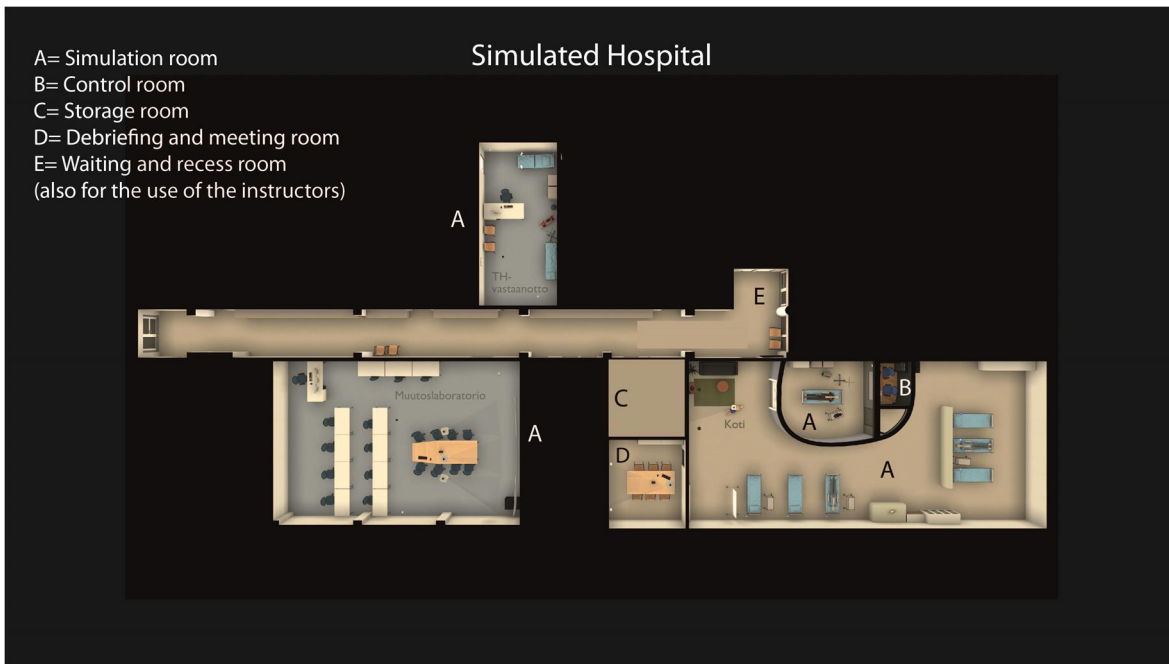
Development projects provide a way for students to achieve concrete results, which increases their motivation to study. This has a positive effect on their academic success. In the best scenario, the workplace and the wider region or industry can also benefit from the new data or service innovation.

The focus and profile of the Hyvinkää campus can be described as Simulation, Innovation and Interaction. The basic idea of multidisciplinary campus is to focus on social development and social responsibility. This means research-based interaction with companies, organizations and the public sector. Our mission is to promote overall wellbeing of society from different perspectives (social, health, economic, law). Laurea Hyvinkää has innovative learning and R&D environments eg. four simulation and five peer-to-peer and student entrepreneurship, pre-incubator learning and R&D-environments,

advanced teaching methods, multidisciplinary development projects and a diverse network of employer contacts and international partners. Laurea Simulated Hospital is an environment where patient care can be practiced in a realistic hospital environment, from the patient's arrival to hospital until the release to home care. Laurea Simulated Hospital is a multi-professional training center focusing on simulating CRM (Crisis Resource Management) and Patient Safety technologies. The aim of the center is to achieve full efficiency and compliance with healthcare regulations. Simulations increase patient safety and, for example, skills in interaction, team-working and co-operation as well as in decision making and leadership.

The Simulated Hospital is a learning environment for the nursing students of Laurea University of Applied Sciences, as well as multi-professional groups of health care environments. The center can also be used as a research and development environment for care and service processes. The simulation is also utilized for further and supplementary education of basic specialty level training, and for further education of healthcare and social welfare, and updating of the aforementioned skills and training.

The computer controlled, wireless patient simulator allows the creation of beforehand-designed and target-orientated clinical learning situations. The learning environment includes a clinic, a trauma room, an intensive care unit (ICU) and a ward. A monitoring and control room is available for the instructors, where they have an opportunity to follow the simulation through video. In addition, there is a debriefing room, as well as storage space. In total, the Simulated Hospital occupies about 300 m² (Picture 1.).



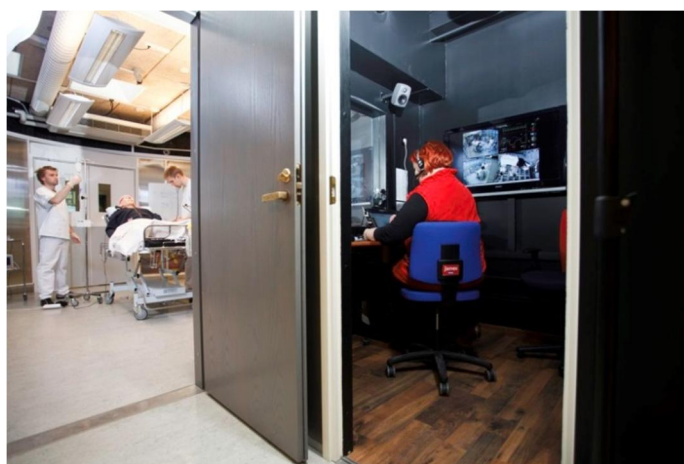
Picture 1 Floor plan of the Simulated Hospital.

Resources

The Simulated Hospital reception room is an open space that can be adapted to different environments. The simulation area can be built for accident and emergency situations, as an ambulance reception area, or the area can be modified to remind you of a nursing home. It is possible to project images on the wall to bring authenticity to the simulation exercises. The trauma room and its equipment is arranged as in a hospital emergency room. The rooms have all

the necessary management tools, an anesthetic table and all the appropriate hospital equipment such as suction, an ECG machine, a defibrillator, patient monitors, infusion pumps and counters.

The command and control room has a direct view of the trauma room through a one-sided mirror. There is also a control technique for managing the equipment, to enable guiding of the patient simulator as well as video and audio for the simulation exercise. It is also possible to discuss the exercise during it. (Picture 2.)



Picture 2 View of Interaction between Command and Control Room and Trauma Room

The ICU is located at the rear of the center. There are three beds for patients, fully equipped with reading lights and outlets for oxygen and air. The first bed features a fixed vital signs monitor. The ICU space also includes lockers for the storage of necessary treatment equipment, as well as the means to practice medical care and nursing.

The ward has three patient beds, and it is designed for the training of basic care skills. It is possible to convert the space as necessary, and it fits well with the students at training workshops, when practicing isolated skills.

Simulated Hospital areas are arranged so that they reflect the patient's treatment path: from first or emergency aid, to the hospital ward, through to home release. This allows for the practical exercises of patient transfer, the reporting to the following ward's managers, as well as the safe home release of the patient.

The debriefing room is in the simulation area's immediate vicinity. The seating in the room is arranged so that the student teams and the professional expert team participating in the debriefing, as well as the instructors, are able to discuss matters on an equal footing. A video projector is used to project the video and audio feed on to the wall, to support the debriefing process. It is also possible to use the room to follow the simulation live.

Storage facilities are located on the same floor of the building as the simulation center. This allows for quick access to supplies. Storage facilities are used to store any bulky equipment, so that they do not take up space in the simulation center.

The Simulated Hospital has a total of fifteen cameras. The cameras have been arranged so that two are allocated to the reception hall, four in the trauma room, two in the ICU, and one in the ward. The remaining six cameras are in the other two simulations rooms. (Picture 3.)



Picture 3 Eleven cameras helping the instructor to follow the nursing learning.

Requisites

The patient simulators are an important part of the simulation training. They are available from a variety of manufacturers. It is important to choose the right kind of patient simulator to meet the training and deployment challenges of any particular exercise.

Laurea's Simulated Hospital has two adult patient simulators (one wired and one wireless), one neonatal patient simulator and includes a

private patient monitor and a gynecological model. Wireless patient simulator allows patient transfer exercises and simulation exercises outside the center. The latest simulators are compatible with genuine hospital equipment such as ECG, defibrillators and oxygen saturation monitors. This increases the authenticity of the exercises, as realistic data can be obtained from the equipment used. Laurea Simulated Hospital has also one mobile simulation unit (in situ).

Equipment and facilities need to be sustainable and modern, so that they correspond as closely as possible to the tools used in a working environment. Regular maintenance of equipment is important to ensure that their usability is maintained. Because the center usually has a large number of users, and in order to ensure the smooth running of the center, the equipment storage areas need to be standardized.

Technical aspects of the simulation center

The control room computers and the audio-visual equipment are housed together in an equipment locker, which is located outside of the control room. The controls on the front face of the cabinet are located inside the control room. This is useful as the heat from the equipment does not increase the control room temperature, and it is easy to use.

Lights

The simulation center has good general lighting. The lighting is adjustable to low light intensity so that, for example, night time work can be simulated in the center.

Safety

Patient simulators are expensive. The center has computers and monitors that may attract

thieves. The simulation trainer must plan for the locking up of the center, rights of access to the appropriate people, as well as how a possible alarm is raised and how the centre will be evacuated in a case of fire. The recordings of the simulations must only be accessible to people who have the authority to view them. For example, user codes for the debriefing system are recommended. Recordings are always kept strictly confidential.

Debriefing system

Simulation exercises are recorded for a later debriefing. It is the key to a simulation-based teaching, and it is a particularly important part of the student learning experience.

Debriefing should demonstrate how the team is able to work together. It is also important to review the details of the exercise, and therefore strengthen good team management skills or to unlearn bad approaches.

Debriefing systems are either fixed or mobile. The advantages of a fixed debriefing system are that the drivers can be integrated inconspicuously in to the control room, and that the number of possible cameras and microphones is almost endless. The advantages of mobile systems are that they are small in size and battery operated, which enables fast setting up and taking down, even in a moving ambulance. (Picture 4.)



Picture 4 Instructor, nursing teacher, and nurse students at work.

Instructors' competencies

The Simulated Hospital environment is created to be as realistic as possible, enabling the student to empathize with the exercise. For example, the background sound generators can generate a sound experience similar to a real hospital environment, which improves the realism of the simulation exercise.

High quality simulation training requires experienced instructors. The instructors possess a good knowledge of nursing, medical information management, knowledge of simulation pedagogy, as well as experience in the treatment of patients. In addition, instructors must be able to apply their knowledge and skills in simulations carried out in emergency treatment situations. The instructors also have to know how to use the equipment and tools, and must be familiar with simulation technology.

The number of instructors will depend on the number of trainees and the difficulty of the simulation exercise. There must be at least two instructors per simulation exercise. One is responsible for directing the exercise, and the other for the patient simulator being used. In addition, instructors must be able to monitor the activities of the trainees as a team, and as individuals.

Simulated Hospital – adaptation into training and learning crisis management

Until now, teamwork and crisis management have been difficult concepts to actually teach or to evaluate. Optimal custom outcomes depend on a team's knowledge, efficiency, and ability to work together. Through simulation it is possible to learn the components of crisis management, and the leadership and teamwork skills needed to successfully deliver exceptional healthcare in a variety of scenarios.

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About the Author

Mr. Jorma Jokela, Ph.D., Lic.Sci(Health Sci.), RN, principal lecturer in medical and nursing simulation center at Laurea University of Applied Sciences, Hyvinkää, Finland. He graduated from medical department, Tampere University in 1987. He is Licentiate of Nursing Science, primary health care, University of Helsinki and Doctor of Philosophy, Experimental anesthesiology, University of Tampere, Medical School, Tampere 2010. He worked for Medical School in Centre for Military Medicine 1987-2008. He became the director of the Simulation Centre of Field and Disaster of the Medicine Centre of Military 2004. In addition to got award-winning poster presentation in San Antonio, AMEDD, USA, Implementing RFID technology in a novel triage system during a simulated mass casualty situation, the 114th Annual Meeting of AMSUS in San Antonio, Texas, 9-14 November 2008. He got Stipend of the Commander of the Finnish Defense Forces 2007. Grant of Scientific Advisory Board for defence (2007-2009). Grant of War Marshal Mannerheim Foundation 2006 Ministry of Social Affairs and Health: Member of the Advisory Board for Health and Welfare in Emergency Conditions 2003 – 2006. Research interests include medical as well as educational issues related to healthcare and wireless mobile applications and medical simulation training. E-mail: jorma.jokela@laurea.fi

Miss Annukka Puotiniemi spent the last 16 years studying and working in England, where she gained a BA in Communications and worked for several years in the finance industry. She has recently returned to her native Finland and is now a first year nursing student at Laurea UAS.

E-mail: annukka.puotiniemi@laurea.fi

Ms. Seija Paasovaara, MNSc, RN, PhD-student, is working as director in Laurea UAS's Hyvinkää campus. She has worked for a long time for the development of education and leadership in UAS context. She is one of the key developers of Laurea UAS's Learning by Developing pedagogical model in practice by participating successfully as an active development member in a regional project "Whirl" during 2002 - 2005, where the topic was in development of five municipalities, fifteen organizations and over one hundred experts regional network for medical laboratory and radiological imaging activities. Laurea's students and lecturers participated in the project by different R&D-studies as well as by working as a partner in the multidisciplinary development expert teams. She has also done pioneer work in Laurea UAS by developing both simulation learning in nursing and simulation learning and R&D-environments in Laurea Hyvinkää from the year 2002. Her main R&D interests are in practice-based learning and education, practice-based R&D as well as practice- and expert-based development of workplaces, network, co-creation and innovation. UAS-students, called younger colleagues, are in the core of her pedagogical and leadership development work. E-mail: seija.paasovaara@laurea.fi

Contents

Foreword.....	5
Minna Mattila	
Different Views on Defining Safety, Security and Social Responsibility	7
Minna Mattila	
Gender: the Best Predictor of Criminal Behaviour?.....	21
Tuomas Tammilehto	
Violence in the Finnish Workplaces: A Review of Literature	31
Simo Salminen	
Navigator Help Desk in a Shopping Center TRIO Counseling Model as an Urban Education Model	39
Eija Mattila, Piia Suomi, Niina Koskelin & Pia Solin	
Restoring a Community's Sense of Security after a Fire - the Residents' Meeting as Form of Community Intervention.....	52
Tiina Korvenranta, Annika Manninen & Sointu Silvola	
Lost in Navigation; Developing a Survival Kit for Lappish Wilderness without Communication Signals and Power Outlets.....	63
Jyri Rajamäki & Juha Knuuttila	
International Tax Planning, Tax Avoidance and Corporate Social Responsibility.....	73
Reijo Knuutinen	
Region's Socio-Demographic Characteristics as Interpreters of Crimes Directed to the Business Establishments.....	85
Anssi Keinänen, Jyri Paasonen & Pasi Karppinen	
Security, Safety and Social Responsibility as Laurea's Area of Focus	94
Minna Mattila	
Book review	
Steinberg, Richard M. Governance, Risk Management, and Compliance. It Can't Happen to Us –Avoiding Corporate Disaster While Driving Success	107
Marita Salo	
LbD in Practice	
Laurea Simulated Hospital – Technical Solutions to Simulate Real Life Medical and Nursing Situations.....	112
Jorma Jokela, Annukka Puotiniemi & Seija Paasovaara	

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Indexed and abstracted in the ProQuest



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Contact:

isj@laurea.fi
www.laurea.fi/en/isj

Publisher:

Laurea University of Applied Sciences
Ratatie 22, FI-01300 Vantaa, Finland

Printed by:

Editia Prima Oy
ISSN 1799-2710